

# GAZZETTA UFFICIALE

## DELLA REPUBBLICA ITALIANA

**PARTE PRIMA**

**Roma - Martedì, 19 agosto 1997**

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**N. 164**

### MINISTERO DELLA SANITÀ

**DECRETO MINISTERIALE 28 aprile 1997.**

**Attuazione dell'art. 37, commi 1 e 2, del decreto legislativo 3 febbraio 1997, n. 52, concernente classificazione, imballaggio ed etichettatura delle sostanze pericolose.**

**VOLUME PRIMO**

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# DECRETI, DELIBERE E ORDINANZE MINISTERIALI

## MINISTERO DELLA SANITA'

DECRETO 28 aprile 1997.

**Attuazione dell'art. 37, commi 1 e 2, del decreto legislativo 3 febbraio 1997, n. 52, concernente classificazione, imballaggio ed etichettatura delle sostanze pericolose.**

### IL MINISTRO DELLA SANITA'

Visto il decreto legislativo 3 febbraio 1997, n. 52, relativo all'attuazione della direttiva 92/32/CEE concernente classificazione, imballaggio ed etichettatura delle sostanze pericolose, ed in particolare l'art. 37, commi 1 e 2;

Vista la direttiva della Commissione 91/632/CEE del 28 ottobre 1991 recante quindicesimo adeguamento al progresso tecnico della direttiva 67/548/CEE del Consiglio concernente il ravvicinamento delle disposizioni legislative, regolamentari ed amministrative relative alla classificazione, all'imballaggio e all'etichettatura delle sostanze pericolose;

Vista la direttiva della Commissione 92/37/CEE del 30 aprile 1992 recante sedicesimo adeguamento al progresso tecnico della direttiva 67/548/CEE del Consiglio concernente il ravvicinamento delle disposizioni legislative, regolamentari ed amministrative relative alla classificazione, all'imballaggio e all'etichettatura delle sostanze pericolose;

Vista la direttiva della Commissione 92/69/CEE del 31 luglio 1992 recante diciassettesimo adeguamento al progresso tecnico della direttiva 67/548/CEE del Consiglio concernente il ravvicinamento delle disposizioni legislative, regolamentari ed amministrative relative alla classificazione, all'imballaggio e all'etichettatura delle sostanze pericolose;

Vista la direttiva della Commissione 93/21/CEE del 27 aprile 1993 recante diciottesimo adeguamento al progresso tecnico della direttiva 67/548/CEE del Consiglio concernente il ravvicinamento delle disposizioni legislative, regolamentari ed amministrative relative alla classificazione, all'imballaggio e all'etichettatura delle sostanze pericolose;

Vista la direttiva della Commissione 93/72/CEE del 1° settembre 1993 recante diciannovesimo adeguamento al progresso tecnico della direttiva 67/548/CEE del Consiglio concernente il ravvicinamento delle disposizioni legislative, regolamentari ed amministrative relative alla classificazione, all'imballaggio e all'etichettatura delle sostanze pericolose;

Vista la direttiva della Commissione 93/101/CE dell'11 novembre 1993 recante ventesimo adeguamento al progresso tecnico della direttiva 67/548/CEE del Consiglio concernente il ravvicinamento delle disposizioni legislative, regolamentari ed amministrative relative alla classificazione, all'imballaggio e all'etichettatura delle sostanze pericolose;

Vista la direttiva della Commissione 94/69/CE del 19 dicembre 1994 recante ventunesimo adeguamento al progresso tecnico della direttiva 67/548/CEE del Consiglio concernente il ravvicinamento delle disposi-

zioni legislative, regolamentari ed amministrative relative alla classificazione, all'imballaggio e all'etichettatura delle sostanze pericolose;

Vista la direttiva della Commissione 96/54/CE del 30 luglio 1996 recante ventiduesimo adeguamento al progresso tecnico della direttiva 67/548/CEE del Consiglio concernente il ravvicinamento delle disposizioni legislative, regolamentari ed amministrative relative alla classificazione, all'imballaggio e all'etichettatura delle sostanze pericolose;

Decreta:

#### Art. 1.

1. L'allegato I al decreto del Ministro della sanità 16 febbraio 1993, pubblicato nel supplemento ordinario alla *Gazzetta Ufficiale* della Repubblica italiana n. 116 del 20 maggio 1993, è sostituito dall'allegato I al presente decreto.

2. Allo scopo di facilitare la ricerca è aggiunta, inoltre, un'appendice che riporta in lingua italiana ed in ordine alfabetico il solo elenco nominativo delle medesime sostanze pericolose classificate, corredata dal relativo Numero indice di identificazione. Detta appendice costituisce parte integrante dell'allegato medesimo.

#### Art. 2.

1. Gli allegati III e IV al decreto del Ministro della sanità 16 febbraio 1993, pubblicato nel supplemento ordinario alla *Gazzetta Ufficiale* della Repubblica italiana n. 116 del 20 maggio 1993, sono sostituiti dagli allegati III e IV al presente decreto.

#### Art. 3.

1. Gli allegati II, VII, VIII e IX al decreto legislativo 3 febbraio 1997, n. 52, pubblicato nel supplemento ordinario alla *Gazzetta Ufficiale* della Repubblica italiana n. 58 dell'11 marzo 1997, sono sostituiti dagli allegati II, VII, VIII e IX al presente decreto.

#### Art. 4.

1. L'allegato V al decreto del Ministro della sanità 3 dicembre 1985, pubblicato nel supplemento ordinario alla *Gazzetta Ufficiale* della Repubblica italiana n. 305 del 30 dicembre 1985, come integrato, da ultimo dall'allegato II al decreto del Ministro della sanità 20 dicembre 1989, pubblicato nel supplemento ordinario alla *Gazzetta Ufficiale* della Repubblica italiana n. 38 del 15 febbraio 1990, è sostituito dall'allegato V al presente decreto.

Il presente decreto sarà pubblicato nella *Gazzetta Ufficiale* della Repubblica italiana.

Roma, 28 aprile 1997

Il Ministro: BINDI

Registrato alla Corte dei conti il 18 giugno 1997  
Registro n. 1 Sanità, foglio n. 265



## **ALLEGATO I**



## PREFAZIONE ALL'ALLEGATO I

**Introduzione**

L'allegato I è un elenco delle sostanze pericolose per le quali, a livello comunitario, sono state concordate una classificazione e un'etichettatura armonizzate ai sensi della procedura stabilita nell'articolo 4, paragrafo 3 della presente direttiva.

**Elenco delle sostanze**

Nell'allegato I le sostanze sono elencate in funzione del numero atomico dell'elemento più caratteristico delle loro proprietà. La tabella A contiene un elenco degli elementi chimici disposti secondo il loro numero atomico. Data la loro varietà, le sostanze organiche sono state inserite nelle categorie convenzionali indicate nella tabella B.

Il numero di ogni sostanza è rappresentato da una sequenza numerica del tipo ABC-RST-VW-Y, dove:

- ABC rappresenta il numero atomico dell'elemento chimico più caratteristico (preceduto da uno o due zeri per completare la sequenza), o il numero della categoria convenzionale relativa alle sostanze organiche;
- RST rappresenta il numero progressivo delle sostanze considerate nella sequenza ABC;
- VW indica la forma di cui la sostanza viene prodotta o immessa in commercio;
- Y rappresenta la cifra di controllo (check-digit) calcolata secondo il metodo utilizzato dall'ISBN (International Standard Book Number).

Ad esempio, il numero del clorato di sodio è: 017-005-00-9.

Per le sostanze pericolose incluse nell'inventario europeo delle sostanze chimiche esistenti a carattere commerciale (Einecs, GU n. C 146 A del 15. 6. 1990), viene indicato anche il numero Einecs, rappresentato da una sequenza di sette cifre XXX-XXX-X che inizia da 200-001-8.

Per le sostanze pericolose notificate ai sensi della presente direttiva, viene indicato il numero della sostanza dell'elenco europeo delle sostanze chimiche notificate (Elincs). Detto numero è rappresentato da una sequenza di sette cifre del tipo XXX-XXX-X che inizia da 400-010-9.

Viene anche indicato il numero CAS (Chemical Abstracts Service) per facilitare l'identificazione della sostanza. Va sottolineato che il numero Einecs comprende sia le forme anidre che idrate di una sostanza, mentre spesso vi sono numerazioni CAS diverse per dette forme. In ogni caso il numero CAS incluso si riferisce soltanto alla forma anidra e pertanto non descrive sempre le sostanze in modo altrettanto preciso del numero Einecs.

I numeri Einecs, Elincs o CAS non sono di solito indicati per i preparati composti da più di tre sostanze diverse.

Per facilitare l'identificazione della sostanza viene indicata anche la struttura delle sostanze ben definite.

**Nomenclatura**

Le sostanze pericolose sono contrassegnate ovunque possibile dalle denominazioni Einecs o Elincs. Le altre sostanze non incluse negli elenchi Einecs ed Elincs sono designate con una denominazione chimica riconosciuta a livello internazionale (ad esempio, ISO, IUPAC); in alcuni casi viene specificato anche il nome comune.

Le impurezze, gli additivi e altri componenti meno significativi non vengono solitamente indicati, **sempreché** non contribuiscano in modo rilevante alla classificazione della sostanza.

Alcune sostanze sono descritte come « miscela di A e B » e si riferiscono ad una miscela specifica. In alcuni casi, quando risulta necessario definire la sostanza immessa in commercio, vengono indicate le proporzioni delle sostanze principali presenti nella miscela.

La denominazione di alcune sostanze comprende l'indicazione della purezza espressa in percentuale. Le sostanze che presentano un tenore più elevato di sostanza attiva (ad esempio, un perossido organico) non vengono incluse nell'allegato I e possono presentare altre proprietà pericolose (ad esempio, esplosive). Quando vengono indicati i limiti di concentrazione specifici, essi si riferiscono alla sostanza o alle sostanze figuranti nell'elenco. In particolare, nel caso di miscele di sostanze descritte con l'indicazione della purezza specifica in percentuale, i limiti si applicano alla sostanza nella forma in cui questa viene descritta nell'allegato I, e non alla sostanza pura.

L'articolo 23, paragrafo 2, lettera a) prevede che, per le sostanze elencate nell'allegato II, la voce della sostanza che deve figurare sull'etichetta sia uno di quelli indicati nell'allegato II. Per le sostanze complesse derivate dal carbone (ad esempio, i cianuri complessi), come per le altre, le informazioni supplementari in parentesi correlate a tale informazione devono figurare sull'etichetta.

Alcune voci contengono un riferimento alle impurezze. Cfr. Indice n. 603-190-00-X (acrilammide) e 603-190-00-X (acrilammide) di metile (contenente "X" di cianammide). In questi casi, il riferimento in parentesi fa parte del nome e deve figurare sull'etichetta.

Alcune voci si riferiscono a gruppi di sostanze (cfr. Indice n. 406-007-00-5, cianuri). Ad eccezione dei cianuri complessi, come ferrocianuri, ferricianuri e ossianuri di mercurio, per sostanze individuali contemplate da queste voci, si deve indicare la designazione EINECS o un'altra designazione riconosciuta a livello internazionale.

## Presentazione

Per ogni sostanza figurante nell'allegato I vengono fornite le seguenti informazioni:

### a) Classificazione

- i) La classificazione consiste nell'inserire una sostanza in una delle categorie di pericolo indicate nell'articolo 2, paragrafo 2 della presente direttiva attribuendole la(e) relativa(e) frase(i) di rischio. La classificazione presenta conseguenze non solo per l'etichettatura, ma anche per altre disposizioni legislative e regolamentari relative alle sostanze pericolose.
- ii) La classificazione in ogni categoria di pericolo viene indicata in riquadri separati; in genere, ogni riquadro comprende una descrizione della categoria di pericolo e la(e) relativa(e) frase(i) di rischio (frasi R). In alcuni casi, tuttavia (ad esempio, per le sostanze classificate come infiammabili, sensibilizzanti e per alcune sostanze classificate come pericolose per l'ambiente), compaiono solo le frasi di rischio in quanto esse forniscono informazioni sufficienti.
- iii) In appresso vengono descritte le categorie di pericolo:
  - Esplosivo: E
  - Comburente: O
  - Altamente infiammabile: F+
  - Facilmente infiammabile: F
  - Infiammabile: R 10
  - Altamente tossico: T+
  - Tossico: T
  - Nocivo: Xn
  - Corrosivo: C
  - Irritante: Xi
  - Sensibilizzante: R 42 e/o R 43
  - Cancerogeno: Carc. Cat. (\*)
  - Mutageno: Mut. Cat. (\*)
  - Tossico per il ciclo riproduttivo: Repr. Cat. (\*)
  - Pericoloso per l'ambiente: N o/e R 52, R 53, R 59.
- iv) Altre frasi di rischio che descrivono proprietà diverse (cfr. punti 2.2.6 e 3.2.8 della guida all'etichettatura) sono indicate in riquadri separati.

### b) Etichetta

comprendente:

- i) il o i simboli, ove previsti, e le indicazioni di pericolo attribuite alla sostanza in base all'allegato II (cfr. articolo 23, paragrafo 2, lettera c));

(\*) Se del caso, viene indicata la categoria della sostanza cancerogena, mutagena o tossica per il ciclo riproduttivo (ad esempio 1, 2 o 3).

• frasi di rischio (frasi R), rappresentate da una serie di cifre precedute dalla lettera R che indica la natura dei rischi particolari di cui all'allegato III [cfr. articolo 23, paragrafo 2, lettera d)]. Le cifre sono separate da un trattino orizzontale (-) per indicare enunciazioni separate dei rischi particolari (R), o da una barra inclinata (/) per indicare l'enunciazione combinata in una sola frase, dei rischi particolari di cui all'allegato III;

• i consigli di prudenza (frasi S), rappresentati da una serie di cifre precedute dalla lettera S che indicano le precauzioni di sicurezza raccomandate ai sensi dell'allegato IV [cfr. articolo 23, paragrafo 2, lettera e)]. Anche in questo caso le cifre sono separate da un trattino orizzontale o da una barra inclinata aventi lo stesso significato indicato al precedente punto b), con l'eccezione che le enunciazioni combinate dei consigli di prudenza raccomandati figurano nell'allegato IV. I consigli di prudenza si riferiscono solo alle sostanze; per i preparati i consigli sono scelti in base alle regole abituali.

Le sostanze che, per talune sostanze e preparati pericolosi venduti al pubblico, sono obbligatorie alcune frasi S.

Le frasi S 1, S 2 ed S 45 sono obbligatorie per tutte le sostanze e i preparati altamente tossici, tossici e corrosivi venduti al pubblico.

Le frasi S 3, S 4, S 5, S 6, S 7, S 8, S 9, S 10, S 11, S 12, S 13, S 14, S 15, S 16, S 17, S 18, S 19, S 20, S 21, S 22, S 23, S 24, S 25, S 26, S 27, S 28, S 29, S 30, S 31, S 32, S 33, S 34, S 35, S 36, S 37, S 38, S 39, S 40, S 41, S 42, S 43, S 44, S 46, S 47, S 48, S 49, S 50, S 51, S 52, S 53, S 54, S 55, S 56, S 57, S 58, S 59, S 60, S 61, S 62, S 63, S 64, S 65, S 66, S 67, S 68, S 69, S 70, S 71, S 72, S 73, S 74, S 75, S 76, S 77, S 78, S 79, S 80, S 81, S 82, S 83, S 84, S 85, S 86, S 87, S 88, S 89, S 90, S 91, S 92, S 93, S 94, S 95, S 96, S 97, S 98, S 99, S 100 sono obbligatorie per tutte le altre sostanze e preparati pericolosi venduti al pubblico ad eccezione di quelli classificati soltanto come «pericolosi per l'ambiente».

Le frasi S 1 ed S 2 sono indicate tra parentesi nell'allegato I e si possono omettere nell'etichetta solo qualora la sostanza o il preparato siano venduti per usi esclusivamente industriali.

**Limiti di concentrazione e relative classificazioni tossicologiche necessari per classificare i preparati pericolosi contenenti la sostanza in conformità della direttiva 88/379/CEE.**

Se non viene specificato diversamente, i limiti di concentrazione sono in percentuale del peso rispetto al peso totale del preparato.

Se non vengono indicati limiti di concentrazione, i limiti da utilizzare nell'applicazione del metodo convenzionale di valutazione dei rischi per la salute sono quelli indicati nell'allegato I della direttiva sui preparati (88/379/CEE).

#### Requisiti generali

##### Gruppi di sostanze

Se si applicano i requisiti ai gruppi di sostanze, in tal caso, i requisiti di classificazione e di etichettatura si applicano a tutte le sostanze del gruppo se queste sono immesse in commercio, e figurano nei requisiti di etichettatura. Qualora una sostanza inclusa in un gruppo si trovi in un'altra sostanza sotto forma di impurezza, nell'etichettatura delle sostanze vengono presi in considerazione i requisiti di classificazione e di etichettatura relativi al gruppo di sostanze.

In alcuni casi, vi sono requisiti di classificazione e di etichettatura per sostanze particolari che potrebbero rientrare nei gruppi di sostanze. In detti casi, per la sostanza vi sarà una voce specifica nell'allegato I e il gruppo di sostanze reccherà l'annotazione «ad eccezione delle sostanze designate nel presente allegato».

Per le classificazioni contraria, le voci riguardanti i sali (indicati con qualsiasi denominazione) nell'allegato I si riferiscono alla forma anidra e a quella idrata.

##### Requisiti con il numero Elincs

Le sostanze dell'allegato I che presentano un numero Elincs sono state notificate ai sensi della presente direttiva. Il produttore o l'importatore che non abbia in precedenza notificato dette sostanze e che intenda immetterle in commercio deve far riferimento alle disposizioni della presente direttiva.



## Note esplicative relative all'identificazione e all'etichettatura delle sostanze

In appresso viene indicato il significato delle note utilizzate sotto la numerazione:

*Nota A*

Il nome della sostanza deve figurare sull'etichetta sotto una delle denominazioni di cui all'allegato I della presente direttiva [cfr. articolo 23, paragrafo 2, lettera a)].

Nell'allegato I è talvolta utilizzata la denominazione generale del tipo: « composti di ... » o « sali di ... ». In tal caso, il fabbricante o qualsiasi altra persona che immette tale sostanza sul mercato è tenuto a precisare sull'etichetta il nome chimico esatto.

Esempio: per  $\text{BeCl}_2$ : cloruro di berillio

*Nota B*

Talune sostanze (acidi, basi, ecc.) vengono immesse in commercio in soluzione acquosa a diverse concentrazioni e richiedono pertanto un'etichettatura diversa poiché i rischi variano in funzione delle concentrazioni.

Per le sostanze dell'allegato I accompagnate dalla nota B viene utilizzata una denominazione generale del tipo: « acido nitrico... % ».

In questo caso, il fabbricante o qualsiasi altra persona che introduce tale sostanza sul mercato deve indicare sull'etichetta la concentrazione della soluzione in percentuale.

Esempio: acido nitrico 45 %

La percentuale di concentrazione viene sempre intesa peso/peso, salvo altra espressa specificazione.

È ammessa l'utilizzazione di dati supplementari (ad esempio, peso specifico, gradi Baumé) o di frasi descrittive (ad esempio fumante o glaciale).

*Nota C*

Alcune sostanze organiche possono essere commercializzate sia come isomeri ben definiti, sia sotto forma di miscela di più isomeri.

Pertanto nell'allegato I viene talvolta utilizzata una denominazione generale del tipo: « xile noto ».

In questo caso, il fabbricante o qualsiasi altra persona che immette tale sostanza sul mercato deve specificare sull'etichetta se si tratta di un isomero ben definito a) o di una miscela di isomeri b).

Esempio: a) 2,4 dimetilfenolo

b) xilenolo (miscela di isomeri)

*Nota D*

Talune sostanze che sono suscettibili di polimerizzarsi o di decomporsi spontaneamente si riscontrano generalmente sul mercato sotto forma stabilizzata. È sotto questa forma che esse sono elencate nell'allegato I della presente direttiva.

Tuttavia, tali sostanze sono a volte immesse sul mercato sotto forma non stabilizzata. In questo caso, il fabbricante o qualsiasi altra persona che immette tali sostanze sul mercato deve specificare sull'etichetta il nome della sostanza seguito dalla dicitura « non stabilizzata ».

Esempio: acido metacrilico (non stabilizzato)

*Nota E*

Alle sostanze aventi effetti specifici sulla salute delle persone (cfr. capitolo 4 dell'allegato VI), classificate come cancerogene, mutagene e/o tossiche per il ciclo riproduttivo, appartenenti alle categorie 1 o 2, viene attribuita la nota E se esse sono classificate anche come altamente tossiche (T+), tossiche (T), o nocive (Xn). Per dette sostanze, le frasi di rischio R 20, R 21, R 22, R 23, R 24, R 25, R 26, R 27, R 28, R 39, R 40 ed R 48 e tutte le combinazioni di queste frasi di rischio devono essere precedute dalla parola « anche ».

«**altamente tossico**» (inoltre anche tossico per inalazione).»

R 46-27.2 «**può causare danni genetici ereditari.**»

«**altamente tossico a contatto con la pelle e per ingestione.**»

«**Nota**»

«Questa sostanza può contenere stabilizzanti. Se lo stabilizzante modifica le caratteristiche di pericolosità della sostanza, quali specificate dall'etichetta prevista conformemente all'allegato I, la sostanza deve essere predisposta secondo le regole per l'etichettatura dei preparati perico-

«Questa sostanza può essere immessa sul mercato in una forma capace di esplodere, nel qual caso dovrà essere valutata secondo metodi di saggio appropriati e dovrà essere provvista di etichetta di pericolo indicante le sue caratteristiche esplosive».

«La classificazione e l'etichetta indicate per questa sostanza concernono soltanto la/le proprietà di pericolo indicate dalla/e frase/i di rischio in combinazione con la/le categoria/e di pericolo. I requisiti dell'articolo 6 della presente direttiva relativi ai fabbricanti, ai distributori e ai trasportatori di questa sostanza si applicano a tutti gli altri aspetti di classificazione ed etichettatura. L'etichetta finale deve rispettare i requisiti della sezione 7 dell'allegato VI della presente direttiva. La presente nota si applica soltanto a talune sostanze composte derivate dal petrolio, figuranti nell'allegato I.»

«La classificazione «**cancerogeno**» non è necessaria se si può dimostrare che la sostanza contiene meno dello 0,1 % peso/peso di benzene (Einecs n. 200-753-7). La presente nota si applica soltanto a talune sostanze composte derivate dal carbone e dal petrolio, figuranti nell'allegato I.»

«La classificazione «**cancerogeno**» non è necessaria se si può dimostrare che la sostanza contiene meno dello 0,1 % peso/peso di 1,3-butadiene (Einecs n. 203-450-8). Se la sostanza è classificata come cancerogena, usare almeno le frasi S (2)9-16. La presente nota si applica soltanto a talune sostanze composte derivate dal carbone e dal petrolio, figuranti nell'allegato I.»

«La classificazione «**cancerogeno**» non è necessaria se si può dimostrare che la sostanza contiene meno dello 0 % di estratto Dmsc secondo la misurazione IP 346. La presente nota si applica soltanto a talune sostanze composte derivate dal carbone e dal petrolio, figuranti nell'allegato I.»

«**Nota M**»

«La classificazione «**cancerogeno**» non è necessaria se si può dimostrare che la sostanza contiene meno dello 0,005 % peso/peso di benzo[a]pirene (Einecs n. 200-028-5). La presente nota si applica soltanto a talune sostanze composte derivate dal carbone e dal petrolio, figuranti nell'allegato I.»

«**N**»

«La classificazione «**cancerogeno**» non è necessaria se si conosce l'intero iter di raffinazione e si può dimostrare che la sostanza da cui il prodotto è derivato non è cancerogena. La presente nota si applica soltanto a talune sostanze composte derivate dal carbone e dal petrolio, figuranti nell'allegato I.»

**Nota P**

La classificazione <cancerogeno> non è necessaria se si può dimostrare che la sostanza contiene meno dello 0,1% peso/peso di benzene (Einecs n. 200-753-7). Se la sostanza è classificata come cancerogena, occorre anche la nota E.

Se la sostanza non è classificata come cancerogena, usare almeno le frasi S (2-)23-24-62. La presente nota si applica soltanto a talune sostanze composte derivate dal carbone e dal petrolio, figuranti nell'allegato I.

**Spiegazione delle note concernenti l'etichettatura dei preparati**

Le note che compaiono accanto ai limiti di concentrazione hanno il significato seguente:

**Nota 1**

Le concentrazioni indicate o, in loro assenza, le concentrazioni generali della direttiva 88/379/CEE sono espresse in percentuale del peso dell'elemento metallico calcolato con riferimento al peso totale del preparato.

**Nota 2**

La concentrazione dell'isocianato indicata rappresenta la percentuale in peso del monomero libero calcolato con riferimento al peso totale del preparato.

**Nota 3**

La concentrazione indicata è espressa in percentuale del peso degli ioni cromo disciolti in acqua, calcolato con riferimento al peso totale del preparato.

**Nota 4**

I preparati contenenti queste sostanze devono essere classificati come nocivi e caratterizzati dalla frase R 65 se rispondono ai criteri di cui al punto 3.2.3 dell'allegato VI.

**Nota 5**

I limiti di concentrazione per i preparati gassosi sono espressi in percentuale volume per volume.

## TABELLA A

Elenco degli elementi chimici ordinati secondo il loro numero atomico (Z)

Z	Simbolo			Z	Simbolo		Z	Simbolo	
1	H	Idrogeno		37	Rb	Rubidio	73	Ta	Tantalio
2	He	Elio		38	Sr	Stronzio	74	W	Tungsteno
3	Li	Litio		39	Y	Ittrio	75	Re	Renio
4	Be	Berillio		40	Zr	Zirconio	76	Os	Osmio
5	B	Boro		41	Nb	Niobio	77	Ir	Iridio
6	C	Carbonio		42	Mo	Molibdeno	78	Pt	Platino
7	N	Azoto		43	Tc	Tecnizio	79	Au	Oro
8	O	Ossigeno		44	Ru	Rutenio	80	Hg	Mercurio
9	F	Fluoro		45	h	Rodio	81	Tl	Tallio
10	Ne	Neon		46	Pd	Palladio	82	Pb	Piombo
11	Na	Sodio		47	Ag	Argento	83	Bi	Bismuto
12	Mg	Magnesio		48	Cd	Cadmio	84	Po	Polonio
13	Al	Alluminio		49	In	Indio	85	At	Astatio
14	Si	Silicio		50	Sn	Stagno	86	Rn	Radon
15	P	Fosforo		51	Sb	Antimonio	87	Fr	Francio
16	S	Zolfo		52	Te	Tellurio	88	Ra	Radio
17	Cl	Cloro		53	I	Iodio	89	Ac	Attinio
18	A	Argon		54	Xe	Xeno	90	Th	Torio
19	K	Potassio		55	Cs	Cesio	91	Pa	Protattinio
20	Ca	Calcio		56	Ba	Bario	92	U	Uranio
21	Sc	Scandio		57	La	Lantanio	93	Np	Nettunio
22	Ti	Titanio		58	Ce	Cerio	94	Pu	Plutonio
23	V	Vanadio		59	Pr	Praseodimio	95	Am	Americio
24	Cr	Cromo		60	Nd	Neodimio	96	Cm	Curio
25	Mn	Manganese		61	Pm	Promezio	97	Bk	Berkelio
26	Fe	Ferro		62	Sm	Samario	98	Cf	Californio
27	Co	Cobalto		63	Eu	Europio	99	Es	Einsteinio
28	Ni	Nickel		64	Gd	Gadolino	100	Fm	Fermio
29	Cu	Rame		65	Th	Terbio	101	Md	Mendelevio
30	Zn	Zinco		66	Dy	Disprosio	102	No	Nobelio
31	Ga	Gallio		67	Hu	Olmio	103	Lw	Lawrencio
32	Ge	Germanio		68	Er	Erbio			
33	As	Arsenico		69	Tm	Tulio			
34	Se	Selenio		70	Yt	Itterbio			
35	Br	Bromo		71	Lu	Lutezio			
36	Kr	Krypton		72	Hf	Afnio			

## TABELLA B

**Classificazione speciale per le sostanze organiche**

---

601	Idrocarburi
602	Derivati alogenati degli Idrocarburi
603	Alcoli e derivati
604	Fenoli e derivati
605	Aldeidi e derivati
606	Chetoni e derivati
607	Acidi organici e derivati
608	Nitrili
609	Nitroderivati
610	Cloronitro derivati
611	Azossi- e azoderivati
612	Aminoderivati
613	Basi eterocicliche e derivati
614	Glucosidi e alcaloidi
615	Cianati e isocianati
616	Ammidi e derivati
617	Perossidi organici
647	Enzimi
648	Sostanze complesse derivate dal carbone
649	Sostanze complesse derivate dal petrolio
650	Sostanze diverse

Leg. No. 1333/74/0

LEC. No. 215-605-7

No 001-001-00-9


 $H_2$ 

ES: hidrógeno  
 DA: hydrogen (brint)  
 DE: Wasserstoff  
 EL: υδρογόνο  
 EN: hydrogen  
 FR: hydrogène  
 IT: idrogeno  
 NL: waterstof  
 PT: hidrogénio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

F+ ; R 12

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F+	
	R : 12
	S : (2-)9-16-33

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 16853-85-3

EEC No 240-877-9

No 001-002-00-4

 $\text{LiAlH}_4$ 

ES: hidruro de litio y de aluminio

DA: lithiumaluminiumhydrid

DE: Lithium-Aluminiumhydrid

EL: υδρίδιο αργιλίου-λιθίου

EN: aluminium lithium hydride

FR: hydrure d'aluminium-lithium

IT: idruro di litio-alluminio; litio-alluminio idruro

NL: lithiumaluminiumhydride

PT: hidreto de alumínio e lítio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 15

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="354 1480 368 1503" data-label="Text">F</div> <div data-bbox="311 1525 416 1628" data-label="Image"> </div> <div data-bbox="949 1534 1032 1563" data-label="Text">R : 15</div> <div data-bbox="949 1588 1173 1621" data-label="Text">S : (2-)7/8-24/25-43</div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7646-69-7

EEC No 231-587-3

No 001-003-00-X

NaH

ES: hidruro de sodio

DA: natriumhydrid

DE: Natriumhydrid

EL: υδρίδιο του νατρίου

EN: sodium hydride

FR: hydrure de sodium

IT: idruro di sodio; sodio idruro

NL: natriumhydride

PT: hidrreto de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação*

F; R 15

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F



R : 15

S : (2-)7/8-24/25-43

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 7789-78-8

EEC No 232-189-2

No 001-004-00-5




ES: hidruro de calcio  
 DA: calciumhydrid  
 DE: Calciumhydrid  
 EL: υδρίδιο του ασβεστίου  
 EN: calcium hydride  
 FR: hydrure de calcium  
 IT: idruro di calcio; calcio idruro  
 NL: calciumhydride  
 PT: hidreto de cálcio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F; R 15

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R : 15
	S : (2-)7/8-24/25-43

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 7439-93-2

EEC No 231-102-5

No 003-001-00-4

Li

ES: litio

DA: lithium

DE: Lithium

EL: λίθιο

EN: lithium

FR: lithium

IT: litio

NL: lithium

PT: lítio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

F; R 14/15

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	C	
		R : 14/15-34
		S : (1/2-)8-43-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 7440-41-7

EEC No 231-150-7

No 004-001-00-7

NOTA E


Be

ES: berilio  
 DA: beryllium  
 DE: Beryllium  
 EL: βηρύλλιο  
 EN: beryllium  
 FR: béryllium ; glucinium  
 IT: berillio  
 NL: beryllium  
 PT: berílio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 49	T+; R 26	T; R 25-48/23	Xi; R 36/37/38	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	R : 49-25-26-36/37/38-43-48/23
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No

EEC No

No. 004-002-00-2

NOTA A

NOTA E

ES: compuestos de berilio, excepto los silicatos dobles de aluminio y berilio

DA: berylliumforbindelser med undtagelse af berylliumaluminiumsillicater

DE: Berylliumverbindungen, ausgenommen Beryllium-Tonerdesilikate

EL: ενώσεις βηρυλλίου εκτός από τα διπλά πυριτικά άλατα αργιλίου-βηρυλλίου

EN: beryllium compounds with the exception of aluminium beryllium silicates

FR: composés de béryllium (glucinium) à l'exception des silicates doubles d'aluminium et de béryllium

IT: composti del berillio esclusi silicati doppi di alluminio e berillio

NL: berylliumverbindingen met uitzondering van beryllium-aluminiumsilicaat

PT: compostos de berílio com excepção dos silicatos duplos de alumínio e berílio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 49

T+; R 26

T; R 25-48/23

Xi; R 36/37/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 49-25-26-36/37/38-43-48/23

S : 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7637-07-2

EEC No 231-569-5

No 005-001-00-X

BF<sub>3</sub>

ES: trifluoruro de boro

DA: bortnfluond

DE: Bortnfluond

EL: τριφθοριοϋχο βόριο

EN: boron trifluoride

FR: trifluorure de bore

IT: trifluoruro di boro; boro trifluoruro

NL: boortrifluoride

PT: trifluoreto de boro

Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

R 14

T+; R 26

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	C	
		R : 14-26-35
		S : (1/2-)9-26-28-36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 10294-34-5

EEC No 233-658-4

No 005-002-00-5

BCl<sub>3</sub>

ES: tricloruro de boro

DA: bortrichlorid

DE: Bortrichlöríd

EL: τριχλωριούχο βόριο

EN: boron trichloride

FR: trichlorure de bore

IT: tricloruro di boro; boro tricloruro

NL: boortrichloride

PT: tricloreto de boro

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

R 14

T+; R 26/28

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+



R : 14-26/28-34

S : (1/2)-9-26-28-36/37/39-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo*


Cas No 10294-33-4

EEC No 233-657-9

No 005-003-00-0

BBr<sub>3</sub>

ES: tribromuro de boro

DA: bortribromid

DE: Bortribromid

EL: τριβρωμιούχο βοριο

EN: boron tribromide

FR: tribromure de bore

IT: tribromuro di boro; boro tribromuro

NL: boortribromide

PT: tribrometo de boro


Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

R 14

T+; R 26/28

C; R 35

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	C	
		R : 14-26/28-35
		S : (1/2-)9-26-28-36/37/39-45

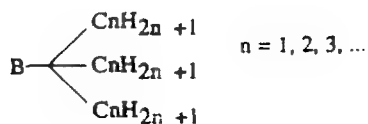
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

EEC No —

No 005-004-00-6

NOTA A



ES: trialkilboranos

DA: trialkylboraner

DE: Trialkylborane

EL: τριαλκυλοβοράνια

EN: trialkylboranes

FR: trialkylboranes

IT: trialkilborani

NL: trialkylboranen



PT: trialkilboranos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 17

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

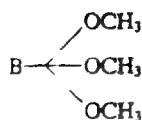
F	C	
		
		R : 17-34
		S : (1/2-)7-23-26-36/37 /39-43-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 121-43-7

EEC No 204-468-9

No 005-005-00-1



ES: borato de trimetilo

DA: trimethylborat

DE: Trimethylborat

EL: βορικός τριμεθυλεστέρας

EN: trimethyl borate

FR: borate de triméthyle

IT: trimetil borato

NL: trimethylboraat

PT: borato de trimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xn; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 10-21

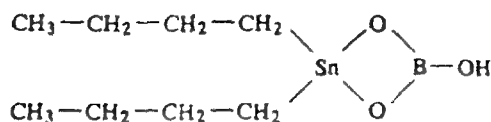
S : (2-)23-25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 75113-37-0

EEC No 401-040-5

No 005-006-00-7



ES: hidrogenoborato de dibutilestaño

DA: dibutyltinhydrogenborat

DE: Dibutylzinnohydrogenborat

EL: υδρογονοβορικός διβουτυλοκασσίτερος

EN: dibutyltin hydrogen borate

FR: hydrogénoborate de dibutylétain

IT: idrogenoborato di dibutilstagno

NL: dibutyltinhydrogeenboraat

PT: hydrogenoborato de dibutilestanho

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T; R 48/25

Xn; R 21/22

XI; R 41

R 43

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

T	N	
		R : 21/22-41-43-48/25-50/53
		S : (1/2-)22-26-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 630-08-0

EEC No 211-128-3

No 006-001-00-2

NOTA E

CO

ES: monoxido de carbono

DA: carbonmonoxid: kulilte

DE: Kohlenstoffmonoxid

EL: μονοξείδιο του άνθρακα

EN: carbon monoxide

FR: monoxyde de carbone

IT: monossido di carbonio, carbonio ossido

NL: koolstofmonoxide

PT: monóxido de carbono

FI: hiilimonoksidi

SV: kolmonoxid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F +, R 12

Repr. Cat. 1; R 61

T, R 23-48/23

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

F +



T



R: 61-12-23-48/23

S: 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisiusrajat, Konzentrationsgrænser*


Cas No 75-44-5

EEC No 200-870-3

No 006-002-00-8

COCL<sub>2</sub>

ES: fosgeno

DA: phosgen

DE: Phosgen; Carbonylchlorid

EL: φωσγενίο

EN: phosgene; carbonyl chloride

FR: phosgène

IT: fosgene; carbonile cloruro

NL: fosgeen

PT: fosgeno


FI: fosgeeni; karbonyylikloridi

SV: fosgen; karbonyldiklorid

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klasificering

T+; R 26	C; R 34
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning

<p>T+</p> 	<p>R. 26-34</p> <p>S. 11-23/9-26-36-37-39-45</p>
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Limits of concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως,  
 concentration limits, limites de concentration, Limiti di concentrazione, Concentrationsgrenzen,  
 Limites de concentração, Pitoiziusrajat, Konzentrationsgränser

C ≤ 5 %	T+; R 26-34
1 % ≤ C ≤ 5 %	T+, R 26-36/37/38
0,5 % ≤ C ≤ 1 %	T, R 23-36/37/38
0,2 % ≤ C ≤ 0,5 %	T, R 23
0,02 % ≤ C ≤ 0,2 %	Xn, R 20

NOTA

Cas No 75-15-0

EEC No 200-843-6

No 006-003-00-3

CS<sub>2</sub>

ES: disulfuro de carbono  
 DA: carbondisulfid ; svovikulstof  
 DE: Kohlendisulfid ; Schwefelkohlenstoff  
 EL: διθειάνθρακας  
 EN: carbon disulphide  
 FR: sulfure de carbone  
 IT: solfuro di carbonio  
 NL: kooldisulfide ; zwavelkoolstof  
 PT: sulfureto de carbono

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

F ; R 11	Repr. Cat. 3 ; R 62-63	T ; R 48/23	Xi ; R 36/38
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	T	
		R : 11-36/38-48/23-62-63 S : 16-33-36/37-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 20 %	T ; R 36/38-48/23-62-63
1 % ≤ C < 20 %	T ; R 48/23-62-63
0,2 % ≤ C < 1 %	Xn ; R 48/20



Cas No 75-20-7

EEC No 200-848-3

No 006-004-00-9



ES: carburo de` calcio

DA: calciumcarbid; karbid

DE: Calciumcarbid

EL: ανθρακασβέστιο

EN: calcium carbide

FR: carbure de calcium

IT: carburo di calcio; calcio carburo

NL: calciumcarbide

PT: carboneto de cálcio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

F; R 15

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

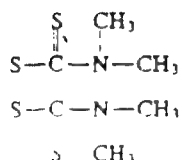
F	
	R : 15
	S : (2)-8-43

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 137-26-8

EEC No 205-286-2

No 006-005-00-4



ES: turam; disulfuro de bis (N,N-dimetiltiocarbamilo)

DA: thiram; tetramethylthiuramdisulfid

DE: Thiram; Bis (dimethyl-thiocarbamoyl)-disulfid

EL: thiram; δις (διμεθυλο-θειοκαρβαμουλ)-δισουλφίδιο

EN: thiram; tetramethylthiuram disulphide

FR: thirame; disulfure de bis (N,N-diméthylthiocarbamyle)

IT: turam; (bis dimetilcarbamoil) disolfuro; disolfuro di tetrametiltiurame


NL: thiram; tetramethylthiuram disulfide

PT: tirame; dissulfureto de tetrametiltiurama

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Muta. Cat. 3; R 40	Xn; R 20/22	Xi; R 36/37	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xn	
	R : 20/22-36/37-40-43
	S : (2-)36/37

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 74-90-8

EEC No 200-821-6

No 006-006-00-X

HCN

ES: ácido cianhídrico; cianuro de hidrógeno

DA: hydrogencyanid; cyanbrinte; blåsyre

DE: Cyanwasserstoff; Blausäure

EL: υδροκυάνιο

EN: hydrogen cyanide; hydrocyanic acid

FR: cyanure d'hydrogène; acide cyanhydrique

IT: ácido cianidrico

NL: cyanwaterstof; blauwzuur

PT: cianeto de hidrogénio; ácido cianídrico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F+; R 12 T+; R 26

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F+	T+	
		
		R : 12-26
		S : (1/2-)7/9-16-36/37-38-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas. No 74-90-8

EEC No 200-821-6

No 006-006-01-7

NOTA B

HCN . . . %

ES: ácido cianhídrico; cianuro de hidrógeno . . . %

DA: hydrogencyanid; cyanbrinte; blåsyre . . . %

DE: Cyanwasserstoff; Blausäure . . . %

EL: υδροκυάνιο . . . %

EN: hydrogen cyanide; hydrocyanic acid . . . %

FR: cyanure d'hydrogène; acide cyanhydrique . . . %

IT: ácido cianidrico . . . %

NL: cyaanwaterstof; blauwzuur . . . %

PT: cianeto de hidrogénio; ácido cianídrico . . . %

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 26/27/28
	S : (1/2-)7/9-16-36/37-38-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 7 \%$	T+ ; R 26/27/28
$1 \% \leq C < 7 \%$	T ; R 23/24/25
$0,1 \% \leq C < 1 \%$	Xn ; R 20/21/22

Cas No —

EEC No —

No 006-007-00-5

NOTA A


- ES: sales del ácido cianhídrico, excepto los cianuros complejos, tales como los ferrocianuros y ferricianuros y oxicianuro de mercurio
- DA: salte af hydrogencyanid med undtagelse af komplekse salte som cyanoferrat (II) og-(III) og kviksølv(II)oxidcyanid
- DE: Salze der Blausäure mit Ausnahme der komplexen Cyanide, z. B. Cyanoferrate (II) und (III) und Quecksilberoxidcyanid
- EL: άλατα υδροκυανίου εκτός από τα συμπλοκα κυανιούχα όπως τα σιδηροκυανιούχα, σιδηρικυανιούχα και οξυκυανιούχο υδράργυρο
- EN: hydrogen cyanide (Salts of ...) with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide
- FR: sels de l'acide cyanhydrique, à l'exception des cyanures complexes tels que ferrocyanures et ferricyanures et oxycyanure de mercure
- IT: sali dell'acido cianidrico, ad esclusione dei cianuri complessi come ferrocianuri e ferricianuri e ossicianuro di Hg
- NL: cyaanwaterstof (Zouten van ...) met uitzondering van complexe cyaniden zoals ferro-en ferricyaniden en kwikoxycyanide
- PT: sais do ácido cianídrico, com excepção dos cianetos complexos tais como ferrocianetos, ferricianetos e oxicianeto de mercúrio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 26/27/28

R 32

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

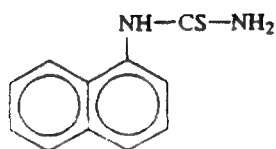
T+	
	R : 26/27/28-32
	S : (1/2)-7-28-29-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 86-88-4

EEC No 201-706-3

No 006-008-00-0




ES: antu (ISO); 1-(1-naftil)-2-tiourea  
 DA: antu (ISO); 1-(1-naphthyl)-2-thiourinstof  
 DE: antu (ISO); 1-(1-Naphthyl)-2-thioharnstoff  
 EL: antu (ISO); 1-(1-ναφθυλο)-2-θειουρία  
 EN: antu (ISO); 1-(1-naphthyl)-2-thiourea  
 FR: antu (ISO); 1-(1-naphtyl)-2-thiourée  
 IT: antu (ISO); 1-(naftil)-2-tiourea  
 NL: antu (ISO); 1-(1-naftyl)-2-thioureum  
 PT: antu (ISO); 1-(naftil)-2-tioureia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+; R 28

Carc. Cat. 3; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

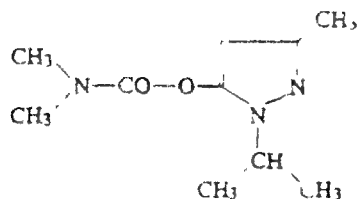
T+	
	R : 28-40
	S : (1/2-)25-36/37-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 119-38-0

EEC No 204-318-2

No 006-009-00-6



ES: dimetilcarbarnato de 1-isopropil-3-metilpirazon-5-ilo; isolan

DA: 1-isopropyl-3-methylpyrazol-5-yl dimethylcarbamate

DE: 1-Isopropyl-3-methylpyrazol-5-yl dimethylcarbamate

EL: isolan · διμεθυλοκαρβαμιδικό 1-ισοπροπυλο-3-μεθυλοπυραζολ-5-υλ-εστέρας

EN: 1-isopropyl-3-methylpyrazol-5-yl dimethylcarbamate; isolan

FR: diméthylcarbamate de 1-isopropyl-3-méthylpyrazole-5-yle; isolan

IT: dimetilcarbammato di 1-isopropil-3-metilpirazol-5-ile


NL: 1-isopropyl-3-methylpyrazool-5-yl dimethylcarbamaat

PT: dimetilcarbarnato de 1-isopropil-3-metil-5-pirazolilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

T+; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerk, Roetelagem

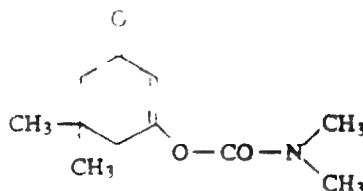
T+	
	R: 27/28
	S: (1/2)28-36/37/39-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração


Cas No 122-15-6

EEC No 204-525-8

No 006-010-00-1



ES: dimetilcarbamato de 5,5-dimetil-3-oxociclohex-1-enilo dimetilcarbamato de 5,5-dimetildihidroresorcinol

DA: 5,5-dimethyl-3-oxocyclohex-1-enyldimethylcarbamate 5,5-dimethyldihydroresorcinoldimethylcarbamate

DE: 5,5-Dimethyl-3-oxocyclohex-1-enyldimethylcarbamate 5,5-Dimethyldihydroresorcinoldimethylcarbamate

EL: dimetan διμεθυλοκαρβαμιδική 5,5-διμεθυλοδιυδρορεσορκινόλη

EN: 5,5-dimethyl-3-oxocyclohex-1-enyl dimethylcarbamate 5,5-dimethyldihydroresorcinol dimethylcarbamate; dimetan

FR: dimethylcarbamate de 5,5-dimethyl-3-oxocyclohex-1-ényle diméthylcarbamate de 5,5-diméthyldihydroresorcinol; dimetan

IT: dimetilcarbammato di 5,5-dimetil-3-ossocicloes-1-enile dimetilcarbammato di 5,5-dimetildiidroresorcina

NL: 5,5-dimethyl-3-oxocyclohex-1-enyldimethylcarbamate 5,5-dimethyldihydroresorcinoldimethylcarbamate

PT: dimetilcarbamato de 5,5-dimetil-3-oxo-1-ciclohexenilo dimetilcarbamato de 5,5-dimetildiidroresorcinol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

T	
	R : 25
	S : (1/2-)36/37-45

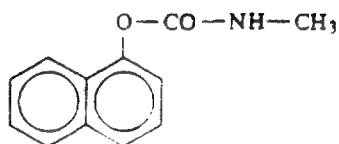
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limites di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 63-25-2

EEC No 200-555-0

No 006-011-00-7



ES: carbaril (ISO); carbarilo (DCI); metilcarbarnato de 1-naftilo

DA: carbaryl (ISO); 1-naphthylmethylcarbamate

DE: carbaryl (ISO); 1-Naphthylmethylcarbamate

EL: carbaryl (ISO); μεθυλοκαρβαμιδικός 1-ναφθυλεστέρας

EN: carbaryl (ISO); 1-naphthyl methylcarbamate

FR: carbaryl (ISO); méthylcarbamate de 1-naphtyle

IT: carbaril (ISO); metilcarbammato di 1-naftile

NL: carbaryl (ISO); 1-naftylmethylcarbamate

PT: carbarilo (ISO); carbaril (DCI); metilcarbarnato de 1-naftilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

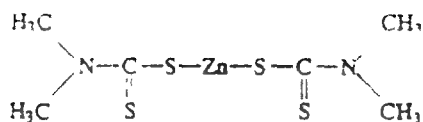
Xn	
	R : 22
	S : (2-)22-24

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 137-30-4

EEC No 205-288-3

No 006-012-00-2



ES ziram; bis (N,N-dimetilditiocarbamato) de cinc

DA - trimer : zink-bis(*N,N*-dimethyldithiocarbamat)

DE: Ziram, Zink-bis(*N,N*-dimethyl-dithiocarbamat)

ΕΛ: Gram (-) ως *N,N*-διμεθυλοδιθειοκαρβαμιδικός) ψευδάργυρος

FN 1.000 gram; zinc bis dimethyldithiocarbamate

FR Formule : bis(*N,N*-dimethyldithiocarbamate) de zinc

— ziram; bis(*N,N*-dimetil-ditiocarbammato) di zinco

NL zram : zink-bis(*N,N*-dimethyldithiocarbamaat)

PT: triame; 2,2,2-V,N-dimetilditiocarbamato) de zinco

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Muta Cat 3; R 40

**Xn : R 22**

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Etichuvavon, Labelling, Étiquetage, Etichestazura, Kenmerken, Rotulagem*

 $x_n$ 

R : 22-36/37/38-40

S : (2-)36/37

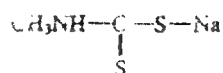
Limites de concentración. Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração.

[illegible]

Cas No 137-42-8

EEC No 205-293-0

No 006-013-00-8



- ES: metam-sodio; N-metilditiocarbamato de sodio  
 DA: metam-Na; natrium-N-methyldithiocarbamat  
 DE: Metam-Natrium; Natrium-N-methyl-dithiocarbamat  
 EL: metam-sodium · N-μεθυλοδιθειοκαρβαμιδικό νάτριο  
 EN: metam-sodium; sodium methyldithiocarbamate  
 FR: metam-sodium; N-méthyldithiocarbamate de sodium  
 IT: metam-sodio; N-metil-ditiocarbammato di sodio  
 NL: metam-natrium; natrium-N-methyldithiocarbamaat  
 PT: metame-sódio; N-metilditiocarbamato de sódio.


*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Inndeling, Classificação*

Xn; R 21/22

R 31

Xi; R 41

*Etiketada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

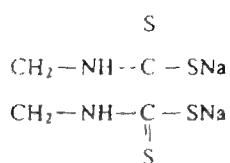
Xn	
	
	R : 21/22-31-41
	S : (2-)26-36/37/39

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 142-59-6

EEC No 205-547-0

No 006-014-00-3



- ES nabam (ISO); etilenbisditiocarbamato de disodio  
 DA nabam (ISO); natriumethylenbisdithiocarbamat  
 DE nabam (ISO); D natriumethylenbisdithiocarbamat  
 EL nabam (ISO); αιθυλενοδισθειοκαρβαμιδικό δινάτριο  
 EN nabam (ISO); disodium ethylenebisdithiocarbamate  
 FR nabame (ISO); ethylenebisdithiocarbamate de disodium  
 IT nabam (ISO); etilenbisditiocarbammato di disodio  
 NL nabam (ISO); dinatriumethyleenbisdithiocarbamaat  
 PT nabame (ISO); etilenobisditiocarbamato de dissódio

Classification, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22	Xi; R 37	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

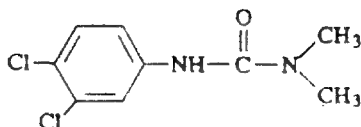
Xn	
	R : 22-37-43
	S : (2-)8-24/25-46

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 330-54-1

EEC No 206-354-4

No 006-015-00-9



ES: diuron; 3-(3,4-diclorofenil)-1,1-dimetilureia

DA: diuron

DE: Diuron

EL: diuron · 3-(3,4-διχλωροφαινυλ)-1,1-διμεθυλουρία

EN: diuron; 3-(3,4-dichlorophenyl)-1,1-dimethylurea

FR: diuron; 3-(3,4-dicchlorophényl)-1,1-diméthylurée

IT: diuron

NL: diuron

PT: diuron

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 48/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 48/22

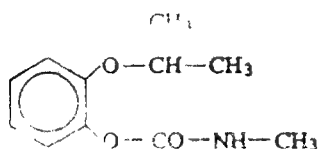
S : (2-)22-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 114-26-1

EEC No 204-043-8

No 006-016-00-4



- ES: propoxur (ISO); metilcarbarnato de 2-isopropoxifenilo  
 DA: propoxur (ISO); 2-isopropoxyphenylmethylcarbamate  
 DE: Propoxur (ISO); 2-Isopropoxyphenylmethylcarbamate  
 EL: propoxur (ISO); μεθυλοκαρβαμιδικός 2-ισοπρόποξυφαινυλεστέρας  
 EN: propoxur (ISO); 2-isopropoxyphenyl methylcarbamate  
 FR: propoxur (ISO); N-méthylcarbamate de 2-isopropoxyphényle  
 IT: propoxur (ISO); metilcarbammato di 2-isopropossifenile  
 NL: propoxur (ISO); 2-isopropoxyfenylmethylcarbamate  
 PT: propoxur (ISO); metilcarbarnato de 2-isopropoxifenilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

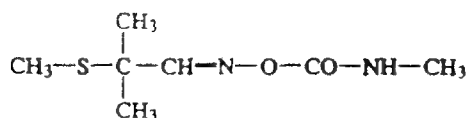
T	
	R : 25 S : (1/2-)37-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 116-06-3

EEC No 204-123-2

No 006-017-00-X



ES: aldicarb (ISO); 2-metil-2-(metiltio)propionaldehido-O-(metilcarbamoil)oxima

DA: aldicarb (ISO); 2-methyl-2-(methylthio) propionaldehyd-O-(methylcarbamoil) oxim

DE: aldicarb (ISO); 2-Methyl-2-(methylthio) propionaldehyd-O-(methylcarbamoil) oxim

EL: aldicarb (ISO); 2-μεθυλο-2-(μεθυλοθειο)προπιοναλδεϋδο-O-(μεθυλοκαρβαμοϋλ)οξιμη

EN: aldicarb (ISO); 2-methyl-2-(methylthio) propionaldehyde O-(methylcarbamoil) oxime

FR: aldicarbe (ISO); 2-méthyl-2-(méthylthio) propionaldéhyde-O-(méthylcarbamoil) oxime; N-méthylcarbamate de (2-méthyl-2-méthylthiopropylidène) amine

IT: aldicarb (ISO); 2-metil-2-(metiltio) propionaldeide-O-(metilcarbamoil) ossima


NL: aldicarb (ISO); 2-methyl-2-(methylthio) propionaldehyd-O-(methylcarbamoil) oxim

PT: aldicarbe (ISO); 2-metil-2-(metiltio)propionaldeido-O-(metilcarbamoil)oxima

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

T+; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

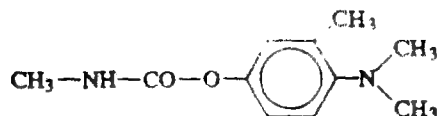
T+	
	R : 27/28
	S : (1/2-)22-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2032-59-9

EEC No 217-990-7

No 006-018-00-5



- ES: aminocarb (ISO); metilcarbarnato de 4-dimetilamino-m-tolilo  
 DA: aminocarb (ISO); 4-dimethylamino-3-tolylmethylcarbamate  
 DE: aminocarb (ISO); 4-Dimethylamino-3-tolylmethylcarbamate  
 EL: aminocarb (ISO); μεθυλοκαρβαμικός 4-διμεθυλαμινο-3-τολουολεστέρας  
 EN: aminocarb (ISO); 4-dimethylamino-3-tolyl methylcarbamate  
 FR: aminocarbe (ISO); méthylcarbamate de 4-diméthylamino-3-tolyle  
 IT: aminocarbe (ISO); metilcarbammato di 4-dimetilammino-3-tolile  
 NL: aminocarb (ISO); 4-dimethylamino-3-tolylmethylcarbamate  
 PT: aminocarbe (ISO); metilcarbarnato de 4-dimetilamino-m-tolilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 24/25
	S : (1/2)-28-36/37-45

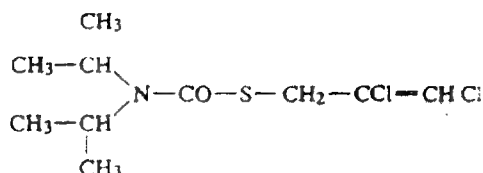
*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentraçào*




Cas No 2303-16-4

EEC No 218-961-1

No 006-019-00-0



ES: dialato (ISO); diisopropiltiocarbamato de S-2,3-dicloroalilo

DA: di-allat (ISO); S-2,3-dichlorallyldiisopropylthiocarbamat

DE: di-allat (ISO); S-2,3-Dichlorallyldiisopropylthiocarbamat

EL: di-allate (ISO); διισοπροπυλοθειοκαρβαμιδικός S-2,3-δichλωροαλλυλεστέρας

EN: di-allate (ISO); S-2,3-dichloroallyl diisopropylthiocarbamate

FR: diallate (ISO); diisopropylthiocarbamate de S-2,3-dichloroallyle

IT: diallato (ISO); diisopropiltiocarbammato di S-2,3-dicloroallile

NL: diallaat (ISO); S-2,3-dichloorallyldiisopropylthiocarbamaat

PT: di-alato (ISO); diisopropiltiocarbamato de S-2,3-dicloroalilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

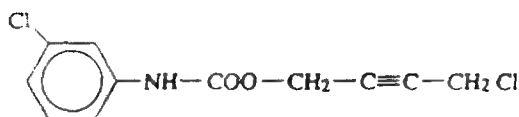
Xn	
	R : 22-40 S : (2-)25-36/37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 101-27-9

EEC No 202-930-4

No 006-020-00-6



- ES : barban (ISO) ; 3-clorofenilcarbarnato de 4-clorobut-2-inilo  
 DA : barban (ISO) ; 4-chlorbut-2-ynyl-3-chlorphenylcarbamate  
 DE : barban (ISO) ; (4-Chlorbut-2-ynyl)-3-chlorphenylcarbamate  
 EL : barban (ISO) ; 3-χλωροφαινυλοκαρβαμιδικός 4-χλωροβουτ-2-ινυλεστέρας  
 EN : barban (ISO) ; 4-chlorbut-2-ynyl 3-chlorophenylcarbamate  
 FR : barbane (ISO) ; 3-chlorophénylcarbamate de 4-chlorobut-2-ynyle  
 IT : barbano (ISO) ; 3-clorofenilcarbammato di 4-clorobut-2-inile  
 NL : barban (ISO) ; (4-chloorbut-2-ynyl)-3-chloorfenylcarbamaat  
 PT : barbane (ISO) ; 3-clorofenilcarbarnato de 4-cloro-2-butililo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

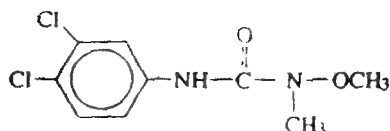
Xn	
	R : 22-43
	S : (2-)24-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*


Cas No 330-55-2

EEC No 206-356-5

No. 006-021-00-1



ES: linuron (ISO); 3-(3,4-diclorofenil)-1-metil-1-metoxiurea

DA: linuron (ISO); 3-(3,4-dichlorphenyl)-1-methoxy-1-methylurinstof

DE: linuron (ISO); 3-(3,4-Dichlorphenyl)-1-methoxy-1-methylharnstoff

EL: linuron (ISO); 3-(3,4-διχλωροφαινυλο)-1-μεθοξυ-1-μεθυλουρία

EN: linuron (ISO); 3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea

FR: linuron (ISO); 3-(3,4-dichlorophényl)-1-méthoxy-1-méthylurée

IT: linuron (ISO); 3-(3,4-diclorofenil)-1-metil-1-metossiurea

NL: linuron (ISO); 3-(3,4-dichloorfenyl)-1-methoxy-1-methylureum

PT: linurone (ISO); 3-(3,4-diclorofenil)-1-metil-1-metoxiureia

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Esichetatura, Kenmerken, Rotulagem

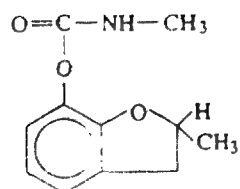
Xn	
	R : 40
	S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1563-67-3

EEC No —

No 006-022-00-7



- ES: decarbofurano; N-metilcarbarnato de 2,3-dihidro-2-metil-7-benzofuranilo  
 DA: decarbofuran; 2,3-dihydro-2-methyl-7-benzofuranyl-methylcarbamate  
 DE: Decarbofuran; 7-(N-Methyl-carbamoyloxy)-2-methyl-2,3-dihydro-benzofuran  
 EL: decarbofuran; N-μεθυλοκαρβαμιδικός 2-μεθυλο-2,3-διυδροβενζοφουραν-7-υλ-εστέρας  
 EN: decarbofuran; 2,3-dihydro-2-methylbenzofuran-7-yl methylcarbamate  
 FR: décarbofuran; N-méthylcarbamate de 2-méthyl-2,3-dihydrobenzo [b] furan-7-yle  
 IT: decarbofurano; 7-(N-metil-ossicarbamoil)-2-metil-2,3-diidrobenzofurano  
 NL: decarbofuraan; 7-(N-Methyl-carbamoyloxy)-2-methyl-2,3-dihydrobenzofuraan  
 PT: decarbofurano; N-metilcarbarnato de 2-metil-2,3-diidrobenzo(b)furane-7-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichèttatura, Kenmerken, Rotulagem

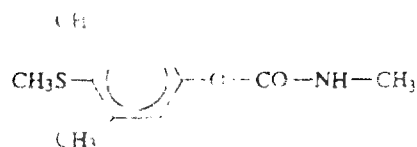
<p>T</p> 	<p>R : 23/24/25</p> <p>S : (1/2-)13-36/37-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2032-65-7

EEC No 217-991-2

No 006-023-00-2



- ES: mercaptodimetur (ISO); metiocarb; metilcarbamat de 4-metiltio-3,5-xililo  
 DA: mercaptodimetur (ISO); metiocarb; 4-methylthio-3,5-xylylmethylcarbammat  
 DE: Mercaptodimetur (ISO); Metiocarb; 4-Methylthio-3,5-xylylmethylcarbammat  
 EL: mercaptodimetur (ISO): μεθυλοκαρβαμιδικός 4-μεθυλοθειο-3,5-ξυλυλεστέρας  
 EN: mercaptodimetur (ISO); methiocarb; 4-methylthio-3,5-xylyl methylcarbamate  
 FR: mercaptodimethur (ISO); méthiocarbe; méthylcarbamate de 4-méthylthio-3,5-xylyle  
 IT: mercaptodimetur (ISO); methiocarb; metilcarbammato di 4-metiltio-3,5-xilile  
 NL: mercaptodimetur (ISO); metiocarb; 4-méthylthio-3,5-xylylmethylcarbamaat  
 PT: mercaptodimetur (ISO); metiocarbe; metilcarbamat de 4-metiltio-3,5-xililo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T; R 25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

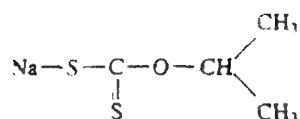
<p>T</p> 	<p>R 25</p> <p>S: (1/2-)22-37-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração*


Cas No 140-93-2

EEC No 205-443-5

No 006-024-00-8



ES: proxan-sodio; ditiocarbamato de O-isopropilo y de sodio

DA: proxan-Na; natrium-isopropyl-xanthogenat

DE: Proxan-Natrium; Natrium-O-isopropyl-dithiocarbonat

EL: proxan-sodium · O-ισοπροπυλοξανθογονικό νάτριο

EN: proxan-sodium; sodium isopropylxanthate

FR: proxane-sodium; dithiocarbonate d'O-isopropyle et de sodium

IT: proxan-sodio; O-isopropil-ditiocarbonato di sodio

NL: natrium-O-isopropyl-dithiocarbonaat

PT: proxana-sodio; ditiocarbonato de O-isopropilo e de sódio

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn: R 22

Xi; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xn



R: 22-38

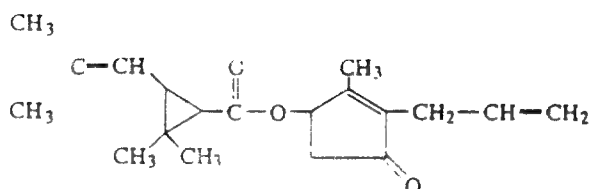
S: (2-)13

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 584-79-2

EEC No 209-542-4

No 006-025-00-3



- ES: aletrina (ISO) ; (+-)-cis-trans-crisantemato de (+-)-3-alil-2-metil-4-oxociclopent-2-enilo  
 DA: allethrin (ISO) ; (+-)-3-allyl-2-methyl-4-oxocyclopent-2-enyl-(+)-cis-trans-chrysanthemat  
 DE: allethrin (ISO) ; (+-)-3-Allyl-2-methyl-4-oxocyclopent-2-enyl-(+)-cis-trans-chrysanthemat  
 EL: allethrin (ISO) ; (+-)-cis-trans-χρυσανθεμικός (+-)-3-αλλυλο-2-μεθυλ-4-οξοκυκλοπεντ-2-ενυλεστέρας  
 EN: allethrin (ISO) ; (+-)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (+)-cis-trans-chrysanthemate  
 FR: alléthrine (ISO) ; (+-)-cis-trans-chrysanthémate de (+-)-3-allyl-2-méthyl-4-oxocyclopent-2-enyle  
 IT: alletrina (ISO) ; (+-)-cis-trans-crisantemato di (+-)-3-alil-2-metil-4-ossociclopent-2-enile  
 NL: alletrine (ISO) ; (+-)-3-allyl-2-methyl-4-oxocyclopent-2-enyl-(+)-cis-trans-chrysanthemaat  
 PT: aletrina (ISO) ; (+-)-cis-trans-crisantemato de (+-)-3-alil-2-metil-4-oxo-2-ciclopentenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

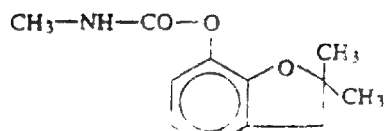
Xn	
	R : 22
	S : (2-)36

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 1563-66-2

EEC No 216-353-0

No 006-026-00-9



ES: carbofuran (ISO); metilcarbarnato de 2,3-dihidro-2,2-dimetilbenzofuran-7-ilo

DA: carbofuran (ISO); 2,3-dihydro-2,2-dimethylbenzofuran-7-ylmethylcarbamate

DE: Carbofuran (ISO); 2,3-Dihydro-2,2-dimethylbenzofuran-7-ylmethylcarbamate

EL: carbofuran (ISO); μεθυλοκαρβαμικός 2,3-διυδρο-2,2-διμεθυλοδενζοφουραν-7-υλεστέρας

EN: carbofuran (ISO); 2,3-dihydro-2,2-dimethylbenzofuran-7-yl methylcarbamate

FR: carbofuran (ISO); méthylcarbamate de 2,3-dihydro-2,2-diméthylbenzofuran-7-yle

IT: carbofuran (ISO); metilcarbammato di 2,3-diidro-2,2-dimetilbenzofuran-7-ile

NL: carbofuraan (ISO); 2,3-dihydro-2,2-dimethylbenzofuran-7-ylmethylcarbamaat

PT: carbofuran (ISO); metilcarbarnato de 2,3-dihidro-2,2-dimetilbenzofurane-7-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R: 26/28
	S: (1/2-)36/37-45

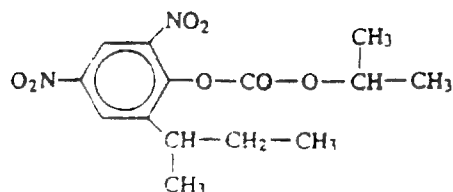
Límites de concentración, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 973-21-7

EEC No 213-546-1

No 006-028-00-X



- ES: dinobuton (ISO); carbonato de 2-sec-butil-4,6-dinitrofenilo y de isopropilo  
 DA: dinobuton (ISO); 2-sec-butyl-4,6-dinitrophenylisopropylcarbonat  
 DE: dinobuton (ISO); 2-sec-Butyl-4,6-dinitrophenylisopropylcarbonat  
 EL: dinobuton (ISO); ανθρακικός 2-δευτ.-δουτυλο-4,6-δινιτροφαινυλ-ισοπροπυλεστέρας  
 EN: dinobuton (ISO); 2-sec-butyl-4,6-dinitrophenyl isopropyl carbonate  
 FR: dinobuton (ISO); carbonate de 2-sec-butyl-4,6-dinitrophényle et d'isopropyle  
 IT: dinobuton (ISO); carbonato di 2-sec-butil-4,6-dinitrofenile e isopropile  
 NL: dinobuton (ISO); 2-sec-butyl-4,6-dinitrofenylisopropylcarbonaat  
 PT: dinobutona (ISO); carbonato de 2-sec-butil-4,6-dinitrofenilo e isopropilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificaçào*

T; R 25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

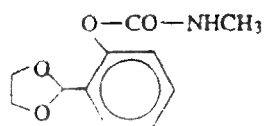
<p>T</p> 	<p>R : 25</p> <p>S : (1/2-)37-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 6988-21-2

EEC No 230-253-4

No 006-029-00-5



ES: dioxacarb (ISO); metilcarbarnato de 2-(1,3-dioxalano-2-il)fenilo

DA: dioxacarb; 2-(1,3-dioxolan-2-yl)phenylmethylcarbamate

DE: Dioxacarb; 2-(1,3-Dioxolan-2-yl)phenylmethylcarbamate

EL: dioxacarb; μεθυλοκαρβαμιδικός 2-(1,3-διοξολαν-2-υλ)φαινυλεστέρας

EN: dioxacarb; 2-(1,3-dioxolan-2-yl)phenyl methylcarbamate

FR: dioxacarbe; methylcarbamate de 2-(1,3-dioxolan-2-yl)phényle

IT: dioxacarb; metilcarbammato di 2-(1,3-diossolan-2-il)fenile

NL: dioxacarb; 2-(1,3-dioxolaan-2-yl) fenylmethylcarbarnaat

PT: dioxacarbe (ISO); metilcarbarnato de 2-(1,3-dioxolano-2-il)fenilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

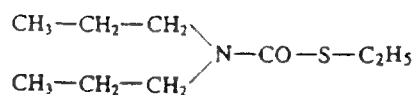
T	
	R : 25
	S : (1/2-)37-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 759-94-4

EEC No 212-073-8

No 006-030-00-0



- ES: EPTC (ISO); dipropiltiocarbamato de S-etilo  
 DA: EPTC (ISO); S-ethyl dipropylthiocarbamat  
 DE: EPTC (ISO); S-Ethyl dipropylthiocarbamat  
 EL: EPTC (ISO); διπροπυλοθειοκαρβαμιδικός S-αιθυλεστέρας  
 EN: EPTC (ISO); S-ethyl dipropylthiocarbamate  
 FR: EPTC (ISO); dipropylthiocarbamate de S-éthyle  
 IT: EPTC (ISO); dipropiltiocarbammato di S-etile  
 NL: EPTC (ISO); S-ethyl dipropylthiocarbamaat  
 PT: EPTC (ISO); dipropiltiocarbamato de S-etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

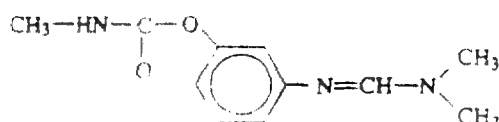
Xn	
	R : 22
	S : (2-)23

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 22259-30-9

EEC No 244-879-0

No 006-031-00-6



- ES: formetanato; N-metilcarbarnato de 3-(dimetilamino-metilen-amino) fenilo  
 DA: formetanat; 3-dimethylaminomethylenaminophenyl- N-methylcarbamat  
 DE: formetanat; 3-(N,N'-Dimethylamino-methylen)-amino-phenyl- N-methylcarbamat  
 EL: formetanat; N-μεθυλοκαρβαμικός 3-(διμεθυλαμινο-μεθυλενο-αμινο)-φαινυλεστέρας  
 EN: formetanate; 3-dimethylaminomethyleneaminophenyl methylcarbamate  
 FR: formetanate; N-méthylcarbarnate de 3-(diméthylaminométhylène-amino)phényle  
 IT: formetanato; metilcarbarnato di 3-(dimeulamino-metilene-imino)fenile  
 NL: formetanaat; 3-(N,N'-dimethylar-inomethyleen)-aminofenyl- N-methylcarbarnaat  
 PT: formetanato; N-metilcarbarnato de 3-dimeulaminometilenoaminofenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 28

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichétsatura, Kenmerken, Rotulagem

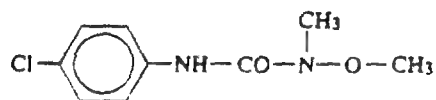
T+	R : 28
	S : (1/2-)22-36/37-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrænzen, Limites de concentraçáo


Cas No 1746-81-2

EEC No 217-129-5

No 006-032-00-1



ES: monolinuron (ISO); 3-(4-clorofenil)-1-metoxi-1-metilurea  
 DA: monolinuron (ISO); 3-(4-chlorphenyl)-1-methoxy-1-methylurinstof  
 DE: Monolinuron (ISO); 3-(4-Chlorphenyl)-1-methoxy-1-methylharnstoff  
 EL: monolinuron (ISO); 3-(4-χλωροφαινυλο)-1-μεθοξυ-1-μεθυλουρία  
 EN: monolinuron (ISO); 3-(4-chlorophenyl)-1-methoxy-1-methylurea  
 FR: monolinuron (ISO); 3-(4-chlorophényl)-1-méthoxy-1-méthylurée  
 IT: monolinuron (ISO); 3-(4-clorofenil)-1-metossi-1-metilurea  
 NL: monolinuron (ISO); 3-(4-chloorfenyl)-1-methoxy-1-methylureum  
 PT: monolinurone (ISO); 3-(4-clorofenil)-1-metoxi-1-metilureia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

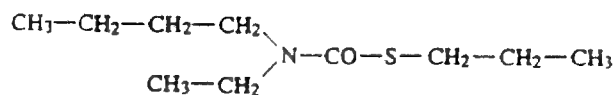
Xn	
	R : 22
	S : (2-)22

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1114-71-2

EEC No 214-215-4

No 006-034-00-2



- ES: pebulato (ISO); butil (etil)tiocarbamato de S-propilo  
 DA: pebulat (ISO); S-propylbutyl (ethyl) thiocarbamat  
 DE: Pebulat (ISO); S-Propylbutyl (ethyl) thiocarbamat  
 EL: pebulate (ISO) · (αιθυλο)βουτυλοθειοκαρβαμιδικός S-προπυλεστέρας  
 EN: pebulate (ISO); S-propyl butyl (ethyl) thiocarbamate  
 FR: pebulate (ISO); butyl(éthyl)thiocarbamate de S-propyle  
 IT: pebulato (ISO); butil (etil) tiocarbammato di S-propile  
 NL: pebulaat (ISO); S-propylbutyl (ethyl) thiocarbamaat  
 PT: pebulato (ISO); butil (etil) tiocarbamato de S-propilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

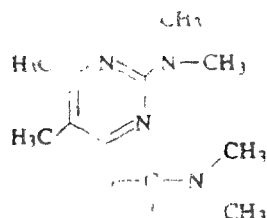
<p>Xn</p> 	<p>R: 22</p> <p>S: (2-)23</p>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, -Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 23103-98-2

EEC No 245-430-1

No 006-035-00-8



ES: pirimicarb; N,N-dimetilcarbarnato de 2-dimetilamino-5,6-4-dimetilpirimidinilo

DA: pirimicarb; 2-dimethylamino-5,6-dimethylpyrimidin-4-yl-dimethylcarbamate

DE: Pirimicarb; 5,6-Dimethyl-2-dimethylamino-pyrimidin-4-yl-N,N-dimethyl-carbamate

EL: pirimicarb; N,N-διμεθυλοκαρβαμιδικός 2-διμεθυλαμινο-5,6-διμεθυλοπυριμιδιν-4-υλ-εστέρας

EN: pirimicarb; 2-dimethylamino-5,6-dimethylpyrimidin-4-yl dimethylcarbamate

FR: pyrimicarbe; N,N-diméthylcarbamate de 2-diméthylamino-5,6-diméthyl-4-pyrimidinyle

IT: pirimicarb; N,N-dimetilcarbammato di (2-dimetil-amino-5,6-dimetil-4-pirimidinile)

NL: pirimicarb; 2-dimethylamino-5,6-dimethylpyrimidin-4-yl-dimethylcarbamaat

PT: pirimicarbe; N,N-dimetilcarbarnato de 2-dimetilamino-5,6-dimetil-4-pirimidinilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

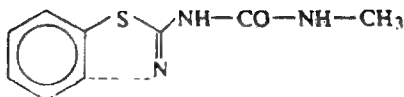
T	
	R : 25
	S : (1/2-)22-37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1929-88-0

EEC No 217-685-9

No 006-036-00-3



- ES: benzotiazuron (ISO); 1-benzotiazol-2-il-3-metilurea  
 DA: benzthiazuron (ISO); 1-benzothiazol-2-yl-3-methylurinstof  
 DE: benzthiazuron (ISO); 1-Benzothiazol-2-yl-3-methylharnstoff  
 EL: benzthiazuron (ISO); 1-δενζοθειαζολ-2-υλ-3-μεθυλουρία  
 EN: benzthiazuron (ISO); 1-benzothiazol-2-yl-3-methylurea  
 FR: benzthiazuron (ISO); 1-benzothiazole-2-yl-3-méthylurée  
 IT: benzthiazuron (ISO); 1-benzotiazol-2-il-3-metilurea  
 NL: benzthiazuron (ISO); 1-benzothiazool-2-yl-3-methylureum  
 PT: benzthiazuron (ISO); 1-benzotiazole-2-il-3-metilureia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2-)24/25

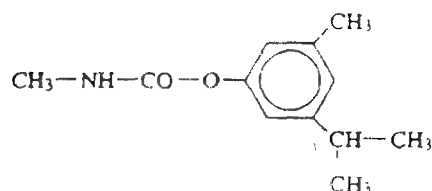
*Limites de concentraç  n, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκ  ντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentra  o*




Cas No 2631-37-0

EEC No 220-113-0

No 006-037-00-9




- ES: promecarb (ISO); metilcarbamato de 5-isopropil-3-tolilo; metilcarbamato de 5-metil-m-cumenilo  
 DA: promecarb (ISO); 5-isopropyl-3-tolylmethylcarbamate  
 DE: Promecarb (ISO); 5-Isopropyl-3-tolylmethylcarbamate  
 EL: promecarb (ISO); μεθυλοκαρβαμικός 5-ισοπροπυλο-3-τολουολεστέρας  
 EN: promecarb (ISO); 5-isopropyl-3-tolyl methylcarbamate  
 FR: promecarbe (ISO); N-méthylcarbamate de 3-isopropyl-5-méthylphényle  
 IT: promecarb (ISO); metilcarbammato di 5-isopropil-3-tolile  
 NL: promecarb (ISO); 5-isopropyl-3-tolylmethylcarbamate  
 PT: promecarbe (ISO); metilcarbamato de 5-isopropil-m-tolilo; metilcarbamato de 5-metil-m-cumenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 25
	S : (1/2-)24-37-45

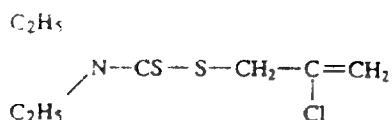
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 95-06-7

EEC No 202-388-9

No 006-038-00-4

NOTA E



ES: sulfalato (ISO); dietilditiocarbamato de 2-cloroalilo

DA: sulfallat (ISO); 2-chlorallyldiethyldithiocarbamat

DE: sulfallat (ISO); 2-Chlorallyldiethyldithiocarbamat

EL: sulfallate (ISO); διαιθυλοδιθειοκαρβαμιδικός 2-χλωροαλλυλεστέρας

EN: sulfallate (ISO); 2-chlorallyl diethyldithiocarbamate

FR: sulfallate (ISO); diéthyldithiocarbamate de 2-chloroallyle

IT: sulfallate (ISO); dietilditiocarbammato di 2-cloroallile

NL: sulfallaat (ISO); 2-chloorallyldiethyldithiocarbamaat


PT: sulfalato (ISO); dietilditiocarbamato de 2-cloroalilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

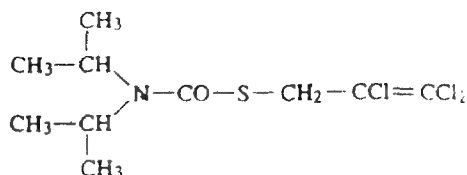
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 45-22</p> <p>S : 53-45</p> </div> </div>	
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 2303-17-5

EEC No 218-962-7

No 006-039-00-X



ES: triallato (ISO); diisopropiltiocarbamato de S-2,3,3-tricloroalilo

DA: triallat (ISO); S-2,3,3-trichlorallyldiisopropylthiocarbamat

DE: Triallat (ISO); S-2,3,3-Trichlorallyldiisopropylthiocarbamat

EL: tri-allate (ISO); διισοπροπυλοθειοκαρβαμικός S-2,3,3-τριχλωροαλλυλεστέρας

EN: tri-allate (ISO); S-2,3,3-trichloroallyl diisopropylthiocarbamate

FR: triallate (ISO); diisopropylthiocarbamate de S-2,3,3-trichloroallyle

IT: triallato (ISO); diisopropiltiocarbammato di S-2,3,3-tricloroallile

NL: triallaat (ISO); S-2,3,3-trichloorallyldiisopropylthiocarbamaat

PT: triallato (ISO); diisopropiltiocarbamato de S-2,3,3-tricloroalilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

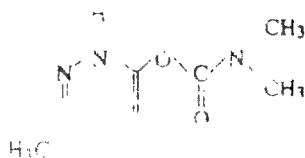
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2532-43-6

EEC No —

No 006-040-00-5



ES: N,N-dimetilcarbarnato de 3-metil-5-pirazolilo

DA: (3-methyl-1H-pyrazol-5-yl)-N,N-dimethylcarbamate

DE: (3-Methyl-1H-pyrazol-5-yl)-N,N-dimethyl-carbamate

EL: N,N-διμεθυλοκαρβαμιδικός 3-μεθυλοπυραζολ-5-υλ-εστέρας

EN: 3-methylpyrazol-5-yl-dimethylcarbamate; monometilan

FR: N,N-diméthylcarbamate de 3-méthyl-1H-pyrazol-5-yle; monodimétilan

IT: (3-metil-1H-pirazol-5-il)-N,N-dimetil-carbammato

NL: (3-methyl-1H-pyrazol-5-yl)-N,N-dimethylcarbamaat

PT: N,N-dimetilcarbarnato de 3-metil-1H-pirazol-5-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 23/24/25
	S : (1/2-)13-45

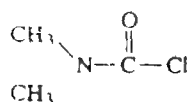
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 79-44-7

EEC No 201-208-6

No 006-041-00-0

NOTA E



ES: cloruro de dimetilcarbamoilo  
 DA: dimethylcarbamoylechlorid  
 DE: Dimethylcarbamoylechlorid  
 EL: διμεθυλοκαρβαμυλοχλωρίδιο  
 EN: dimethylcarbamoyle chloride  
 FR: chlorure de diméthylcarbamoyle  
 IT: dimetilcarbamoile cloruro  
 NL: dimethylcarbamoylechloride  
 PT: cloreto de dimetilcarbamoilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Carc. Cat. 2; R 45	T; R 23	Xn; R 22	Xi; R 36/37/38
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

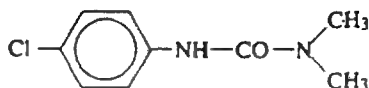
T	
	
	R : 45-22-23-36/37/38
	S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 150-68-5

EEC No 205-766-1

No 006-042-00-6



ES: monuron (ISO); 3-(4-clorofenil)-1,1-dimetilurèa  
 DA: monuron (ISO); 3-(4-chlorphenyl)-1,1-dimethylurinstof  
 DE: monuron (ISO); 3-(4-Chlorphenyl)-1,1-dimethylharnstoff  
 EL: monuron (ISO); 3-(4-χλωροφαινυλο)-1,1-διμεθυλουρία  
 EN: monuron (ISO); 3-(4-chlorophenyl)-1,1-dimethylurea  
 FR: monuron (ISO); 3-(4-chlorophényl)-1,1-diméthylurée  
 IT: monuron (ISO); 3-(4-clorofenil)-1,1-dimetilurea  
 NL: monuron (ISO); 3-(4-chloorfenyl)-1,1-dimethylureum  
 PT: monurone (ISO); 3-(4-clorofenil)-1,1-dimetilureia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

Carc. Cat. 3; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

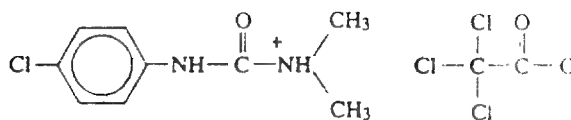
Xn	
	R : 22-40
	S : (2-)36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 140-41-0

EEC No —

No 006-043-00-1



- ES: tricloroacetato de 3-(4-clorofenil)-1,1-dimetiluronio; monuron-TCA  
 DA: 3-(4-chlorphenyl)-1,1-dimethyluroniumtrichloracetat; monuron-TCA  
 DE: 3-(4-Chlorphenyl)-1,1-dimethyluroniumtrichloracetat; Monuron-TCA  
 EL: τριχλωροοξικό 3-(4-χλωροφαινυλο)-1,1-διμεθυλουρόνιο · monuron-TCA  
 EN: 3-(4-chlorophenyl)-1,1-dimethyluronium trichloroacetate; monuron-TCA  
 FR: trichloroacétate de 3-(4-chlorophényl)-1,1-diméthyluronium; monuron-TCA  
 IT: tricloroacetato di 3-(4-clorofenil)-1,1-dimetiluronio; monuron-TCA  
 NL: 3-(4-chloorfenyl)-1,1-dimethyluroniumtrichlooracetaat; monuron-TCA  
 PT: tricloroacetato de 3-(4-clorofenil)-1,1-dimetilurónio; monuron-TCA

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 3; R 40    Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

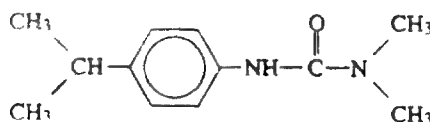
Xn	
	R : 36/38-40
	S : (2-)36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 34123-59-6

EEC No 251-835-4

No 006-044-00-7



- ES : isoproturon ; 3-(4-isopropilfenil)-1,1-dimetilurea  
 DA : isoproturon ; 3-(4-isopropylphenyl)-1,1-dimethylurinstof  
 DE : Isoproturon ; 3-(4-Isopropylphenyl)-1,1-dimethylharnstoff  
 EL : isoproturon ; 3-(4-ισοπροπυλοφαινυλο)-1,1-διμεθυλουρία  
 EN : isoproturon ; 3-(4-isopropylphenyl)-1,1-dimethylurea  
 FR : isoproturon ; 3-(4-isopropylphényl)-1,1-diméthylurée  
 IT : isoproturon ; 3-(4-isopropilfenil)-1,1-dimetilurea  
 NL : isoproturon ; 3-(4-isopropylfenyl)-1,1-dimethylureum  
 PT : isoproturon ; 3-(4-isopropilfenil) 1,1-dimetilureia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 3 ; R 40	Xn ; R 22
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etikettatura, Kenmerken, Rotulagem*

Xn	
	R : 22-40
	S : (2-)36/37

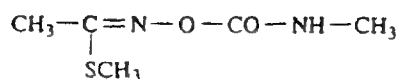
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 16752-77-5

EEC No 240-815-0

No 006-045-00-2



- ES: metomil; metilcarbàmato de metiltio-1-etilidenamino  
 DA: 1-methylthioethylidenaminmethylcarbamát  
 DE: 1-Methylthioethylidenaminmethylcarbamát  
 EL: methomyl· μεθυλοκαρβαμιδική 1-μεθυλοθειοαιθυλιδενάμίνη  
 EN: methomyl; 1-methylthioethylideneamine methylcarbamate  
 FR: methomyl; N-(méthylcarbamoyloxy)thioacétimide de S-méthyle  
 IT: metilcarbammato di 1-metiltioetilidenammina  
 NL: 1-methylthioethylidenaminmethylcarbamaat  
 PT: metomil; metilcarbamato de metiltio-1-etilidenoamino

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T+ ; R 28

*Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

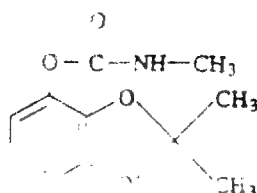
T+	
	R : 28
	S : (1/2-)22-36/37-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 22781-23-3

EEC No 245-216-8

No 006-046-00-8



- ES bendiocarb (ISO); metilcarbamato de 2,2-dimetil-1,3-benzodioxol-4-ilo  
 DA bendiocarb (ISO); 2,2-dimethyl-1,3-benzodioxol-4-ylmethylcarbamate  
 DE Bendiocarb (ISO); 2,2-Dimethyl-1,3-benzodioxol-4-ylmethylcarbamate  
 EL bendiocarb (ISO); μεθυλοκαρβαμιδικός 2,2-διμεθυλο-1,3-δενζοδιοξολ-4-υλεστέρας  
 N bendiocarb (ISO); 2,2-dimethyl-1,3-benzodioxol-4-yl methylcarbamate  
 FR bendiocarbe (ISO); méthylcarbamate de 2,2-diméthyl-1,3-benzodioxole-4-yle  
 IT bendiocarbe (ISO); metilcarbammato di 2,2-dimetil-1,3-benzodiossol-4-ile  
 NL bendiocarb (ISO); 2,2-dimethyl-1,3-benzodioxol-4-ylmethylcarbamaat  
 PT bendiocarbe (ISO); metilcarbamato de 2,2-dimetil-1,3-benzodioxole-4-ilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Xn; R 21

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etiketatura, Kenmerken, Rotulagem

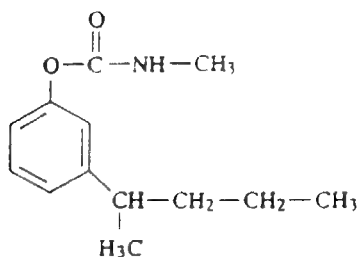
T	
	R : 21-25 S : (1/2-)22-36/37-45

Limites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

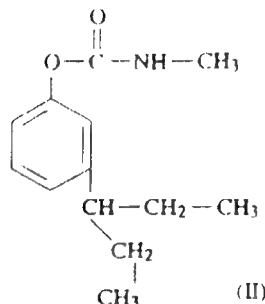

Cas No 8065-36-9

EEC No —

No 006-047-00-3



(I)



(II)

ES: bufencarb; metilcarbamat de 3-(pent-2-il)fenilo--metilcarbamat de 3-(pent-3-il)fenilo (3:1), conteniendo 35 % de una mezcla de isómeros 2- y 4

DA: bufencarb (ISO); 3-(1-methylbutyl) phenylmethylcarbamate--3-(1-ethylpropyl) phenylmethylcarbamate (3:1)

DE: Bufencarb (ISO); 3-(1-Methylbutyl) phenylmethylcarbamate--3-(1-Ethylpropyl) phenylmethylcarbamate (3:1)

EL: bufencarb (ISO); μεθυλοκαρβαμιδικός 3-(1-μεθυλοβουτυλο)φαινυλεστέρας--μεθυλοκαρβαμιδικός 3-(1-αιθυλοπροπυλο)φαινυλεστέρας (3:1)

EN: bufencarb (ISO); 3-(1-methylbutyl)phenyl methylcarbamate--3-(1-ethylpropyl)phenyl methylcarbamate (3:1)

FR: bufencarbe (ISO); méthylcarbamate de 3-(1-méthylbutyl)phényle--méthylcarbamate de 3-(1-éthylpropyl)phényle (3:1)

IT: bufencarb (ISO); metilcarbammato di 3-(1-metilbutil) fenile--metil carbammato di 3-(1-etilpropil) fenile (3:1)


NL: bufencarb (ISO); 3-(1-methylbutyl) fenylmethylcarbamaat--3-(1-ethylpropyl) fenylmethylcarbamaat (3:1)

PT: bufencarbe (ISO); metilcarbamat de 3-(pent-2-il)fenilo--metilcarbamat de 3-(pent-3-il)fenilo (3:1), contendo 35 % de uma mistura de isómeros 2 e 4

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

T; R 24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

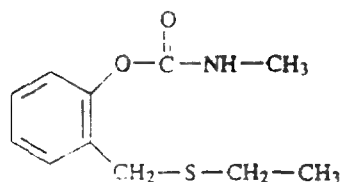
T	
	
	R : 24/25
	S : (1/2-)28-36/37-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiagrenzen, Limites de concentraçã*


Cas No 29973-13-5

EEC No 249-981-9

No 006-048-00-9



- ES: etiofencarb (ISO); metilcarbarnato de 2-etiltiometilfenilo  
 DA: ethiofencarb (ISO); 2-ethylthiomethylphenylmethylcarbamat  
 DE: Ethiofencarb (ISO); 2-Ethylthiomethylphenylmethylcarbamat  
 EL: etiofencarb (ISO); μεθυλοκαρδαμικός 2-αιθυλοθειομεθυλοφαινυλεστέρας  
 EN: ethiofencarb (ISO); 2-ethylthiomethylphenyl methylcarbarnate  
 FR: ethiophencarbe (ISO); N-méthylcarbarnate de 2-éthylthiométhylphényle  
 IT: etiofencarbe (ISO); metilcarbarnato di 2-etiltiometilfenile  
 NL: ethiofencarb (ISO); 2-ethylthiomethylfenylmethylcarbarnaat  
 PT: etiofencarbe (ISO); metilcarbarnato de 2-etiltiometilfenilo

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etiketisatura, Kennerken, Rotulagem

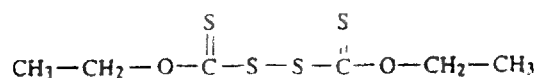
Xn	
	R : 22
	S : (2)

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo


Cas No 502-55-6

EEC No 207-944-4

No 006-049-00-4



- ES: dixantógeno; ditiobis(tioformiato) de O,O-dietilo  
 DA: dixanthogen; O,O-diethyldithiobis(thioformiat)  
 DE: Dixanthogen; O,O-Diethyldithiobis(thioformiat)  
 EL: dixanthogen · δις(Ο-αιθυλοθειομυρμηκικό)δισουλφίδιο  
 EN: dixanthogen; O,O-diethyl dithiobis(thioformate)  
 FR: dixanthogène; dithiobis(thioformiate) de O,O-diéthyle  
 IT: dixantogeno; ditiobis(tioformiato) di O,O-dietile  
 NL: dixanthogeen; O,O-diethyldithiobis(thioformiaat)  
 PT: dixantogene; ditiobis(tioformiato) de O,O-dietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

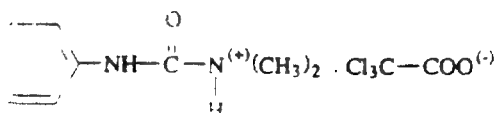
Xn	
	R : 22
	S : (2-)24

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 4482-55-7

EEC No —

No 006-050-00-X



ES: tricloroacetato de 1,1-dimetilfeniluronio; fenuron-tricloroacetato

DA: 1,1-dimethylphenyluroniumtrichloracetat; fenuron-TCA

DE: 1,1-Dimethylphenyluroniumtrichloracetat; Fenuron-TCA

EL: τριχλωροξικό 1,1-διμεθυλοφαινυλουρόνιο · fenuron-TCA

EN: 1,1-dimethyl-3-phenyluronium trichloroacetate; fenuron-TCA

FR: trichloroacetate de 1,1-diméthylphényluronium; fenuron-TCA

IT: tricloroacetato di 1,1-dimetilfeniluronio; fenuron-TCA

NL: 1,1-dimethylfenyluroniumtrichlooracetaat; fenuron-TCA

PT: tricloroacetato de 1,1-dimetilfenilcarbamoilamónio; fenurão-tricloroacetato

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 38

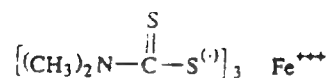
S : (2)

Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 14484-64-1

EEC No 238-484-2

No 006-051-00-5




- ES: ferbam (ISO); tris(dimetilditiocarbamato) de hierro  
 DA: ferbam (ISO); jerntris(dimethyldithiocarbamat)  
 DE: Ferbam (ISO); Eisentris(dimethyldithiocarbamat)  
 EL: ferbam (ISO); τρις(διμεθυλοδιθειοκαρβαμιδικός)σίδηρος  
 EN: ferbam (ISO); iron tris(dimethyldithiocarbamate)  
 FR: ferbame (ISO); tris(dimethyldithiocarbamate) de fer  
 IT: ferbam (ISO); tris(dimetilditiocarbammato) di ferro  
 NL: ferbam (ISO); ijzertris(dimethyldithiocarbamaat)  
 PT: ferbame (ISO); tris(dimetilditiocarbamato) de ferro

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichestatura, Kenmerken, Rotulagem*

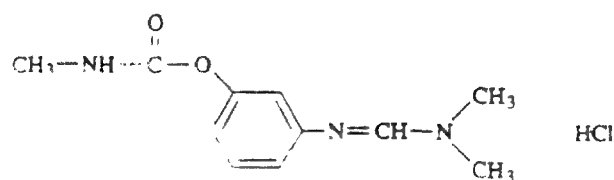
Xi	
	R : 36/37/38
	S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 23422-53-9

EEC No 245-656-0

No 006-052-00-0



ES: formetanato - clorhidrato

DA: formetanathydrochlorid

DE: Formetanathydrochlorid

EL: formetanate · υδροχλωρικός μεθυλοκαρβαμιδικός 3-(διμεθυλαμινο-μεθυλενοαμινο)-φαινυλεστέρας

EN: formetanate hydrochloride

FR: formétanate - chlorhydrate

IT: formetanato - cloridrato

NL: formetanaathydrochloride

PT: formetanato - cloridrato

Κατηγοριοποίηση, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 28

Εtiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 28
	S : (1/2-)22-36/37-45

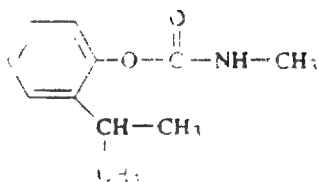
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 2631-40-5

EEC No 220-114-6

No 006-053-00-6




- ES: isoprocarb (ISO); metilcarbamat de o-cumenilo  
 DA: isoprocarb (ISO); o-cumenylmethylcarbamate  
 DE: Isoprocarb (ISO); o-Cumenylmethylcarbamate  
 EL: isoprocarb (ISO); μεθυλοκαρβαμιδικός ο-κουμενυλεστέρας  
 EN: isoprocarb (ISO); o-cumenyl methylcarbamate  
 FR: isoprocabe (ISO); méthylcarbamate de o-cuményle  
 IT: isoprocabe (ISO); metilcarbammato di o-cumenile  
 NL: isoprocarb (ISO); o-cumenvlmethylcarbamaat  
 PT: isoprocabe (ISO); metilcarbamat de o-cumenilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

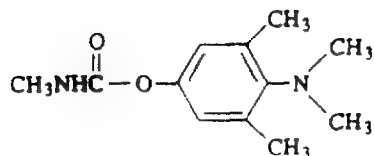
Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 315-18-4

EEC No 206-249-3

No 006-054-00-1



- ES: mexacarbato (ISO); metilcarbamato de 4-dimetilamino-3,5-xililo  
 DA: mexacarbát (ISO); 4-dimethylamino-3,5-xylylmethylcarbamát  
 DE: Mexacarbát (ISO); 4-Dimethylamino-3,5-xylylmethylcarbamát  
 EL: mexacarbate (ISO); μεθυλοκαρβαμιδικός 4-διμεθυλαμινο-3,5-ξυλυλεστέρας  
 EN: mexacarbate (ISO); 4-dimethylamino-3,5-xylyl methylcarbamate  
 FR: mexacarbate (ISO); méthylcarbamate de 4-diméthylamino-3,5-xylyle  
 IT: mexacarbato (ISO); metilcarbammato di 4-dimetilammino-3,5-xilile  
 NL: mexacarbaat (ISO); 4-dimethylamino-3,5-xylylmethylcarbamaat  
 PT: mexacarbato (ISO); metilcarbamato de 4-dimetilamino-3,5-xililo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T+; R 28

Xn; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

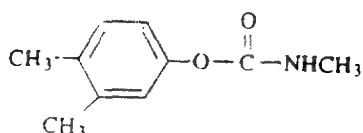
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2425-10-7

EEC No 219-364-9

No 006-055-00-7



- ES : xylylcarb (ISO) ; metilcarbarnato de 3,4-xililo ; MPMC  
 DA : xylylcarb (ISO) ; 3,4-xylylmethylcarbamat ; MPMC  
 DE : Xylylcarb (ISO) ; 3,4-Xylylmethylcarbamat ; MPMC  
 EL : xylylcarb (ISO) ; μεθυλοκαρβαμιδικός 3,4-ξυλυλεστέρας  
 EN : xylylcarb (ISO) ; 3,4-xylyl methylcarbarnate ; MPMC  
 FR : xylylcarb (ISO) ; méthylcarbarnate de 3,4-xylyle  
 IT : xylylcarb (ISO) ; metilcarbarnato di 3,4-xilile ; MPMC  
 NL : xylylcarb (ISO) ; 3,4-xylylmethylcarbarnaat ; MPMC  
 PT : xililcarbe (ISO) ; metilcarbarnato de 3,4-xililo ; MPMC

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

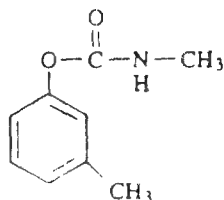
Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1129-41-5

EEC No 214-446-0

No 006-056-00-2



- ES: metolcarb (ISO); metilcarbamato de m-tolilo; MTMC  
 DA: metolcarb (ISO); m-tolylmethylcarbamate; MTMC  
 DE: Metolcarb (ISO); m-Tolylmethylcarbamate; MTMC  
 EL: metolcarb (ISO); μεθυλοκαρβαμικός μ-τολουολεστέρας  
 EN: metolcarb (ISO); m-tolyl methylcarbamate; MTMC  
 FR: metolcarb (ISO); méthylcarbamate de m-tolyle  
 IT: metolcarb (ISO); metilcarbammato di m-tolile; MTMC  
 NL: metolcarb (ISO); m-tolylmethylcarbamaat; MTMC  
 PT: metolcarbe (ISO); metilcarbamato de m-tolilo; MTMC

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

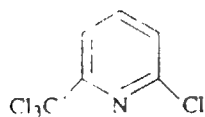
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1929-82-4

EEC No 217-682-2

No 006-057-00-8



- ES: nitrapyrin (ISO); 2-cloro-6-triclorometilpiridina  
 DA: nitrapyrin (ISO); 2-chlor-6-trichlormethylpyridin  
 DE: Nitrapyrin (ISO); 2-Chlor-6-trichlormethylpyridin  
 EL: nitrapyrin (ISO); 2-χλωρο-6-τριχλωρομεθυλοπυριδίνη  
 EN: nitrapyrin (ISO); 2-chloro-6-trichloromethylpyridine  
 FI: nitrapyrine (ISO); 2-chloro-6-trichlorométhylpyridine  
 IT: nitrapyrin (ISO); 2-cloro-6-triclorometilpiridin  
 NL: nitrapyrin (ISO); 2-chloor-6-trichloormethylpyridin  
 PT: nitrapirina (ISO); 2-cloro-6-triclorometilpiridina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

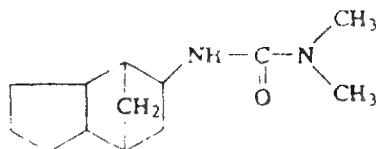
Xn	
	R : 22
	S : (2 )24

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 2163-79-3

EEC No —

No 006-058-00-3



- ES: noruron (ISO); 1,1-dimetil-3-(perhidro-4,7-metanoinden-5-il)urea  
 DA: noruron (ISO); 1,1-dimethyl-3-(perhydro-4,7-methanoinden-5-yl)urinstof  
 DE: Noruron (ISO); 1,1-Dimethyl-3-(perhydro-4,7-methanoinden-5-yl)harnstoff  
 EL: noruron (ISO); 1,1-διμεθυλο-3-(υπερυδρο-4,7-μεθανοϊνδεν-5-υλ)ουρία  
 EN: noruron (ISO); 1,1-dimethyl-3-(perhydro-4,7-methanoinden-5-yl)urea  
 FR: noruron (ISO); 1,1-diméthyl-3-(perhydro-4,7-méthanoindène-5-yl)urée  
 IT: noruron (ISO); 1,1-dimetil-3-(peridro-4,7-metanoinden-5-il)urea  
 NL: noruron (ISO); 1,1-dimethyl-3-(perhydro-4,7-methanoindeen-5-yl)ureum  
 PT: norurão (ISO); 1,1-dimetil-3-(perhidro-4,7-metanoindeno-5-il)ureia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

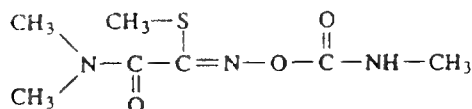
Xn	
	R : 22
	S : (2)

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 23135-22-0

EEC No 245-445-3

No 006-059-00-9



- ES: N-metilcarbamat de N',N'-dimetilcarbamoil(metiltio)metilenamina; oxamil  
 DA: N',N'-dimethylcarbamoil(methylthio)methylenamin-N-methylcarbamate; oxamil  
 DE: N',N'-Dimethylcarbamoil(methylthio)methylenamin-N-methylcarbamate; Oxamil  
 EL: oxamil · N-μεθυλοκαρβαμδική N',N'-διμεθυλοκαρβαμιούλο(μεθυλοθειο)μεθυλεναμίνη  
 EN: N',N'-dimethylcarbamoil(methylthio)methylenamine N-methylcarbamate; oxamil  
 FR: N,N'-diméthyl-2-méthylcarbamoxyimino-2-(méthylthio)acétamide; oxamil  
 IT: N-metilcarbammato di N',N'-dimetilcarbammoil(metiltio)metilenammina; ossamil  
 NL: N',N'-dimethylcarbamoil(methylthio)methylanamin-N-methylcarbamaat; oxamil  
 PT: N-metilcarbamat de N',N'-dimetilcarbamoil(metiltio)metilenamina; oxamil

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/28

Xn ; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

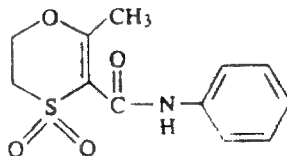
T+	
	R : 21-26/28
	S : (1/2)-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 5259-88-1

EEC No 226-066-2

No 006-060-00-4



- ES : oxycarboxin (ISO) ; 5,6-dihidro-2-metil-1,4-oxatiin-3-carboxanilida 4,4-dioxido  
 DA : oxycarboxin (ISO) ; 5,6-dihydro-2-methyl-1,4-oxathiin-3-carboxanilid-4,4-dioxid  
 DE : Oxycarboxin (ISO) ; 5,6-Dihydro-2-methyl-1,4-oxathiin-3-carboxanilid-4,4-dioxid  
 EL : oxycarboxin (ISO) ; 4,4-διοξο-2-μεθυλο-5,6-διυδρο-1,4-οξαθεινο-3-καρβοξυανιλίδιο  
 EN : oxycarboxin (ISO) ; 5,6-dihydro-2-methyl-1,4-oxathi-in-3-carboxanilide 4,4-dioxide  
 FR : oxycarboxine (ISO) ; 5,6-dihydro-2-méthyl-1,4-oxathiine-3-carboxanilide 4,4-dioxyde  
 IT : oxicarboxina (ISO) ; 5,6-diidro-2-metil-1,4-ossatiin-3-carbossanilida 4,4-diossido  
 NL : oxycarboxine (ISO) ; 5,6-dihydro-2-methyl-1,4-oxathiin-3-carboxanilide-4,4-dioxide  
 PT : oxicarboxina (ISO) ; 5,6-diidro-2-metil-1,4-oxatiino-3-carboxanili de 4,4-dióxido

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22 S : (2)

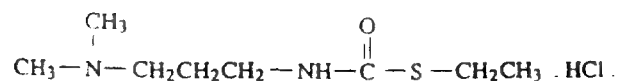
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 19622-19-6

EEC No 243-193-9

No 006-061-00-X



- ES: N-(dimetilaminopropil)tiocarbamato de S-etilo clorhidrato; protiocarb clorhidrato  
 DA: S-ethyl-N-(dimethylaminopropyl)thiocarbamathydrochlorid; prothiocarb hydrochlorid  
 DE: S-Ethyl-N-(dimethylaminopropyl)thiocarbamathydrochlorid; Prothiocarb hydrochlorid  
 EL: υδροχλωρικός N-(διμεθυλαμινοπροπυλο)θειοκαρβαμιδικός S-αιθυλεστέρας· prothiocarb hydrochlorid  
 EN: S-ethyl N-(dimethylaminopropyl)thiocarbamatehydrochloride; prothiocarb hydrochloride  
 FR: chlorhydrate de 3-(diméthylaminopropyl)thiocarbamate de S-éthyle; prothiocarbe chlorhydrate  
 IT: N-(dimetilamminopropil)tiocarbammato di S-etile cloridrato; protiocarb cloridrato  
 NL: S-ethyl-N-(dimethylaminopropyl)thiocarbamaathydrochloride; prothiocarb hydrochloride  
 PT: N-(dimetilaminopropil)tiocarbamato de S-etilo cloridrato; protiocarbe cloridrato

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

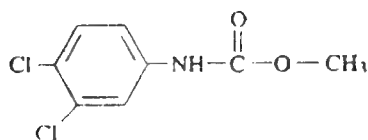
Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1918-18-9

EEC No —

No 006-062-00-5



ES: 3,4-diclorofenilcarbarnato de metilo

DA: methyl-3,4-dichlorphenylcarbamate

DE: Methyl-3,4-dichlorphenylcarbamate

EL: 3,4-διχλωροφαινυλοκαρβαμιδικός μεθυλεστέρας: SWEP

EN: methyl 3,4-dichlorophenylcarbamate; SWEP

FR: 3,4-dichlorophenylcarbamate de méthyle; 3,4-dichloro-carbamilate de méthyle

IT: 3,4-diclorofenilcarbammato di metile

NL: methyl-3,4 dichloortenylcarbamaat

PT: 3,4-diclorofenilcarbarnato de metilo

Κατηγορία, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

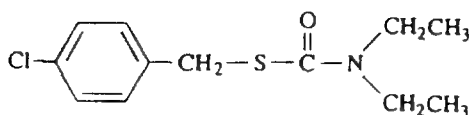
Xn	
	R : 22
	S : (2)

Λίmites de concentração, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 28249-77-6

EEC No 248-924-5

No 006-063-00-0



ES: dietiltiocarbamato de S-4-clorobencilo; tiobencarb

DA: S-4-chlorbenzyl diethylthiocarbamat; thiobencarb

DE: S-4-Chlorbenzyl diethylthiocarbamat; Thiobencarb

EL: thiobencarb · διαιθυλοθειοκαρβαμιδικός S-4-χλωρο-δενζυλεστέρας

EN: S-4-chlorobenzyl diethylthiocarbamate; thiobencarb

FR: diéthylthiocarbamate de S-4-chlorobenzyle; thiobencarbe

IT: dietiltiocarbammato di S-4-clorobenzile; tiobencarb

NL: S-4-chloorbenzyl diethylthiocarbamaat; thiobencarb

PT: metilcarbamato de 3,5-dimetilfenilo; tiobencarbe

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

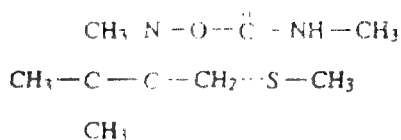
Xn	
	R : 22
	S : (2)

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 39196-18-4

EEC No 254-346-4

No 006-064-00-6



- ES: 3,3-dimetil-1-(metiltio)butanona-O-(N-metilcarbamoil)oxima ; tiofanox  
 DA: 3,3-dimethyl-1-(methylthio)butanon-O-(N-methylcarbamoil)oxim ; thiofanox  
 DE: 3,3-Dimethyl-1-(methylthio)butanon-O-(N-methylcarbamoil)oxim ; Thiofanox  
 EL: 3,3-διμεθυλο-1-(μεθυλοθειο)βουτανον-O-(N-μεθυλοκαρβαμολ)οξιμη · thiofanox  
 EN: 3,3-dimethyl-1-(methylthio)butanone-O-(N-methylcarbamoil)oxime ; thiofanox  
 FR: 3,3-diméthyl-1-(méthylthio)butanone-O-(N-méthylcarbamoil)oxime ; thiofanox  
 IT: 3,3-dimetil-1-(metiltio)butanon-O-(N-metilcarbamoil)ossima ; tiofanox  
 NL: 3,3-dimethyl-1-(methylthio)butanon-O-(N-methylcarbamoil)oxim ; thiofanox  
 PT: 3,3-dimetil-1-(metiltio)butanona-O-(N-metilcarbamoil)oxima ; tiofanox

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

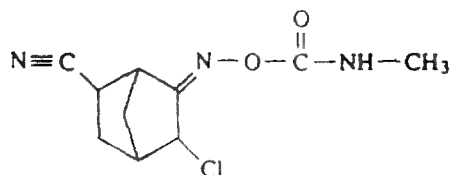
T -	
	R : 27/28
	S : (1/2-)27-36/37-45

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 15271-41

EEC No —

No 006-065-00-1



ES: 3-cloro-6-ciano-biciclo(2,2,1)heptan-2-ona-O(N-metilcarbamoil)oxima

DA: 3-chlor-6-cyano-bicyclo(2,2,1)heptan-2-on-O(N-methylcarbamoil)oxim

DE: 3-Chlor-6-cyan-bicyclo(2,2,1)heptan-2-on-O(N-methylcarbamoil)oxim

EL: 3-χλωρο-6-κυανο-δικυκλο(2,2,1)επτανο-2-ον-O(N-μεθυλοκαρβαμουλ)οξιμη

EN: 3-chloro-6-cyano-bicyclo(2,2,1)heptan-2-one-O(N-methylcarbamoil)oxime

FR: 3-chloro-6-cyano-bicyclo(2,2,1)heptane-2-one-O(N-méthylcarbamoil)oxime

IT: 3-cloro-6-ciano-biciclo(2,2,1)eptan-2-one-O(N-metilcarbamoil)ossima

NL: 3-chloor-6-cyaan-bicyclo(2,2,1)heptaan-2-on-O(N-methylcarbamoil)oxim

PT: 3-cloro-6-ciano-biciclo(2,2,1)heptano-2-ona-O(N-metilcarbamoil)oxima

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennzeichen, Rotulagem

T+



R: 24-28

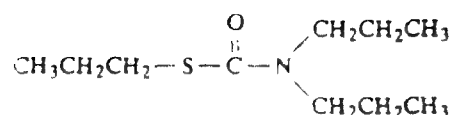
S: (1/2-)28-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1929-77-7

EEC No 217-681-7

No 006-066-00-7




- ES: dipropiltiocarbamato de S-propilo; vernolato  
 DA: S-propyldipropylthiocarbamat; vernolat  
 DE: S-Propyldipropylthiocarbamat; Vernolat  
 EL: διπροπυλοθειοκαρβαμιδικός S-προπυλεστέρας; vernolate  
 EN: S-propyl dipropylthiocarbamate; vernolate  
 FR: dipropylthiocarbamate de S-propyle; vernolate  
 IT: dipropiltiocarbammato di S-propile; vernolato  
 NL: S-propyldipropylthiocarbamaat; vernolaat  
 PT: dipropiltiocarbamato de S-propilo; vernolato

*Classification, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

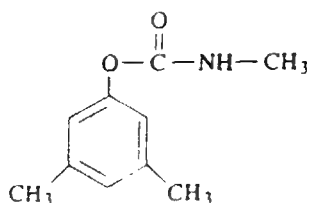
Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 2655-14-3

EEC No —

No 006-067-00-2



ES: metilcarbamato de 3,5-xililo

DA: 3,5-xylylmethylcarbamate

DE: 3,5-Xylylmethylcarbamate

EL: XMC · μεθυλοκαρβαμιδικός 3,5-ξυλυλεστέρας

EN: XMC; 3,5-xylyl methylcarbamate

FR: methylcarbamate de 3,5-xylyle

IT: XMC; 3,5-dimetilfenil metilcarbammato

NL: 3,5-xylylmethylcarbamaat

PT: metilcarbamato de 3,5-xililo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2)

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 334-88-3

EEC No 206-382-7

No 006-068-00-8



ES: diazometano

DA: diazomethan

DE: Diazomethan

EL: διαζωμεθάνιο

EN: diazomethane

FR: diazomethane

IT: diazometano

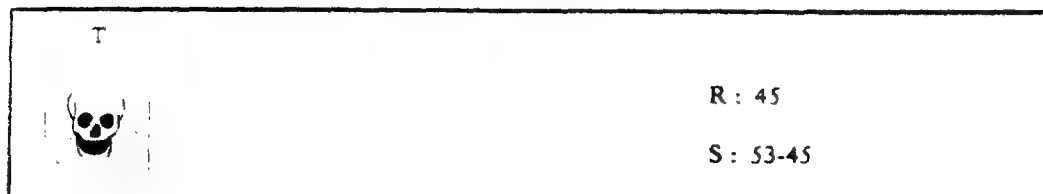
NL: diazomethaan

PT: diazometano

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



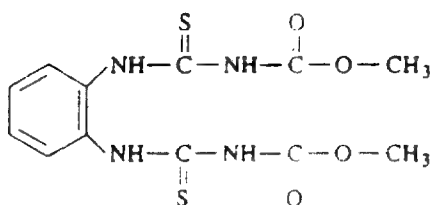
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 23564-05-8

EEC No 245-740-7

No 006-069-00-3



ES: tiofanato-metil

DA: thiophanat-methyl

DE: Thiophanat-methyl

EL: thiophanate-methyl · 4,4'-Ο-φαινυλενο-δισ-(3-θειοαλλοφανικό μεθύλιο)

EN: thiophanate-methyl; dimethyl 4,4'-(0-phenylene)-bis-(3-thioallophanate)

FR: thiophanate-méthyl; 4,4'-(0-phénylène)bis(3-thioallophanate) de diméthyle

IT: tiofanato-metil


NL: thiofanaat-methyl

PT: tiofanato-metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Muta. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichestatura, Kenmerken, Rotulagem

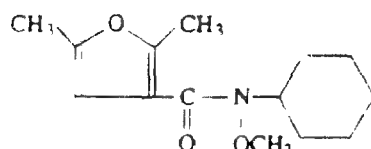
Xn	
	R : 40 S : (2-)36/37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçõe


Cas No 60568-05-0

EEC No 262-302-0

No 006-070-00-9



ES N-ciclohexil-2,5-dimetil-N-metoxi-3-furamida

DA N-cyclohexyl-N-methoxy-2,5-dimethyl-3-furamid ; furmecyclox

DE N-Cyclohexyl-N-methoxy-2,5-dimethyl-3-furamid

EL N-κυκλοεξανο-N-μεθοξυ-2,5-διμεθυλο-3-φουραμίδιο ; furmecyclox

EN N-cyclohexyl-N-methoxy-2,5-dimethyl-3-furamide ; furmecyclox

FR N-cyclohexyl-N-methoxy-2,5-diméthyl-3-furamide ; furmecyclox

IT N-cicloesil-2,5-dimetil-N-metossi-3-furammide

NL N-cyclohexyl-N-methoxy-2,5-dimethyl-3-furamide ; furmecyclox

PT N-ciclohexil-2,5-dimetil-N-metoxi-3-furamida ; furmecyclox

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação :

Carc. Cat. 3 ; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotylagem

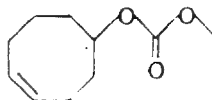
Xn	
	R : 40
	S : (2-)36/37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


**Cas No 87731-18-8**  
(FOR  
COMPONENT I)

EEC No 401-620-8

No 006-071-00-4



ES: carbonato de ciclooct-4-en-1-ilo y de metilo

DA: cyclooct-4-en-1-ylmethylcarbonat

DE: Cyclooct-4-en-1-ylmethylcarbonat

EL: ανθρακικό κυκλοοκτ-4-εν-1-ύλιο μεθύλιο

EN: cyclooct-4-en-1-yl methyl carbonate

FR: carbonate de cyclooct-4-ène-1-yle et de méthyle

IT: carbonato di cicloott-4-en-1-ile e metile

NL: cyclooct-4-een-1-ylmethylcarbonaat

PT: carbonato de ciclooct-4-eno-1-ilo e metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 43

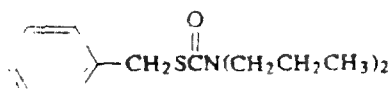
S : (2-)24-37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 52888-80-9

EEC No 401-730-6

No 006-072-00-X



ES : N,N-dipropiltiocarbamato de S-bencilo  
 DA : S-benzyl-N,N-dipropylthiocarbamat  
 DE : S-Benzyl-N,N-dipropylthiocarbamat  
 EL : N,N-διπροπυλοθειοκαρβαμιδικό S-βενζύλιο  
 EN : S-benzyl N,N-dipropylthiocarbamate  
 FR : N,N-dipropylthiocarbamate de S-benzyle  
 IT : N,N-dipropiltiocarbammato di S-benzile  
 NL : S-benzyl-N,N-dipropylthiocarbamaat  
 PT : N,N-dipropiltiocarbamato de S-benzilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn ; R 22-48/22

N ; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

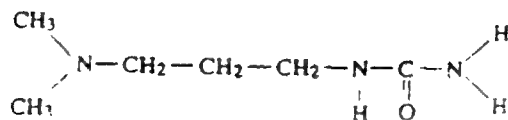
Xn	N	
		R : 22-48/22-51/53 S : (2-)37-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 31506-43-1

EEC No 401-950-2

**No 006-073-00-5**



ES : 3-(dimetilamino)propilurea

DA: 3-(dimethylamino)propylurinstof-

DE: 3-(Dimethylamino)propylharnstoff

EL: 3-(διμεθυλαμινο)προπυλουρία

EN : 3-(dimethylamino)propylurea

FR : 3-(diméthylamino)propylurée

IT : 3-(dimetilammino)propilurea

NL: 3-(dimethylamino)propylureum

PT: 3-(dimetilamino)propilureia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Xi: R 4!

*Etiquetado, Etikettering, Kennzeichnung, Ετικευαση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

**Xi**

**R : 41**

S : (2-)26-39

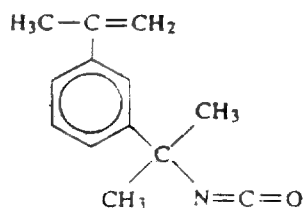
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentraçáo*

[illegible]

Cas No 2094-99-7

EEC No 402-440-2

No 006-074-00-0




- ES: isocianato de 2-(3-(prop-1-en-2-il)fenil)prop-2-ilo  
 DA: 2-(3-(prop-1-en-2-yl)phenyl)prop-2-ylisocyanat  
 DE: 2-(3-(Prop-1-en-2-yl)phenyl)prop-2-ylisocyanat  
 EL: ισοκυανικό 2-(3-(προπ-1-εν-2-ύλο)φαινύλο)προπ-2-ύλιο  
 EN: 2-(3-(prop-1-en-2-yl)phenyl)prop-2-yl isocyanate  
 FR: isocyanate de 2-(3-(prop-1-ène-2-yl)phényl)prop-2-yle  
 IT: isocianato di 2-(3-(prop-1-en-2-il)fenil)prop-2-ile  
 NL: 2-(3-(prop-1-en-2-yl)fenyl)prop-2-ylisocyanat  
 PT: isocianato de 2-(3-(prop-1-en-2-il)fenil)prop-2-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T+; R 26	C; R 34	Xn; R 48/20	R 42/43	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerkēn, Rotulagem

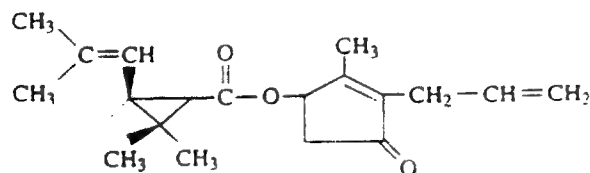
T+	N	
		
		R : 26-34-42/43-48/20-50/53
		S : (1/2-)7-15-28-36/37/39-38-45-60-61

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 584-79-2

EEC No 209-542-4

No 006-075-00-6



- ES: bioaletrina; (+)-trans-crisantemato de (+)-3-alil-2-metil-4-oxociclopent-2-enilo  
 DA: bioallethrin; (+)-3-allyl-2-methyl-4-oxocyclopent-2-enyl-(+)-trans-chrysanthemat  
 DE: Bioallethrin; (+)-3-Allyl-2-methyl-4-oxocyclopent-2-enyl-(+)-trans-chrysanthemat  
 EL: bioallethrin; (+)-trans-χρυσανθεμικός (+)-3-αλλυλο-2-μεθυλο-4-οξοκυκλοπεντ-2-ενυλεστέρας  
 EN: bioallethrin; (+)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (+)-trans-chrysanthemate  
 FR: depalléthrine; (+)-trans-chrysanthémate de (+)-3-allyl-2-methyl-4-oxocyclopent-2-ényle  
 IT: bioaletrina; (+)-trans-crisantemato di (+)-3-allil-2-metil-4-ossociclopent-2-enile  
 NL: bioalletrine; (+)-3-allyl-2-methyl-4-oxocyclopent-2-enyl-(+)-trans-chrysanthemaat  
 PT: bioaletrina; (+)-trans-crisantemato de (+)-3-alil-2-metil-4-oxociclopent-2-enilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

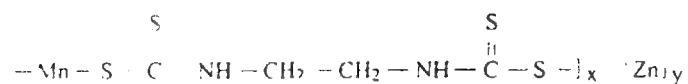
Xn	
	R : 22
	S : (2-)24

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 8018-01-7

EEC No —

No 006-076-00-1



ES: mancozeb

DA: mancozeb

DE: Mancozeb

EL: mancozeb

EN: mancozeb

FR: mancozebe

IT: mancozebe

NL: mancozeb

PT: mancozene

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Xi, R 37	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 37-43 S : (2-)8-24/25-46

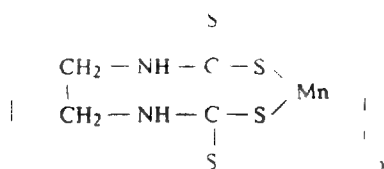
*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 12427-38-2

EEC No 235-654-8

No 006-077-00-7




ES: maneb  
 DA: maneb  
 DE: Maneb  
 EL: maneb  
 EN: mánēb  
 FR: manebe  
 IT: manebe  
 NL: maneb  
 PT: manebe

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 37	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

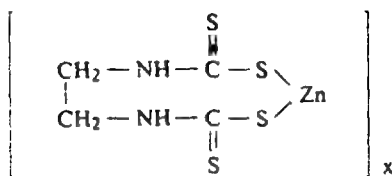
Xi	
	R : 37-43 S : (2-)8-24/25-46

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 12122-67-7

EEC No 235-180-1

No 006-078-00-2



ES : zineb

DA : zineb

DE : Zineb

EL : zineb

EN : zineb

FR : zinebe

IT : zinebe

NL : zineb

PT : zinebe

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi ; R 37 R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 37-43

S : (2-)8-24/25-46

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7664-41-7

EEC No 231-635-3

No 007-001-00-5



NH

ES: amoníaco, anhidro  
 DA: ammoniak, vandfri  
 DE: Ammoniak, wasserfrei  
 EL: αμμωνία, ανυδρος  
 EN: ammonia, anhydrous  
 FR: ammoniac, anhydre  
 IT: ammoniaca, anidra  
 NL: ammoniak, watervrij  
 PT: amoníaco, anidro  
 FI: ammoniakki, vedetön  
 SV: ammoniak, vattenfri

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassifizierung*

R 10	T; R 23	C; R 34	N; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Marennat*

T	N	
		
		R: 10-23-34-50
		S (1/2-)9 16-26 36/37 39 45-6

*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen,  
 Limites de concentraçao, Pitoisiusrajat, Konzentrationsgrenzen*

C ≥ 5 %	T; R 23-34
0,5 % ≤ C < 5 %	Xn; R 20-36/37/38

NOTA 5

Cas No 1336-21-6

EEC No 215-647-6

No 007-001-01-2

NOTA B

NH<sub>3</sub> . . . %

ES: amoniaco . . . %

DA: ammoniak . . . %

DE: Ammoniak . . . %

EL: αμμωνία . . . %

EN: ammonia . . . %

FR: ammoniac . . . %

IT: ammoniaca . . . %

NL: ammoniak . . . %

PT: amoniaco . . . %



FI: ammoniakki . . . %

SV: ammoniaklösning . . . %

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification,  
Classificazione, Indeling, Classificação, Luokitus, Klassificering*

C: R 34 N: R 50

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

C	N	R: 34-50
		S: (1/2-)26-36/37/39-45-61

*Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*

C ≥ 25 %	C, N, R 34-50
10 % ≤ C < 25 %	C: R 34
5 % ≤ C < 10 %	N, R 36/37/38

Cas No 10102-44-0 [1]  
10544-72-6 [2]

EEC No 233-272-6 [1]  
234 126-4 [2]

No 007-002-00-0

NO, [1]

NO, [2]

ES: dióxido de nitrógeno [1]; tetraóxido de dinitrogeno [2]

DA: nitrogendioxid [1]; dinitrogentetraoxid [2]

DE: Stickstoffdioxid [1]; Distickstofftetraoxid [2]

EL: διοξείδιο του αζώτου [1] τετραοξειδίου του διαζώτου [2]

EN: nitrogen dioxide [1]; dinitrogen tetraoxide [2]

FR: dioxyde d'azote [1]; tétraoxyde de diazote [2]

IT: diossido di azoto [1]; tetraossido di diazoto [2]

NL: stikstofdioxyde [1], distikstoftetraoxyde [2]

PT: dióxido de azoto [1], tetraóxido de diazoto [2]

FI: typpidioksidi [1]; dityppitetraoksidi [2]

SV: kvävedioxid [1]; dikvävetetraoxid [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T+; R 26 C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T+



R: 26-34

S: (1/2-)9-26-28-36/37/39-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*

C ≥ 10 %	T+; R 26-34
5 % ≤ C < 10 %	T; R 23-34
1 % ≤ C < 5 %	T; R 23-36/37/38
0,5 % ≤ C < 1 %	Xn; R 20-36/37/38
0,1 % ≤ C < 0,5 %	Xn; R 20

NOTA

Cas No 999-81-5

EEC No 213-666-4

No 007-003-00-6



ES: cloruro de clormecuat (ISO); cloruro de 2-cloroetiltrimetilamonio

DA: chlormequatchlorid (ISO); 2-chlorethyltrimethylammoniumchlorid

DE: Chlormequatchlorid (ISO); 2-Chlorethyltrimethylammoniumchlorid

EL: chlormequat chloride (ISO); χλωριούχο 2-χλωροαιθυλοτριμεθυλαμμώνιο

EN: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

FR: chlorméquat-chlorure (ISO); chlorure de 2-chloroéthyltriméthylammonium

IT: cloruro di clormequato (ISO); cloruro di 2-cloroetiltrimetilamonio

NL: chloormequatchloride (ISO); 2-chloorethyltrimethylammoniumchloride

PT: cloreto de clormequate (ISO); cloreto de 2-cloroetiltrimetilamónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<div data-bbox="367 1400 403 1424">Xn</div> <div data-bbox="336 1447 437 1547">  </div> <div data-bbox="975 1453 1091 1482">R : 21/22</div> <div data-bbox="975 1509 1118 1538">S : (2-)36/37</div>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7697-37-2

EEC No 231-714-2

No 007-004-00-1

NOTA B

 $\text{HNO}_3$  ...%

ES: ácido nítrico ... %  
 DA: salpetersyre ... %  
 DE: Salpetersäure ... %  
 EL: νιτρικό οξύ ... %  
 EN: nitric acid ... %  
 FR: acide nitrique ... %  
 IT: ácido nítrico ... %  
 NL: salpeterzuur ... %  
 PT: ácido nítrico ... %

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

O; R 8

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		R: 8-35 S: (1/2-)23-26-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 20 %	C; R 35
5 % ≤ C < 20 %	C; R 34

O

C ≥ 70%



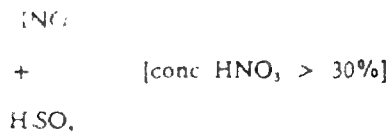
; R 8

Cas No 51602-38-1

EEC No —

No 007-005-00-7

NOTA B



- ES: mezcla sulfonítrica conteniendo ... %  $\text{HNO}_3$
- DA: blanding af salpetersyre og svovlsyre med ... %  $\text{HNO}_3$
- DE: Mischung von Salpetersäure und Schwefelsäure ... %  $\text{HNO}_3$ ; Nitriersäure
- EL: μείγμα νιτρικού κα. θεικού οξέος που περιέχει ... %  $\text{HNO}_3$
- EN: mixture of nitric and sulphuric acids containing ... %  $\text{HNO}_3$
- FR: mélange sulfo-nitrique contenant ... %  $\text{HNO}_3$
- IT: miscela solfonitrica con ... %  $\text{HNO}_3$
- NL: nitreermengsel (salpeterzuur en zwavelzuur met ... %  $\text{HNO}_3$
- PT: mistura de ácidos azótico e sulfúrico contendo ... %  $\text{HNO}_3$

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

O; R 8

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		R : 8-35
		S : (1/2-)23-26-30-36-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 109-95-5

EEC No 203-722-6

No 007-006-00-2



ES: nitrato de etilo

DA: ethylnitrit

DE: Ethylnitrit

EL: νιτρώδης αιθυλεστέρας

EN: ethyl nitrite

FR: nitrite d'éthyle

IT: nitrato di etile; etile nitrito

NL: ethylnitriet

PT: nitrato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

E; R 2

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

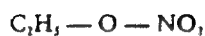
E	Xn	
		R : 2-20/21/22 S : (2)

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào*


Cas No 625-58-1

EEC No 210-903-3

No 007-007-00-8



ES: nitrato de etilo

DA: ethylnitrat

DE: Ethylnitrat

EL: νιτρικός αιθυλεστέρας

EN: ethyl nitrate

FR: nitrate d'éthyle

IT: nitrato di etile: etile nitrato

NL: ethylnitraat

PT: nitrato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

E; R 2

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

<p>E</p> 	<p>R : 2</p> <p>S : (2-)23-24/25</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 302-01-2

EEC No 206-114-9

No 007-008-00-3

NOTA E




ES: hidrazina  
 DA: hvdrazin  
 DE: Hydrazin  
 EL: υδραζίνη  
 EN: hydrazine  
 FR: hydrazine  
 IT: idrazina  
 NL: hydrazine  
 PT: hidrazina

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

R 10	Carc. Cat. 2; R 45	T; R 23/24/25	C; R 34	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45-10-23/24/25-34-43 S : 53-45

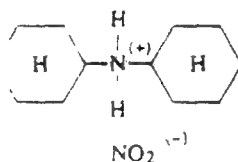
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	T; R 45-23/24/25-34-43
10 % ≤ C < 25 %	T; R 45-20/21/22-34-43
3 % ≤ C < 10 %	T; R 45-20/21/22-36/38-43
1 % ≤ C < 3 %	T; R 45-43
0,1 % ≤ C < 1 %	T; R 45

Cas No 3129-91-7

EEC No 221-515-9

No 007-009-00-9



ES: nitrato de dicitlohexilamonio

DA: dicyclohexylammoniumnitrat

DE: Dicyclohexylammoniumnitrat

EL: νιτωδες δικυκλοεξυλαμμωνιο

EN: dicyclohexylammonium nitrate

FR: nitrate de dicyclohexylammonium

IT: dicitloesilammonio nitrato

NL: dicyclohexylammoniumnitriet

PT: nitrato de dicitloexilamonio

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20/22
	S : (2-)15-41

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	Xn ; R 20/22

Cas No 7632-00-0

EEC No 231-555-9

No 007-010-00-4



ES: nitrito de sodio

DA: natriumnitrit

DE: Natriumnitrit

EL: νιτρώδες νάτριο

EN: sodium nitrite

FR: nitrite de sodium

IT: sodio nitrito

NL: natriumnitriet



PT: nitrito de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificasjon, Classificazione, Indeling, Classificação

O; R 8

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

 	R: 8-25 S: (1/2)-45
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 5 \%$	T; R 25
$1 \% \leq C < 5 \%$	Xn; R 22

Cas No 7758-09-0

EEC No 231-832-4

No 007-011-00-X

 $\text{KNO}_2$ 

ES: nitrito de potasio

DA: kaliumnitrit

DE: Kaliumnitrit

EL: νιτρώδες κάλιο

EN: potassium nitrite

FR: nitrite de potassium

IT: potassio nitrito

NL: kaliumnitriet

PT: nitrito de potássio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

O; R 8

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	T	
		R : 8-25
		S : (1/2-)45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

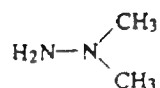
$C \geq 5 \%$	T; R 25
$1 \% \leq C < 5 \%$	Xn; R 22

Cas No 57-14-7

EEC No 200-316-0

No 007-012-00-5

NOTA E



ES: N,N-dimetilhidrazina

DA: N,N-dimethylhydrazin

DE: N,N-Dimethylhydrazin

EL: N,N-διμεθυλϋδραζίνη

EN: N,N-dimethylhydrazine

FR: N,N-diméthylhydrazine

IT: N,N-dimetilidrazina


NL: N,N-dimethylhydrazine

PT: N,N-dimetilidrazina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

F; R 11	Carc. Cat. 2; R 45	T; R 23/25	C; R 34
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F		R : 45-11-23/25-34	
		S : 53-45	

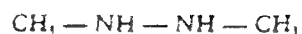
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçã


Cas No 540-73-8

EEC No —

No 007-013-00-0

NOTA E



ES: 1,2-dimetilhidrazina

DA: 1,2-dimethylhydrazin

DE: 1,2-Dimethylhydrazin

EL: 1,2-διμεθυλδραζίνη

EN: 1,2-dimethylhydrazine

FR: 1,2-dimethylhydrazine

IT: 1,2-dimetilidrazina

NL: 1,2-dimethylhydrazine

PT: 1,2 dimetil-hidrazina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	T; R 23/24/25
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-23/24/25
	S : 53-45

*Limites de concentración, Koncentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No —

EEC No —

No 007-014-00-6

NOTA A

NOTA E

ES: sales de hidrazina

DA: salte af hydrazin

DE: Salze von Hydrazin

EL: άλατα της υδραζίνης

EN: salts of hydrazine

FR: sels d'hydrazine

IT: sali di idrazina

NL: zouten van hydrazine

PT: sais de hidrazina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

T; R 23/24/25

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R: 45-23/24/25-43

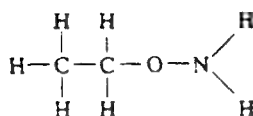
S: 53-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 624-86-2

EEC No 402-030-3

No 007-015-00-1



ES: O-etilhidroxilamina  
 DA: O-ethylhydroxylamin  
 DE: O-Ethylhydroxylamin  
 EL: O-αιθυλυδροξυλαμίνη  
 EN: O-ethylhydroxylamine  
 FR: O-éthylhydroxylamine  
 IT: O-etilidrossilamina  
 NL: O-ethylhydroxylamine  
 PT: O-etilhidroxilamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

F; R 11

T; R 23/24/25




Xn; R 48/20

Xi; R 36

R 43

N; R 50

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

P	T	N	
			R : 11-23/24/25-36-43 -48/20-50 S : (1/2-)16-26-36/37/39 -38-45-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 544-16-1

EEC No 208-862-1

No 007-016-00-7



ES: nitrato de butilo

DA: butylnitrit

DE: Butylnitrit

EL: νιτρώδης βουτυλεστέρας

EN: butyl nitrite

FR: nitrite de butyle

IT: nitrato di butile; n-butil nitrato

NL: butylnitriet


PT: nitrato de butilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

F: R 11

T: R 23/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

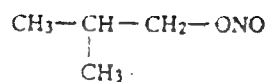
F	T	
		
		R: 11-23/25
		S: (1/2-)16-24-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 542-56-3

EEC No 208-819-7

No 007-017-00-2



ES: nitrato de isobutilo

DA: isobutylnitrit

DE: Isobutylnitrit

EL: νιτρώδης ισοβουτυλεστέρας

EN: isobutyl nitrite

FR: nitrite d'isobutyle

IT: nitrato di isobutile; isobutylnitrito


NL: isobutylnitriet

PT: nitrato de isobutilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

F: R 11 | Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

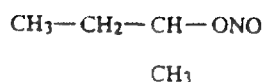
F	Xn	
		R: 11-20/22
		S: (2-)16-24-46

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 924-43-6

EEC No 213-104-8

No 007-018-00-8

ES: nitrato de *sec*-butiloDA: *sec*-butylnitritDE: *sec*-Butylnitrit



EL: νιτρώδης δευτ. βουτυλεστερας

EN: *sec*-butyl nitriteFR: nitrte de *sec*-butyleIT: nitrato di *sec*-butile; *sec* butil nitritoNL: *sec*-butylnitrietPT: nitrato de *sec*-butilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

F; R 11 Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

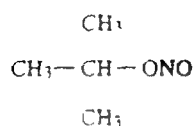
F	Xn	
		R : 11-20/22
		S : (2-)16-24-46

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 540-80-7

EEC No 208-757-0

No 007-019-00-3

ES: nitrato de *tert*-butiloDA: *tert*-butylnitritDE: *tert*-Butylnitrit

EL: νιτρώδης τριτ. βουτυλεστερας

EN: *tert*-butyl nitriteFR: nitrato de *tert*-butyleIT: nitrato de *terz*-butile; *terz*-butil nitritoNL: *tert*-butylnitrietPT: nitrato de *tert*-butilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

F; R 11 Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

P	Xn	
		R : 11-20/22
		S : (2-)16-24-46

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 463-04-7[1]  
110-46-3[2]

EEC No 207-332-7 [1]  
203-770-8 [2]


No 007-020-00-0

ES: nitrito de pentilo [1] «nitrito de amilo», mezcla de isómeros [2]  
 DA: pentylnitrit [1] «amylnitrit», blanding af isomerer [2]  
 DE: Pentylnitrit [1] „Amylnitrit“, Mischung von Isomeren [2]  
 EL: νιτρώδης πεντυλεστέρας [1] «νιτρώδης αμυλεστέρας», μείγμα ισομερών [2]  
 EN: pentyl nitrite [1] 'amyl nitrite', mixed isomers [2]  
 FR: nitrite de pentyle [1] «nitrite d'amyle», mélange d'isomères [2]  
 IT: nitrito di pentile; pentile nitrito [1] nitrito di amile «», miscela di isomeri; « amile nitrito » miscela di isomeri [2]  
 NL: pentylnitriet [1] „amylnitriet“, mengsel van isomeren [2]  
 PT: nitrito de pentilo [1] «nitrito de amilo», mistura de isómeros [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11 Xn; R 20/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		
		R : 11-20/22
		S : (2-)16-24-46

*Limites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 463-04-7 [1]  
101-770-8 [2]

EC No 207-332-7 [1]  
101-770-8 [2]



No 007-010-00 9

- FR : nitrite de pentile (1) • nitrito de amilo • miscela de isómeros (2)
- GR : πεντανιτρίτης (1) • πεντανιτρίτης (1) • πεντανιτρίτης (1) • πεντανιτρίτης (2)
- DE : Pentylnitrit (1) • Amylnitrit (1) • Mischung von Isomeren (2)
- EL : πεντανιτρίτης (1) • πεντανιτρίτης (1) • πεντανιτρίτης (1) • πεντανιτρίτης (2)
- EN : pentyl nitrite (1) • amyl nitrite (1) • mixed isomers (2)
- FR : nitrite de pentile (1) • nitrite d'amyle • mélange d'isomères (2)
- IT : nitrito di pentile • pentile nitrito (1) • nitrito di amile • miscela di isomeri • amile nitrito • miscela di isomeri (2)
- NL : pentylnitriet (1) • amylnitriet (1) • mengsel van isomeren (2)
- PT : nitrito de pentilo (1) • nitrito de amilo • mistura de isómeros (2)

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

F : R 11 | Xn : R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xn	
		R : 11-20/22
		S : (2)-16-24-46

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

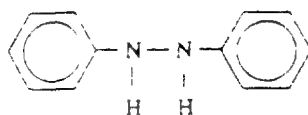



Cas No 122-66-7

EEC No 204-563-5

No 007-021-00-4

NOTA E



ES: hidrazobenceno

DA: hydrazobenzen ; 1,2-diphenylhydrazin

DE: Hydrazobenzol

EL: υδραζωβενζόλιο

EN: hydrazobenzene ; 1,2-diphenylhydrazine

FR: hydrazobenzène ; 1,2-diphénylhydrazine

Γ1: ιδραζοβενζενη

NL: hydrazobenzeen

PT: hidrazobenzeno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2 ; R 45

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	R : 45-22
	S : 53-45

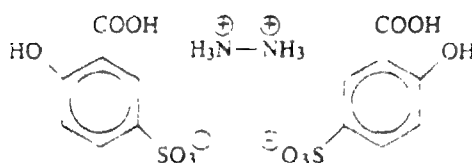
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 405-030-1

No 007-022-00-X

NOTA E



- ES: bis(3-carboxi-4-idrossibencensulfonato) de hidrazina  
 DA: hydrazinbis(3-carboxy-4-hydroxybenzensulfonat)  
 DE: Hydrazinbis(3-carboxy-4-hydroxybenzolsulfonat)  
 EL: bis(3-καρβοξύ-4-υδροξύβενζοϊλοσουλφωνική υδραζίνη)  
 EN: hydrazine bis(3-carboxy-4-hydroxybenzensulfonate)  
 FR: bis(3-carboxy-4-hydroxybenzenesulfonate) d'hydrazine  
 IT: bis(3-carbossi-4-idrossibenzensulfonato) di idrazina  
 NL: hydrazinebis(3-carboxy-4-hydroxybenzeensulfonaat)  
 PT: bis(3-carboxi-4-hidroxibenzenossulfonato) de hidrazina

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45	Xn; R 22	C; R 34	R 43	R 52-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

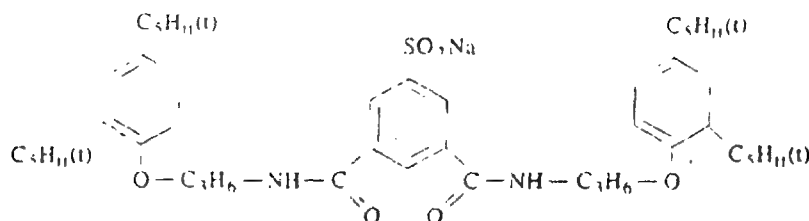
T	
	R : 45-22-34-43-52/53 S : 53-45-61

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 405-510-0

No 007-023-00-5



- ES : 3,5-bis(3-(2,4-di-tert-pentilfenoxi)propylcarbamoyl)benzensulfonato de sodio  
 DA : natnum-3,5-bis(3-(2,4-di-tert-pentylphenoxy)propylcarbamoyl)benzensulfonat  
 DE : Natrium-3,5-bis(3-(2,4-di-tert-pentylphenoxy)propylcarbamoyl)benzolsulfonat  
 EL : 3,5-δις(3-(2,4-δι-τερτ-πεντυλοφαινοξύ)προπυλοκαρδαμούλο)βενζολοσουλφονικό νάτριο  
 EN : sodium 3,5-bis(3-(2,4-di-tert-pentylphenoxy)propylcarbamoyl)benzenesulfonate  
 FR : 3,5-bis(3-(2,4-di-tert-pentylphénoxy)propylcarbamoyl)benzènesulfonate de sodium  
 IT : 3,5-bis(3-(2,4-di-terz-pentilfenossi)propylcarbamoyl)benzensolfonato di sodio  
 NL : natnum-3,5-bis(3-(2,4-di-tert-pentylfenoxyl)propylcarbamoyl)benzeensulfonaat  
 PT : 3,5-bis(3-(2,4-di-terc-pentilfenoxi)propylcarbamoyl)benzenossulfonato de sodio

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xi ; R 38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>Xi</p> 	<p>R : 38-43</p> <p>S : (2-)24-37</p>
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*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 7782-44-7

EEC No 231-956-9

No 008-001-00-8


O.

**ES:** oxigeno**DA:** oxygen; ilt**DE:** Sauerstoff**EL:** οξυγόνο**EN:** oxygen**FR:** oxygene**IT:** ossigeno**NL:** zuurstof**PT:** oxigenio**FI:** happi**SV:** syre; flytande

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification,  
classificazione, Classificazione, Indeling, Classificação, Luokitus, Klassifizierung*

O; R S

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

<p>O</p> 	<p>R: S</p> <p>S: (2-1)7</p>
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*Limites de concentracion, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Párházhatárok, Konzentrationsgränser*


Cas No 7722-84-1

EEC No 231-765-0

No 008-003 00-9

NOTA B

 $H_2O_2$  ... %

ES: peróxido de hidrógeno en solución ... %; agua oxigenada ... %

DA: hydrogenperoxidopløsning ... %; brintovenite ... %

DE: Wasserstoffperoxid in Lösung ... %

EL: διάλυμα υπεροξειδίου του υδρογόνου ... %

EN: hydrogen peroxide solution ... %

FR: peroxyde d'hydrogène en solution ... %; eau oxygénée ... %

IT: perossido di idrogeno soluzione ... %; acqua ossigenata ... %

NL: waterstofperoxide in oplossing ... %

PT: peróxido de hidrogénio em solução ... %; água oxigenada ... %

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

O; R 8

C; R 34


*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

O	C	
		R : 8-34 S : (1/2-)3-28-36/39-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 20 %	C; R 34
5 % ≤ C < 20 %	Xi; R 36/38

O

C ≥ 60% ·  ; R 8

Cas No 7782-41-4



LEC 11-

ES: flúor  
 DA: fluor  
 DE: Fluor  
 EL: φθόριο  
 EN: fluorine  
 FR: fluor  
 IT: fluoro  
 NL: fluor  
 PT: fluor  
 FI: fluori  
 SV: fluor

*Clasificación, Klassifisering, Klassifikation, Klassifizierung, Classificazione, Classificação, Inducting, Classificacao, Classifica*

R 11	T +, R 26	C, R 35
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*Etiquetado, Etikettering, Kennzeichnung, Etiketäily, Etikettierung, Etiketage, Etichettatura, Kennerken, Rotulagem, Merkennat, Markning*

T+	C	
		R: 26-35
		S: (1-2)9-26-36-37-39-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Opiit-oru-kevytsoo, concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*


Cas No 7664-39-3

EEC No 231-634-8

No 009-002-00-6

HF

ES: fluoruro de hidrógeno; ácido fluorhídrico

DA: hydrogenfluorid

DE: Fluorwasserstoff

EL: υδροφθόριο

EN: hydrogen fluoride

FR: fluorure d'hydrogène

IT: acido fluoridrico

NL: fluorwaterstof

PT: acido fluorídrico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T+ : R 26/27/28 C ; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Roetelagem

T+	C	
		R : 26/27/28-35
		S : (1/2-)/7/9-26-36/37/39-45

Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7664-39-3

EEC No 231-634-8

No 009-003-00-1

NOTA B

HF ... %

ES: fluoruro de hidrógeno ... %; ácido fluorhídrico ... %

DA: hydrogenfluorid, opløsning ... %; flussyre ... %

DE: Fluorwasserstoffsäure ... %; Flußsäure ... %

EL: υδροφθορικό οξύ ... %

EN: hydrofluoric acid ... %

FR: acide fluorhydrique ... %

IT: acido fluoridrico ... %



NL: fluorwaterstofzuur ... %

PT: acido fluorídrico em solução ... %

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T+; R 26/27/28 C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	C	
		R : 26/27/28-35
		S : (1/2-)/7/9-26-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 7\%$	T+; C; R 26/27/28-35
$1\% \leq C < 7\%$	T; C; R 23/24/25-34
$0,1\% \leq C < 1\%$	Xn; R 20/21/22-36



Cas No 7681-49-4

EEC No 231-667-8

No 009-004-00-7

NaF

ES: fluoruro de sodio

DA: natrumfluorid

DE: Natriumfluorid

EL: φθοριούχο νάτριο

EN: sodium fluoride

FR: fluorure de sodium

IT: fluoruro di sodio; sodio fluoruro

NL: natrumfluoride

PT: fluoreto de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T; R 25

Xi; R 36/38

R 32

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 25-32-36/38

S : (1/2-)22-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7789-23-3

EEC No 232-151-5

No 009-005-00-2

KF

ES: fluoruro de potasio

DA: kaliumfluorid

DE: Kaliumfluorid

EL: οξοριούχο κάλιο

EN: potassium fluoride

FR: fluorure de potassium

IT: fluoruro di potassio; potassio fluoruro


NL: kaliumfluoride

PT: fluoreto de potassio

Classification: Klassifizierung: Einstufung: Ταξινόμηση: Classification: Classificação: Classificação

T; R 23/24/25

Etiquetado: Etikettering: Kennzeichnung: Επισήμανση: Labelling: Etiquetage: Etichetatura: Kennektes: Rotulagem

T	
	R 23/24/25
	S 1/2/3/6-45

Límites de concentración: Konzentrationsgrenzen: Konzentrationsgrenzwerte: Όρια συγκέντρωσης: Concentration limits  
 Limites de concentration, Limite di concentrazione: Concentratiegrenzen: Limites de concentração


Cas No 12125-01-8

EEC No 235-185-9

No 009-006-00-8

NH<sub>4</sub>F

ES: fluoruro de amonio

DA: ammoniumfluorid

DE: Ammoniumfluorid

EL: φθοριούχο αμμώνιο

EN: ammonium fluoride

FR: fluorure d'ammonium

IT: fluoruro d'ammonio; ammonio fluoruro

NL: ammoniumfluoride

PT: fluoreto de amónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração


Cas No 1333-83-1

EEC No 215-608-3

No 009-007-00-3

NaF.HF

ES: difluoruro de sodio

DA: natriumhydrogenfluorid

DE: Natriumhydrogendifluorid

EL: διφθοριούχο νάτριο υδρογόνο

EN: sodium bifluoride; sodium hydrogen difluoride

FR: bifluorure de sodium

IT: bifluoruro di sodio; sodio bifluoruro

NL: natriumwaterstofdifluoride



PT: difluoreto de sódio; hidrogenodifluoreto de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

T; R 25

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	C	
		R : 25-34
		S : (1/2-)22-26-37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 10\%$	T; C; R 25-34
$1\% \leq C < 10\%$	C; R 22-34
$0,1\% \leq C < 1\%$	Xi; R 36/38

Cas No 7789-29-9

EEC No 232-156-2

No 009-008-00-9

KF.HF

ES: difluoruro de potasio

DA: kaliumhydrogenfluond

DE: Kaliumhydrogendifluond

EL: διφθορισύχο κάλιο υδρογόνο

EN: potassium bifluoride; potassium hydrogen difluoride

FR: bifluorure de potassium

IT: bifluoruro di potassio; potassio bifluoruro

NL: kaliumwaterstofdifluoride

PT: bifluoreto de potassio; hidrogenodifluoreto de potassio

Clasificación, Klassificering, Einstufung, Ταξινόνηση, Classification, Classification, Classificazione, Indeling, Classificação

T; R 25

C; R 34

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	C	
		R : 25-34
		S : (1/2-)22-26-37-45

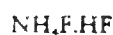
Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10%	T; C; R 25-34
1% ≤ C < 10%	C; R 22-34
0,1% ≤ C < 1%	Xi; R 36/38

Cas No 1341-49-7

EEC No 215-676-4

No 009-009-00-4



ES: difluoruro de amonio

DA: ammoniumhydrogenfluorid

DE: Ammoniumhydrogendifluorid; Ammoniumbifluorid

EL: διφθοριούχο αμμώνιο υδρογόνο

EN: ammonium bifluoride; ammonium hydrogen difluoride

FR: bifluorure d'ammonium

IT: bifluoruro d'ammonio; ammonio bifluoruro

NL: ammoniumwaterstofdifluoride


PT: bifluoreto de amónio; hidrogenodifluoreto de amónio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T; R 25

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	C	
		R : 25-34
		S : (1/2-)22-26-37-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*

$C \geq 10\%$	T; C; R 25-34
$1\% \leq C < 10\%$	C; R 22-34
$0,1\% \leq C < 1\%$	Xi; R 36/38

Cas No 16872-11-0

EEC No 240-898-3

No 009-010-00-X

NOTA B

HBF<sub>4</sub> ... %

ES: ácido fluorobórico; tetrafluoroborato de hidrógeno ... %

DA: hydrogenbortetrafluorid ... %; tetrafluorborsyre ... %

DE: Tetrafluorborsäure ... %; Bortfluorwasserstoffsäure ... %

EL: τετραφθοροβορικό οξύ ... %

EN: fluoroboric acid ... %

FR: tetrafluoroborate d'hydrogène ... %; acide fluoborique ... %

IT: ácido fluoborico ... %

NL: tétrafluorboorzuur ... %; boortfluorwaterstof ... %

PT: ácido fluorobórico ... %

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 34 S : (1/2-)26-27-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	C; R 34
10 % ≤ C < 25 %	Xi; R 36/38

Cas No 16961-83-4

EEC No 241-034-8

No 009-011-00-5

NOTA B

 $\text{H}_2\text{SiF}_6$ 

ES: ácido fluorosilícico; hexafluorosilicato de hidrógeno ... %  
 DA: hydrogensilicimhexafluorid ... %, fluskiselsyre ... %  
 DE: Hexafluorokieselsäure ... %; Kieselfluorwasserstoffsäure ... %  
 EL: εξαφθοροπυρρικό οξύ ... %  
 EN: fluorosilicic acid ... %  
 FR: hexafluorosilicate d'hydrogene ... %, acide fluosilicique ... %  
 IT: acido fluosilicico ... %  
 NL: hexafluorkiezelzuur, kiezelfluorwaterstof ... %  
 PT: ácido fluorossilícico em solução ... %

Classification, Klassificering, Benennung, Ταξινόηση, Classification, Classificazione, Classificazione, Indeling, Classificação

C, R 34

Etiquetado, Etikettering, Kennzeichnung, Σήμανση, Labelling, Etichetare, Etichetare, Kenmerken, Rotulagem



Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκενδρωτικής, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 10 \%$	C; R 34
$5 \% \leq C < 10 \%$	Xi; R 36/38

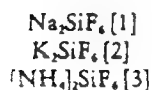


Cas No 16893-85-9 [1]  
16871-90-2 [2]  
16919-19-0 [3]

EEC No 240-934-8 [1]  
240-896-2 [2]  
240-968-3 [3]

No 009-012-00-0

NOTA A



ES: hexafluorosilicatos alcalinos; fluorosilicatos alcalinos (Na [1], K [2], NH<sub>4</sub> [3])  
DA: ammonium- og alkalihexafluorosilicater (Na [1], K [2], NH<sub>4</sub> [3])  
DE: Alkalihexafluorsilikate (Na [1], K [2], NH<sub>4</sub> [3])  
EL: εξαφθοροπυριτικά άλατα αλκαλίων και αμμωνίου (Na [1], K [2], NH<sub>4</sub> [3])  
EN: alkali fluorosilicates (Na [1], K [2], NH<sub>4</sub> [3])  
FR: hexafluorosilicates alcalins; fluorosilicates alcalins (Na [1], K [2], NH<sub>4</sub> [3])  
IT: esafluosilicati alcalini (Na [1], K [2], NH<sub>4</sub> [3])  
NL: alkalihexafluorsilikaten (Na [1], K [2], NH<sub>4</sub> [3])  
PT: hexafluorossilicatos alcalinos; fluorossilicatos alcalinos (Na [1], K [2], NH<sub>4</sub> [3])

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 23/24/25 S : (1/2-)26-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào

C ≥ 10 %	T; R 23/24/25
1 % ≤ C < 10 %	Xn; R 20/21/22

Cas No —

EEC No —

No 009-013-00-6

NOTA A

{M}, {SF<sub>6</sub>},

ES hexafluorosilicatos; fluorosilicatos, excepto los especialmente indicados en este Anexo

DA hexafluorosilicater, undtagen de andetsteds i dette bilag nævnte

DE Hexafluorosilikate, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL εξαφθοροσυρικήκα αλάτα, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN fluorosilicates, with the exception of those specified elsewhere in this annex

FR hexafluorosilicates; fluorosilicates, à l'exclusion de ceux nommément désignés dans cette annexe

IT esatruosilicati, esclusi quelli espressamente indicati in questo allegato

NL hexafluorsilicaten, met uitzondering van de in deze bijlage met name genoemde

PT exatruosilicatos; fluorosilicatos, com excepção dos expressamente referidos no presente anexo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2-)13-24/25

Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 10 %	Xn; R 22

Cas No 25808-74-6

EEC No 247-278-1

No 009-014-00-1

NOTA E

PbSiF

ES: hexafluorisilicato de plomo

DA: blyhexafluoroasilicat

DE: Bleihexafluorsilikat

EL: εξαφθοριοπυριτικός μόλυβδος

EN: lead hexafluorosilicate

FR: hexafluorosilicate de plomb (II): fluosilicate de plomb (II)

IT: piombo esatfluossilicato

NL: loodhexafluorsilikaat

PT: hexafluoreossilicato de chumbo II: fluorossilicato de chumbo (II)

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 1 ; R 61

Repr. Cat. 3 ; R 62

Xn ; R 20/22

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem



R : 61-62-20/22-33

S : 53-45

Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentração


NOTA

Cas No 15096-52-3

EEC No 239-148-8

No 009-016-00-2

Na, Al F<sub>6</sub>

ES: hexafluoroaluminato de trisodio

DA: aluminiumtrinatriumhexafluorid; cryolit

DE: Aluminiumtrinatriumhexafluorid; Cryolit

EL: κρυολίθος· εξαφθοριούχο αργίλιο τρινάτριο

EN: aluminium trisodium hexafluoride; cryolite

FR: hexafluorure d'aluminium et de trisodium; cryolithe

IT: esafluoruro di alluminio e trisodio; criolit

NL: aluminiumtrinatriumhexafluoride; cryolite

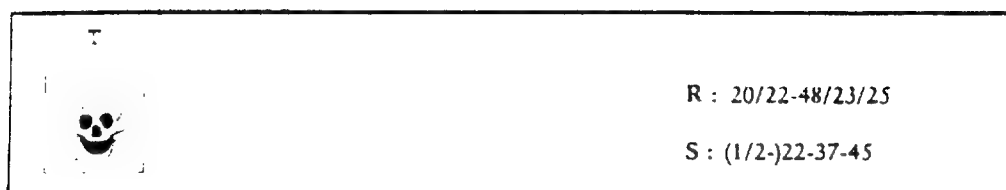
PT: hexafluoroaluminato de trissodio; criolite

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

Xn; R 20/22

T; R 48/23/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2699-79-8

EEC No 220-281-5

No 009-015-00-7

O

F -- S = O

F

ES : difluoruro de sulfurio

DA : sulfurdifluorid

DE : Sulfurdifluorid

EL : διφθοριζο θειωδης διατο

EN : sulfur difluoride

FR : difluorure de soufre

IT : difluoruro di zolfo

L : sulfurdifluoride

PT : difluoreto de sulfuro

Classification, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione

U. R. 23/25	XI. R. 36/37/38
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Classification, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione, Classificazione

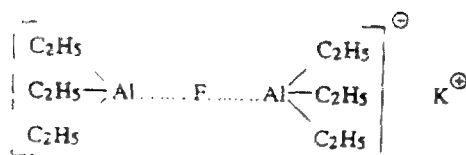
T	
	R 23/25 36/37/38 S 1/2 323 37 39/40

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits, límites de concentración, Limiti di concentrazione, Concentratiegrenzen, Limites de concentrações


Cas No 12091-08-6

EEC No 400-040-2

No 009-017-00-8



ES: mu-fluoro-bis(trietilaluminio) de potasio

DA: kalium-mu-fluoro-bis(triethylaluminium)

DE: Kalium-mu-fluoro-bis(triethylaluminium)

EL: μυ-φθορο-δισ(τριαιθυλαργίλιο) του καλίου

EN: potassium mu-fluoro-bis(triethylaluminium)

FR: mu-fluoro-bis(triéthylaluminium) de potassium

IT: mu-fluoro-bis(trietilalluminio) di potassio

NL: kalium-mu-fluor-bis(triethylaluminium)

PT: mu-fluor-bis(trietilaluminio) de potassio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

F; R 11-14/15    C; R 35    Xn; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	C	
		
		R : 11-14/15-20-35
		S : (1/2)-16-30-36/39-43-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7440-23-5

EEC No 231-132-9

No 011-001-00-0

Na

ES: sodio  
 DA: natrium  
 DE: Natrium  
 EL: νάτριο  
 EN: sodium  
 FR: sodium  
 IT: sodio  
 NL: natium  
 PT: sodio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

F; R 14/15

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	C	
		
		R : 14/15-34
		S : (1/2-)S'-8-43-45

ES S S no debe ser utilizada si se emplea otro embalaje de seguridad.  
 DA S S skal ikke påføres, såfremt anden sikker emballage er anvendt.  
 DE Angabe des S S ist nicht erforderlich, falls in anderer Weise sicher verpackt.  
 EL Τό S S δεν είναι απαραίτητο εάν χρησιμοποιείται μια άλλη συσκευασία ασφαλείας.  
 EN S S is not required when an alternative safe packaging is used.  
 FR S S ne doit pas être utilisé si un autre emballage de sécurité est employé.  
 IT S S non è richiesta qualora venga utilizzato altro imballaggio di sicurezza.  
 NL S S behoeft niet te worden vermeld indien een andere veilige verpakking gebruikt is.  
 PT S S não deve ser utilizada se se empregar uma outra embalagem de segurança.

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 1310-73-2

EEC No 215-185-5

No 011-002-00-6

NaOH

ES: hidróxido de sodio

DA: natriumhydroxid

DE: Natriumhydroxid

EL: υδροξείδιο του νατρίου

EN: sodium hydroxide; caustic soda

FR: hydroxyde de sodium

IT: idrossido di sodio


NL: natriumhydroxide

PT: hidróxido de sodio

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 35 S : (1/2-)26-37/39-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 5 %	C; R 35
2 % ≤ C < 5 %	C; R 34
0,5 % ≤ C < 2 %	Xi; R 36/38



Cas No 1313-60-6

EEC No 215-209-4

No 011-003-00-1



ES: peróxido de sodio

DA: natrumperoxid

DE: Natriumperoxid

EL: υπερδξειδιο του νατρίου

EN: sodium peroxide

FR: peroxyde de sodium

IT: perossido di sodio; sodio perossido

NL: natrumperoxide

PT: peróxido de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

O; R 8

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		R : 8-35
		S : (1/2-)8-27-39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No. 26628-22-8

EEC No 247-852-1

No 011-004-00-7

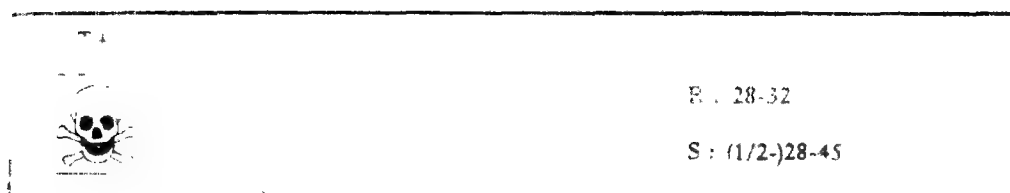
ES : nitrato de sodio, azida sódica  
 DA : natriumazid  
 DE : Natriumazid  
 EL : νάτριοζίδιο  
 EN : sodium azide  
 FR : azoture de sodium, azide de sodium  
 IT : azoturo di sodio, sodio azoturo  
 NL : natriumazide  
 PT : azida de sodio

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

T+ ; R 28

R 32

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 497-19-8

EEC No 207-838-8

No 011-005-00-2



ES: carbonato de sodio

DA: natrumcarbonat

DE: Natriumcarbonat

EL: ανθρακικό νάτριο

EN: sodium carbonate

FR: carbonate de sodium

IT: sodio carbonato

NL: natrumcarbonaat

PT: carbonato de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36
	S : (2-)22-26

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 917-61-3

EEC No 213-030-6

No 011-006-00-8

NaOCN

ES: cianato de sodio

DA: natriumcyanat

DE: Natriumcyanat

EL: κυανικό νάτριο

EN: sodium cyanate

FR: cyanate de sodium

IT: cianato di sodio

NL: natriumcyanaat

PT: cianato de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2-)24/25

*Límites de concentración, Koncentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No. 7439-95-4

EEC No 231-104-6

No 012-001-00-3

Mg

ES: magnesio en polvo (pirotónico)  
 DA: magnesiumpulver (ustabiliseret)  
 DE: Magnesiumpulver (nicht stabilisiert)  
 EL: μαγνησιο σκόνη (πυροφορός)  
 EN: magnesium powder (pyrophoric)  
 FR: magnésium en poudre (pyrophorique)  
 IT: magnesio in polvere (piroforica)  
 NL: magnesiumpoeder (niet gestabiliseerd)  
 PT: magnesio em po (não estabilizado)

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação*

F; R 15-17

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	
	R: 15-17
	S: (2-)7/8-43

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No

—

EEC No 231-104-6

No 012-002-00-9

Mg

ES: magnesio en polvo (estabilizado) o en virutas

DA: magnesiumpulver (stabiliseret) og -spåner

DE: Magnesiumpulver (phlegmatisiert) oder -späne

EL: μαγνησιο σκόνη (σταθεροποιημένη) ή ξέσματα

EN: magnesium, powder or turnings

FR: magnesium en poudre (stabilisée) ou en copeaux

IT: magnesio in polvere (stabilizzata) o trucioli

NL: magnesiumpoeder (gestabiliseerd) of krullen

PT: magnesio em pó (estabilizado) ou em pedaços

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

F; R 11-15

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	
	R : 11-15
	S : (2-)7/8-43

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

—

EEC No

—

No 012-003-00-4

NOTA A



n = 1 - 5

ES: derivados de alquilmagnesio

DA: magnesiumalkyler

DE: Magnesiumalkyle

EL: διαλκυλικές ενώσεις μαγνησίου

EN: magnesium alkyls

FR: derives alkylés du magnésium

IT: magnesio-alchili

NL: magnesiumalkylen

PT: alquilos de magnesio


Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 14

F; R 17

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	C	
		R: 14-17-34
		S: (1/2-)16-43-45

Limites de concentraç  n, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκ  ντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentra  o


Cas No 7429-90-5

EEC No 231-072-3

No 013-001-00-6

Al

ES: aluminio en polvo (pirofórico)  
 DA: aluminiumpulver (ustabiliseret)  
 DE: Aluminiumpulver (Nicht stabilisiert)  
 EL: αργίλιο σκόνη (πυροφόρος)  
 EN: aluminium powder (pyrophoric)  
 FR: aluminium en poudre (pyrophorique)  
 IT: alluminio in polvere (piroforica)  
 NL: aluminiumpoeder (niet gestabiliseerd)  
 PT: alumínio em pó (não estabilizado)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

F; R 15-17

*Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	
	R : 15-17
	S : (2-)7/8-43

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No —

EEC No 231-072-3

No 013-002-00-1

Al

ES: aluminio en polvo (estabilizado)  
 DA: aluminiumpulver (stabiliseret)  
 DE: Aluminiumpulver (phlegmatisiert)  
 EL: αργίλιο σκόνη (σταθεροποιημένη)  
 EN: aluminium powder (stabilized)  
 FR: aluminium en poudre (stabilisée)  
 IT: alluminio in polvere (stabilizzata)  
 NL: aluminiumpoeder (gestabiliseerd)  
 PT: alumínio em pó (estabilizado)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 15	R 10
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R: 10-15

S: (2-)/7/8-43

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 7446-70-0

EEC No 231-208-1

No 013-003-00-7



ES cloruro de aluminio anhidro

DA aluminiumchlorid, vandfrit

DE Aluminiumchlorid, wasserfrei

EL ανυδρο τριχλωριούχο αργύλιο

EN aluminium chloride, anhydrous

FR chlorure d'aluminium anhydre

IT cloruro d'alluminio anidro; alluminio cloruro anidro

NL aluminiumchloride, watervrij

PT cloreto de alumínio anidro

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	R : 34 S : (1/2-)/7/8-28-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No

—

EEC No

—

No 013-004-00-2

NOTA A



$$n = 1 - 5$$

ES: derivados de alquilaluminio

DA: aluminiumalkyler-

DE: Aluminiumalkyle

EL: τριαλκυλικές ενώσεις αργιλίου

EN: aluminium alkyls

FR: dérivés alkylés de l'aluminium

IT: alluminio-alcili

NL: aluminiumal'len

PT: alquilo de alumínio



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

R 14

F; R 17

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

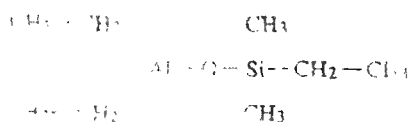
F	C	
		R : 14-17-34
		S : (1/2-)16-43-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 55426-95-4

EEC No 401-160-8

No 013-005-00-8




ES : dietil(etildimetilsilanolato)aluminio  
DA : diethyl(ethyl)dimethylsilanolato)aluminium  
DE : Diethyl(ethyl)dimethylsilanolato)aluminium  
EL : διαιθυλ(αιθυλοδιμεθυλοσιλανολατο)αργυριο  
EN : diethyl(ethyl)dimethylsilanolato)aluminium  
FR : diéthyl(éthyldiméthylsilanolato)aluminium  
IT : dietil(etildimetilsilanolato)alluminio  
NL : diethyl(ethyl)dimethylsilanolato)aluminium  
PT : dietil(etildimetilsilanolato)aluminio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

F; R 14/15-17	C; R 35
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*Etiquetado, Esskettering, Kennzeichnung, Etiketavon, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F  C  R : 14/15-17-35 S : (1/2)-6-16-30-36/39-43-45

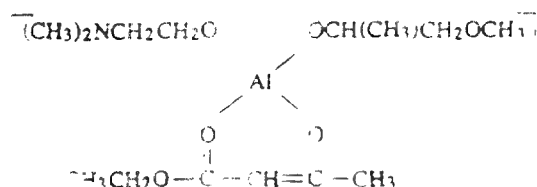
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçao*


Cas No

—

EEC No 402-370-2

No 013-006-00-3



ES : (etil-3-oxobutanoato-O'1,O'3)(2-dimetilaminoetanolato)(1-metoxi-2-propanolato)aluminio(III), dimerizado

DA : (ethyl-3-oxobutanoato-O'1,O'3)(2-dimethylaminoethanolato)(1-methoxy-2-propanolato)aluminium(III), dimenseret

DE : (Ethyl-3-oxobutanoato-O'1,O'3)(2-dimethylaminoethanolato)(1-methoxy-2-propanolato)aluminium(III), dimerisiert

EL : (αιθυλ-3-οξοβουτανοατο-O'1,O'3)(2-διμεθυλαμινοαιθανολατο)(1-μεθοξυ-2-προπανολατο)αργίλιο(III), διμερισμένο

EN : (ethyl-3-oxobutanoato-O'1,O'3)(2-dimethylaminoethanolato)(1-methoxypropan-2-olato)aluminium(III), dimerised

FR : (éthyl-3-oxobutanoato-O'1,O'3)(2-diméthylaminoethanolato)(1-methoxy-2-propanolato)aluminium(III), dimense

IT : (etil-3-ossobutanoato-O'1,O'3)(2-dimetilamminoetanolato)(1-metossi-2-propanolato)alluminio(III), dimerizzato

NL : (ethyl-3-oxobutanoato-O'1,O'3)(2-dimethylaminoethanolato)(1-methoxy-2-propanolato)aluminium(III), gedimenseerd

PT : (etil-3-oxobutanoato-O'1,O'3)(2-dimetilaminoetanolato)(1-metoxi-2-propanolato)aluminio(III), dimerizado

Classificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificaça:

R 10

Xi; R 41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagen.

Xi



R : 10-41

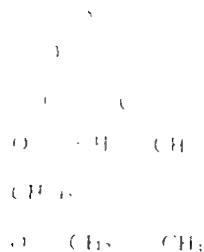
S : (2-)26-39

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No \_\_\_\_\_

EEC No 403-430-0

No 013-007-00-9



ES	non(oxo(2-butoxyethyl)-3-oxobutanoato-O <sup>1</sup> ,O <sup>3</sup> )aluminum
DA	poly(oxo(2-butoxyethyl)-3-oxobutanoato-O <sup>1</sup> ,O <sup>3</sup> )aluminum
DE	poly(oxo(2-butoxyethyl)-3-oxobutanoato-O <sup>1</sup> ,O <sup>3</sup> )aluminium
EL	poly(oxo(2-butoxyethyl)-3-oxobutanoato-O <sup>1</sup> ,O <sup>3</sup> )αργιλιο
EN	poly(oxo(2-butoxyethyl)-3-oxobutanoato-O <sup>1</sup> ,O <sup>3</sup> )aluminium
FR	poly(oxo(2-butoxyethyl)-3-oxobutanoato-O <sup>1</sup> ,O <sup>3</sup> )aluminium
IT	poliosso(2-butoossietil)-3-ossobutanato-O <sup>1</sup> ,O <sup>3</sup> )alluminio
NL	poly(oxo(2-butoxyethyl)-3-oxobutanoato-O <sup>1</sup> ,O <sup>3</sup> )aluminium
PT	poli(oxo(2-butoxietyl)-3-oxobutanoato-O <sup>1</sup> ,O <sup>3</sup> )alumínio

Classification Classification Classificazione, Indexing, Classificazione

X1 : R 41

*tsimulato*, ziketterim Aonzenbung  $\varepsilon\pi\sigma\mu\iota\upsilon\alpha\tau\alpha\iota$ , *capoling*, *Etimutage*, *Etichattatua*, Kenmerken, *Rosulagem*

X

R : 41

S : (2-)26-39

*Limites de concentration, Konzentrationsgrenze, Konzentrationsgrenze, Όρια συγκεντρώσης, Concentration limits, Límites de concentración, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 10025-78-2

EEC No 233-042-5

No 014-001-00-9



ES: trichlorosilano

DA: trichlorsilan

DE: Trichlorsilan ; Siliciumchloroform

EL: τριχλωροσιλάνιο

EN: trichlorosilane

FR: trichlorosilane ; silicochloroforme

IT: trichlorosilano

NL: trichloorsilaan

PT: trichlorossilano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

F; R 15-17

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	
	R : 15-17
	S : (2-)24/25-43

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No 10026-04-7

EEC No 233-054-0

No 014-002-00-4

SiCl<sub>4</sub>

ES: tetracloruro de silicio  
 DA: siliciumtetrachlorid  
 DE: Siliciumtetrachlorid  
 EL: τετραχλωριούχο πυρίτιο  
 EN: silicon tetrachloride  
 FR: tetrachlorure de silicium  
 IT: tetracloruro di silicio; silicio tetracloruro  
 NL: siliciumtetrachloride  
 PT: tetracloreto de silício

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

R 14

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem

Xi



R : 14-36/37/38

S : (2-)7/8-26

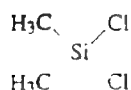
Limites de concentration, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 75-78-5

EEC No 200-901-0

No 014-003-00-X



ES: dimetildiclorosilano

DA: dichlordimethylsilan

DE: Dimethyldichlorsilan

EL: διμεθυλοδιχλωροσιλάνιο

EN: dimethyldichlorosilane

FR: dichlorodiméthylsilane

IT: dimetildiclorosilano

NL: dimethyldichloorsilaan



PT: dimetildiclorossilano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação*

F: R 11

Xi: R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xi	
		
		R: 11-36/37/38
		S: (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 75-79-6

EEC No 200-902-6

No 014-004-00-5

CH<sub>3</sub>SiCl<sub>3</sub>

metiltriolo silano

DA methyltrichlorosilan

DE Methyltrichlorosilan

EL τριχλωρομεθυλοσιλάνιο

EN trichloro(methyl)silane ; methyltrichlorosilane

FR trichlorométhylsilane

IT metiltriclorosilano

NL methyltrichloorsilaan

PT triclorometilsilano

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 14 F; R 11 Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xi	
		R : 11-14-36/37/38 S : (2-)26-39

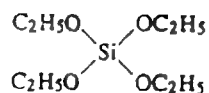
Límites de concentración, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 1 %	Xi; R 36/37/38

Cas No 78-10-4

EEC No 201-083-8

No 014-005-00-0



ES silicato de tetraetilo  
 DA ethylsilikat, tetraethoxysilan  
 DE Tetraethylsilikat  
 EL πυριτικό τετρααιθύλιο  
 EN tetraethyl silicate, ethyl silicate  
 FR silicate d'éthyle, silicate de tetraéthyle  
 IT etile silicato  
 NL tetraethylsilikaat, ethylsilikaat  
 PT silicato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 10	Xn; R 20	Xi; R 36/37
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

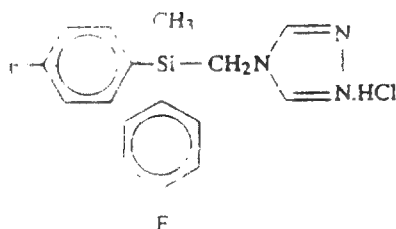
Xn	
	R : 10-20-36/37
	S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No 401-380-4

No 014-006-00-6



- ES : bis(4-fluorofenil)-metil-(1,2,4-triazol-4-ilmetil)silano, clorhidrato  
 DA : bis(4-fluorophenyl)-methyl-(1,2,4-triazol-4-ylmethyl)silanhydrochlorid  
 DE : Bis(4-fluorophenyl)-methyl-(1,2,4-triazol-4-ylmethyl)silanhydrochlorid  
 EL : μεθυλο-(1,2,4-τριαζολ-4-υλομεθυλο)-δισ(4-φθοροφαινυλο)σιλάνιο υδροχλωρικό  
 EN : bis(4-fluorophenyl)-methyl-(1,2,4-triazol-4-ylmethyl)silane hydrochloride  
 FR : bis(4-fluorophényl)-methyl-(1,2,4-triazole-4-ylmethyl)silane, chlorhydrate  
 IT : bis(4-fluorofenil)-metil-(1,2,4-triazol-4-ilmetil)silano, cloridrato  
 NL : bis(4-fluorfenyl)-methvl-(1,2,4-triazool-4-vlmethyl)silaanhydrochloride  
 PT : bis(4-fluortenil)-metil-(1,2,4-triazol-4-ilmetil)silano, cloridrato

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Xi ; R 36

N ; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

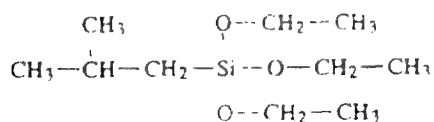
Xi	N	
		R : 36-51/53
		S : (2-)26-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 17980-47-1

EEC No 402-810-3

No 014-007-00-1



ES: trietoxiisobutilsilano

DA: triethoxyisobutylsilan

DE: Triethoxyisobutylsilan

EL: τριαεθοξισοβουτυλοσιλάνιο

EN: triethoxyisobutylsilane

FR: triethoxyisobutylsilane

IT: trietossiisobutilsilano

NL: triethoxyisobutylsilaan

PT: trietoxiisobutilsilano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xi; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 38
	S : (2-)24

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 85491-26-5

EEC No 401-200-4

No 014-008-00-7

 $C_6H_4ClF_2Si$ 

ES : (clorometil)bis(4-fluorofenil)metilsilano  
 DA : (chlormethyl)bis(4-fluorophenyl)methylsilan  
 DE : (Chlormethyl)bis(4-fluorophenyl)methylsilan  
 EL : μεθυλοδισ(4-φθοροφαινυλο)χλωρομεθυλοσιλάνιο  
 EN : (chloromethyl)bis(4-fluorophenyl)methylsilane  
 FR : (chlorométhyl)bis(4-fluorophényl)méthylsilane  
 IT : (clorometil)bis(4-fluorofenil)metilsilano  
 NL : (chloormethyl)bis(4-fluorfenyl)methylsilaan  
 PT : (clorometil)bis(4-fluorofenil)metilsilano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

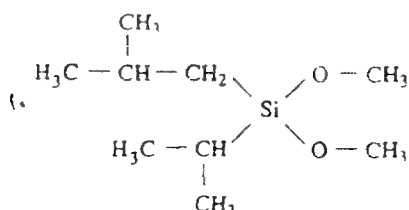


*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 111439-76-0

EEC No 402-580-4

No 014-009-00-2



ES : isobutilisopropildimetoxisilano  
 DA : isobutylisopropyldimethoxysilan  
 DE : Isobutylisopropyldimethoxysilan  
 EL : ισοβουτυλισοπροπυλοδιμεθοξυσιλάνιο  
 EN : isobutylisopropyldimethoxysilane  
 FR : isobutylisopropyldiméthoxysilane  
 IT : isobutilisopropildimetossisilano  
 NL : isobutylisopropyldimethoxysilaan  
 PT : isobutilisopropildimetoxissilano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

R 10

Xn ; R 20

Xi ; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 10-20-38

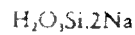
S : (2-)25-26-36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 6834-92-0

EEC No 229-912-9

No 014-010-00-8



ES: metasilicato de disodio  
 DA: dinatriummetasilicat  
 DE: Dinatriummetasilikat  
 EL: μεταπυριτικό δινάτριο  
 EN: disodium metasilicate  
 FR: metasilicate de disodium  
 IT: metasilicato di disodio; disodio metasilicato  
 NL: dinatriummetasilicaat  
 PT: metassilicato de dissódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

C; R 34	Xi; R 37
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	<p>R : 34-37</p> <p>S : (1/2-)13-24/25-36/37/39-45</p>

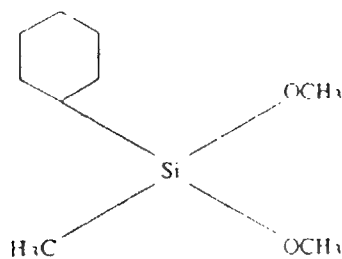
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 17865-32-6

EEC No 402-140-1

No 014-011-00-3



ES: ciclohexilmetildimetoxisilano

DA: cyclohexyldimethoxymethylsilan

DE: Cyclohexyldimethoxymethylsilan

EL: κυκλοεξυλοδιμεθοξυμεθυλοσιλάνιο

EN: cyclohexyldimethoxymethylsilane

FR: cyclohexyldiméthoxyméthylsilane

IT: cicloesilmetildimetossisilano

NL: cyclohexyldimethoxymethylsilaan

PT: ciclohexilmetildimetoxisilano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi; R 38

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

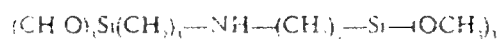
Xi	N	
		R : 38-51/53
		S : (2-)24-61

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Case No

EEC No 403-480-3

No 014-012-00-9



ES : bis(3-(trimetoxisilil)propil)ammina

DA : bis(3-(trimethoxysilyl)propyl)amin

DE : Bis(3-(trimethoxysilyl)propyl)amin

EL : δις(3-(τριμεθοξυσυλοπριποϋλ)αμιν)

EN : bis(3-(trimethoxysilyl)propyl)amine

FR : bis(3-(trimethoxysilyl)propyl)amine

IT : bis(3-(trimetossisilil)propil)ammina

NL : bis(3-(trimethoxysilyl)propyl)amine

PT : bis(3-(trimetoxissilil)propil)ammina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xi ; R 41

N ; R 51-53

Labelling, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

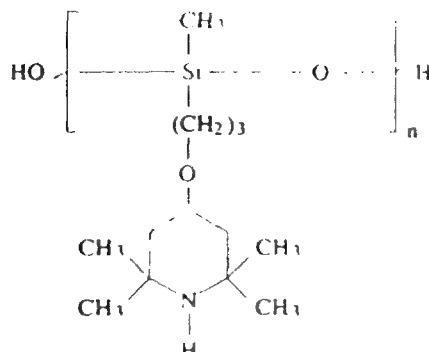
Xi	N	
		R : 41-51/53 S : (2-)24-26-39-61

Limits de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, límites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 404-920-7

Nò 014-013-00-4



ES: alfa-hidroxi poli(metil-(3-(2,2,6,6-tetrametilpiperidin-4-iloxi)propil)siloxano)

DA: alpha-hydroxypoly(methyl-(3-(2,2,6,6-tetramethylpiperidin-4-yloxy)propyl)siloxan)

DE: alpha-Hydroxypoly(methyl-(3-(2,2,6,6-tetramethylpiperidin-4-yloxy)propyl)siloxan)

EL: αλφα-υδροξυπολυ(μεθυλο-(3-(2,2,6,6-τετραμεθυλοπiperιδιν-4-υλοξυ)προπυλο)σιλοξάνιο)

EN: alpha-hydroxypoly(methyl-(3-(2,2,6,6-tetramethylpiperidin-4-yloxy)propyl)siloxane)

FR: alpha-hydroxypoly(méthyl-(3-(2,2,6,6-tétraméthylpipéridine-4-yloxy)propyl)siloxane)

IT: alfa-idrossipoli(metil-(3-(2,2,6,6-tetrametilpiperidin-4-ilossi)propil)silossano)

NL: alfa-hydroxypoly(methyl-(3-(2,2,6,6-tetramethylpiperidine-4-yloxy)propyl)siloxaan)

PT: alfa-hidroxi poli(metil-(3-(2,2,6,6-tetrametilpiperidina-4-iloxi)propil)siloxano)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 21/22	C; R 34	N; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	N	
		
		R 21/22-34-51/53
		S (1/2-)26-36/37/39-45-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 12185-10-3

EEC No —

No 015-001-00-1

P<sub>4</sub>

ES: fósforo blanco

DA: phosphor, hvidt og gult; fosfor

DE: Tetraphosphor; weißer Phosphor; gelber Phosphor

EL: λευκός φωσφόρος

EN: white phosphorus

FR: phosphore blanc

IT: fosforo bianco; fosforo giallo

NL: gele of witte fosfor

PT: fósforo branco




Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 17

T+; R 26/28

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	T+	C	
			R : 17-26/28-35 S : (1/2-)5-26-28-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7723-14-0

EEC No 231-768-7

No 015-002-00-7

P<sub>(n)</sub>

ES: fósforo rojo

DA: phosphor, rødt

DE: Roter Phosphor

EL: ερυθρός φωσφόρος

EN: red phosphorus

FR: phosphore rouge

IT: fosforo rosso

NL: rode fosfor

PT: fósforo vermelho

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 16

F; R 11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F



R : 11-16

S : (2-)7-43

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1305-99-3

EEC No 215-142-0

No 015-003-00-2



ES: fosfuro de calcio

DA: calciumphosphid

DE: Calciumphosphid

EL: φωσφορουχο ασβέστιο

EN: calcium phosphide

FR: phosphure de calcium

IT: fosfuro di calcio; calcio fosfuro

NL: calciumfosfide



PT: fosforeto de cálcio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

F; R 15/29

T+; R 28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

P	T+	
		
		R : 15/29-28
		S : (1/2-)22-43-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 20859-73-8

EEC No 244-088-0

No 015-004-00-8

Al P

ES: fosfuro de aluminio

DA: aluminiumphosphid

DE: Aluminiumphosphid

EL: φωσφορικό αργίλιο

EN: aluminium phosphide

FR: phosphure d'aluminium

IT: fosfuro di alluminio

NL: aluminiumfosfide

PT: fosforeto d alumínio


Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

F; R 15/29

T+; R 28

R 32

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	T+	
		
		R : 15/29-28-32
		S : (1/2-)3/9/14-30-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 12057-74-8

EEC No 235-023-7

No 015-005-00-3



ES : fósforo de magnesio

DA : magnesiumphosphid

DE : Magnesiumphosphid

EL : φωσφορούχο μαγνήσιο

EN : magnesium phosphide

FR : phosphure de magnésium

IT : fosforo di magnesio ; magnesio fosforo

NL : magnesiumfosfide

PT : fósforeto de magnésio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

F ; R 15/29

T+ ; R 28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	T+	
		
		R : 15/29-28
		S : (1/2-)22-43-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 1314-84-7

EEC No 215-244-5

No 015-006-00-9



ES: difosfuro de tricinc

DA: trizinkdiphosphid

DE: Trizinkdiphosphid

EL: διφωσφίδιο του τριψευδαργύρου

EN: trizinc diphosphide

FR: diphosphure de trizinc

IT: difosfuro di trizinco

NL: trizinkdifosfide

PT: difosforeto de trizinco

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

F; R 15/29

T+; R 28

R 32

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	F	
		
		R : 15/29-28-32
		S : (1/2-)3/9/14-30-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits.  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7719-12-2

EEC No 231-749-3

No 015-007-00-4

PCl<sub>3</sub>

ES: tricloruro de fósforo

DA: phosphortrichlorid

DE: Phosphortrichlorid

EL: τριχλωριούχος φωσφόρος

EN: phosphorus trichloride

FR: trichlorure de phosphore

IT: tricloruro di fosforo, fosforo tricloruro

NL: fosfortrichloride

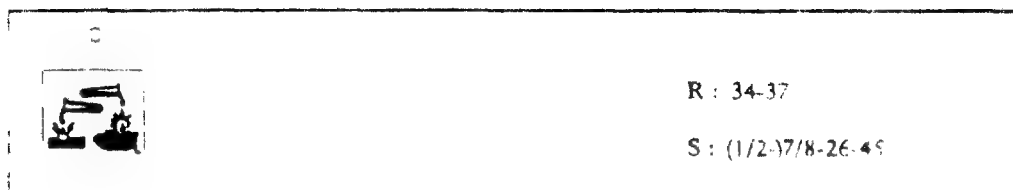
PT: triclureto de fósforo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

C; R 34

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 10026-13-8

EEC No 233-060-3

No 015-008-00-X

PCl<sub>5</sub>

ES: pentacloruro de fósforo

DA: phosphorpentachlorid

DE: Phosphorpentachlorid

EL: πενταχλώριος φασφόρος

EN: phosphorus pentachloride

FR: pentachlorure de phosphore

IT: pentacloruro di fosforo; fosforo pentacloruro

NL: fosforpentachloride

PT: pentacloreto de fósforo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

C; R 34

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 34-37

S : (1/2-)7/8-26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 10025-87-3

EEC No 233-046-7

No 015-009-00-5

POCl<sub>3</sub>

ES: oxiclورو de fósforo; triclورو de fosforilo

DA: phosphorylchlorid

DE: Phosphoroxidchlorid; Phosphorylchlorid

EL: οξυχλωριούχος φωσφόρος

EN: phosphorus oxychloride; phosphoryl chloride

FR: trichlorure de phosphore; oxychlorure de phosphore

IT: ossiclورو di fosforo; fosforo ossiclورو

NL: fosforylchloride

PT: oxicleto de fósforo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

C; R 34

Xi; R 37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R : 34-37

S : (1/2-)7/8-26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1314-56-3

EEC No 215-236-1

No 015-010-00-0



ES: pentóxido de fósforo

DA: phosphorpentaoxid

DE: Phosphorpentoxid

EL: πεντοξείδιο του φωσφόρου

EN: phosphorus pentoxide

FR: pentoxyde de diphosphore; anhydride phosphorique

IT: anidride fosforica

NL: fosforpentoxide

PT: pentóxido de fósforo; anidrido fosfórico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R : 35

S : (1/2-)22-26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7664-38-2

EEC No 231-633-2

No 015-011-00-6

NOTA B

 $H_3PO_4$  ... %

ES: ácido fosfórico ... %; ácido ortofosfórico ... %

DA: phosphorsyre ... %; fosforsyre ... %

DE: Phosphorsäure ... %

EL: ορθοφωσφορικό οξύ ... %

EN: phosphoric acid ... %, orthophosphoric acid ... %

FR: acide phosphorique ... %

IT: acido fosforico ... %

NL: fosforzuur ... %

PT: ácido fosfórico em solução ... %

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R: 34 S: (1/2-)26-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	C; R 34
10 % ≤ C < 25 %	Xi; R 36/38

Cas No 1314-85-8

EEC No 215-245-0

No 015-012-00-1

 $P_4S_3$ 

ES: trisulfuro de tetrafósforo; sesquisulfuro de fósforo

DA: tetraphosphortrisulfid

DE: Tetraphosphortrisulfid; Phosphorsesquisulfid

EL: τριθειούχος φωσφόρος · τριθειούχος τετραφωσφόρος

EN: phosphorus sesquisulphide

FR: trisulfure de tétraphosphore; sesquisulfure de phosphore

IT: trisolfuro di fosforo; fosforo trisolfuro

NL: tetrafosfortrisulfide

PT: sesquissulfureto de fósforo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

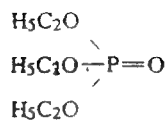
F	Xn	
		
		R : 11-22
		S : (2-)7-16-24/25

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 78-40-0

EEC No 201-114-5

No 015-013-00-7



ES: fosfato de trietilo

DA: triethylphosphat

DE: Triethylphosphat

EL: φωσφορικός τριαιθυλεστέρας

EN: triethyl phosphate

FR: phosphate de triéthyle

IT: trietilfosfato


NL: triethylfosfaat

PT: fosfato de trietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	<p>R : 22</p> <p>S : (2-)25</p>

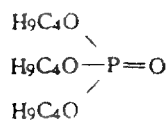
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 126-73-8

EEC No 204-800-2

No 015-014-00-2



ES: fosfato de tributilo

DA: tributylphosphat

DE: Tributylphosphat

EL: φωσφορικός τριβουτυλεστέρας

EN: tributyl phosphate

FR: phosphate de tributyle

IT: tributilfosfato


NL: tributylfosfaat

PT: fosfato de tributilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> Xn   </div> <div> R : 22  S : (2-)25 </div> </div>
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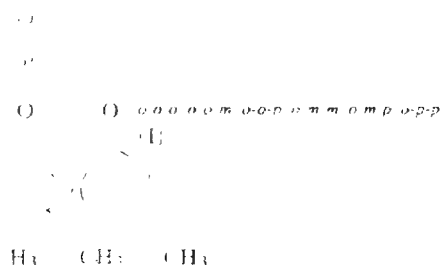
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*


Cas No 78-30-8 [1]

EEC No 201-103-5 [1]

No 015-015-00-8

NOTA C



ES: testatos de nicotilo; testatos de cresilo; o-o-o, o-o-m, o-o-p, o-m-m, o-m-p o-p-p

DA: tricesciph speaker      m: a: a: a: m: m: a: m: p: a: p: p

DE  $\alpha$ -m-cresylphosphat  $\alpha$ -m-m, o-m-p, o-p-p

EΙ φωσφορικά τριχρεσυστατικά : ο-ο-ο-m, ο-ο-ρ, ο-m-m, ο-m-p, ο-p-p

EN increase phosphate 100-150 phosphate o-o-o, o-o-m, o-o-p, o-m-m, o-m-p, o-p-p

FR phosphate de triéthyle, phosphate de tri*n*-crésyle ; *o-o-o*, *o-o-m*, *o-o-p*, *o-m-m*, *o-m-p*, *o-p-p*

II crescitato,  $\phi = 0$ ,  $m = m$ ,  $n = n$ ,  $p = p$

NI    menses festat    0-0 0 1 2 3 4 5 6 7 8 9 m m 0 m p 0 p p

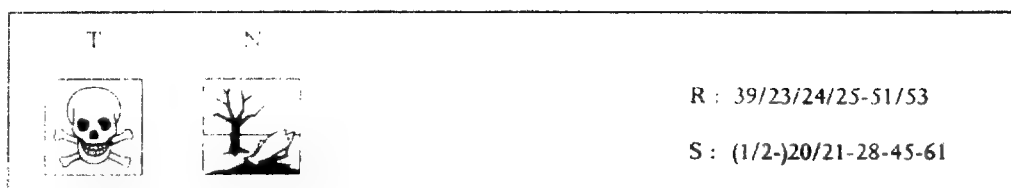
PT Costato 24.1.1951 (10.1.1951) 0.0-m, 0.0-m-m, 0.0-m-m, 0.0-m-p, 0.0-p-p

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

T. R 39/23/24/25

N ; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Etikettuavon, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

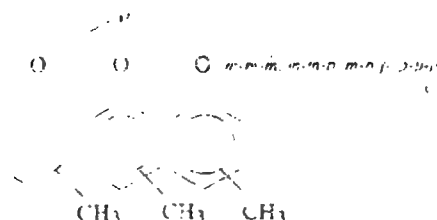
$C \geq 1\%$	T; R 39/23/24/25
$0,2\% \leq C < 1\%$	Xn; R 40/20/21/22

Leg. No. 78-32-0-11

CEC. No. 201-05-6 (I)

No. 015-016-00-3

NOTA C



- ES : fosfatos de tritolilo ; fosfatos de tricresilo ; *m-m-m, m-m-p, m-p-p, p-p-p*
- DA : tricresylphosphater ; *m-m-m, m-m-p, m-p-p, p-p-p*
- DE : Trikresylphosphat ; *m-m-m, m-m-p, m-p-p, p-p-p*
- EL : φωσφορικός τρικρεσυλεστερας ; *m-m-m, m-m-p, m-p-p, p-p-p*
- EN : tricresyl phosphate ; tritolyl phosphate ; *m-m-m, m-m-p, m-p-p, p-p-p*
- FR : phosphate de tritolyle ; phosphate de trincr syle ; *m-m-m, m-m-p, m-p-p, p-p-p*
- IT : tricresilfosfato ; *m-m-m, m-m-p, m-p-p, p-p-p*
- NL : trincresylfosfaat ; *m-m-m, m-m-p, m-p-p, p-p-p*
- PT : fosfato de tricresilo ; fosfato de tritolilo ; *m-m-m, m-m-p, m-p-p, p-p-p*

*Clasificaci n, Klassificering, Einstufung, Ταξι νιση, Classification, Classificati n, Classificazione, Indeling, Classifica  o*

Xn ; R 21/22

N ; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισ μηση, Labelling,  tiquette, Etichettatura, Kenmerken, Rotulagem*

Xn	N	
		R : 21/22-51/53
		S : (2-)28-61

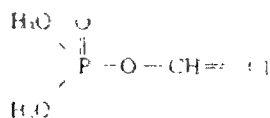
* mites de concentraci n, Koncentrationsgr nser, Konzentrationsgrenzwerte,  ρια συγκ ντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentra  o*

C ≥ 5 %	Xn ; R 21/22

Cas No 62-73-7

EEC No 200-547-7

No 015-019-00-X



ES: diclorvos (ISO), fosfato de 2,2-diclorovinilo y dimetilo

DA: dichlorvos (ISO); 2,2-dichlorvinyl dimethylphosphat

DE: dichlorvos (ISO); 2,2-Dichlorvinyl dimethylphosphat

EL: dichlorvos (ISO); φωσφορικός 2,2-διχλωροβινυλο-διμεθυλεστέρας

EN: dichlorvos (ISO), 2,2-dichlorvinyl dimethyl phosphate

FR: dichlorvos (ISO), phosphate de 2,2-dichlorovinyle et de diméthyle

IT: diclorvos (ISO); fosfato di 2,2-diclorovinile e dimetile

NL: dichloorvos (ISO), 2,2-dichloorvinyl dimethylfosfaat

PT: diclorvos (ISO); fosfato de 2,2-diclorovinilo e dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T; R 24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

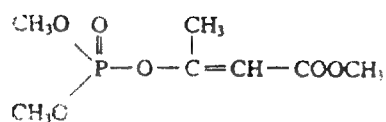
T	
	R : 24/25
	S : (1/2-)23-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas N° 7786-34-7

EEC No 232-095-1

No 015-020-00-5



ES: mevinfos (ISO); fosfato de 2-metoxicarbonil-1-metilvinilo y de dimetilo

DA: mevinphos (ISO); 2-methoxycarbonyl-1-methylvinyl dimethylphosphat

DE: Mevinphos (ISO); 2-Methoxycarbonyl-1-methylvinyl dimethylphosphat

EL: mevinphos (ISO); φωσφορικός 2-μεθοξυκαρβονυλο-1-μεθυλοβινυλο-διμεθυλεστέρας

EN: mevinphos (ISO); 2-methoxycarbonyl-1-methylvinyl dimethyl phosphate

FR: mevinphos (ISO); phosphate de 2-méthoxycarbonyl-1-méthylvinyle et de diméthyle

IT: mevinphos (ISO); fosfato di dimetile e 1-metil-2-metossicarbonilvinile

NL: mevinfos (ISO); 2-methoxycarbonyl-1-methylvinyl dimethylfosfaat

PT: mevinfos (ISO); fosfato de 1-metil-2-metoxicarbonilvinilo e de dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T+; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

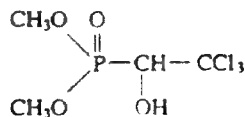
T+	
	R 27/28
	S : (1/2-)23-28-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 52-68-6

EEC No 200-149-3

No 015-021-00-0



- ES: triclорfon (ISO); 2,2,2-tricloro-1-hidroxietylfosfonato de dimetilo  
 DA: trichlorfon (ISO); dimethyl-2,2,2-trichlor-1-hydroxyethylphosphonat  
 DE: Trichlorfon (ISO); Dimethyl-2,2,2-trichlor-1-hydroxyethylphosphonat  
 EL: trichlorfon (ISO); φωσφορώδης 2,2,2-τριχλωρο-1-υδροξυαιθυλο-διμεθυλεστέρας  
 EN: trichlorfon (ISO); dimethyl 2,2,2-trichloro-1-hydroxyethylphosphonate.  
 FR: trichlorfon (ISO); 2,2,2-trichloro-1-hydroxyéthylphosphonate de diméthyle  
 IT: triclорfon (ISO); 2,2,2-tricloro-1-idrossietilfosfonato di dimetile  
 NL: trichloorfon (ISO); dimethyl-2,2,2-trichloor-1-hydroxyethylfosfonaat  
 PT: triclорfone (ISO); 2,2,2-tricloro-1-hidroxietylfosfonato de dimetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

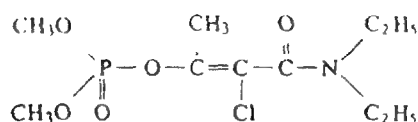
Xn	
	R : 22-43 S : (2-)24-37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 13171-21-6

EEC No 236-116-S

No 015-022-00-6



**ES:** fosfato de dimetilo y de 2-cloro-2-(N,N-dietilcarbamoil)-1-metilvinilo; fosfamidon

DA : phosphamidon ; (2-chlor-3-diethylamino-1-methyl-3-oxo-prop-1-en-yl)-dimethylphosphat

**DE : Phosphamidon :** (2-Chlor-3-diethylamino-1-methyl-3-oxo-prop-1-en-yl)-dimethyl-phosphat

EL: φωσφαμιντον· φωσφορικός διμεθυλο-2-χλωρο-2-δισαιθυλοκαρβαμυόλο-1-μεθυλο-δινυλεσιέρας

EN : phosphamidon ; 2-chloro-2-diethylcarbamoyl-1-methylvinyl dimethyl phosphate

FR : phosphamidon ; phosphate de diméthyle et de 2-chloro-2-(*N,N*-diéthylcarbamoyl)-1-méthyl-vinyle

IT: fosfamidone; (2-cloro-3-dietilamino-1-metil-3-oxo-prop-1-en-il)-dimetil-fosfato

NL: fofamidon; (2-chloor-3-diethylamino-1-methyl-3-oxo-prop-1-en-yl)-dimethyl-fofaat

**PT:** fosfamidião; fosfato de dimetilo e de 2-cloro-2-(*N,N*-dietilcarbamoil)-1-metilvinilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

T+ ; R 28	T ; R 24	Mura. Cat. 3 ; R 40	N ; R 50-53
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*Etiquetado, Etskettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

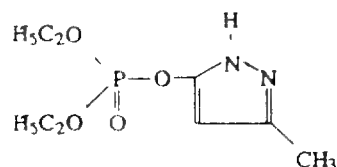
T+	N	
		R : 24-28-40-50/53
		S : (1/2-)23-36/37-45-60-61

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 108-34-9

EEC No —

No 015-023-00-1



- ES: fosfato de dietilo y de 3-metil-5-pirazolilo; pirazoxón  
 DA: pyrazoxon; 0,0-diethyl-O-(3-methyl-1H-pyrazol-5-yl)-phosphat  
 DE: Pyrazoxon; 0,0-Diethyl-O-(3-methyl-1H-pyrazol-5-yl)-phosphat  
 EL: pyrazoxon; φωσφορικός διαιθυλο-3-μεθυλοπυραζόλ-5-υλ-εστέρας  
 EN: pyrazoxon; diethyl 3-methylpyrazol-5-yl phosphate  
 FR: pyrazoxone; phosphate de diéthyle et de 3-méthyl-5-pyrazolyne  
 IT: pirazoxon; 0,0-dietil-O-(3-metil-1H-pirazol-5-il)fosfato  
 NL: pyrazoxon; 0,0-diethyl-O-(3-methyl-1H-pyrazol-5-yl)-fosfaat  
 PT: pirazoxão; fosfato de dietilo e de 3-metil-1H-pirazol-5-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R: 26/27/28
	S: (1/2-)13-28-45

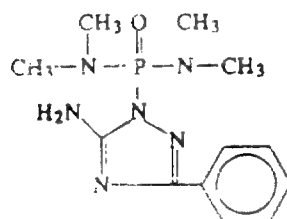
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao




Cas No 1031-47-6

EEC No —

No 015-024-00-7



- ES: triamifos (ISO); 5-amino-3-fenil-1,2,4-triazol-1-il-N,N,N',N'-tetrametilfosfonodiamida  
 DA: triamiphos (ISO); 5-amino-3-phenyl-1,2,4-triazol-1-yl-N,N,N',N'-tetramethylphosphondiamid  
 DE: triamiphos (ISO); 5-Amino-3-phenyl-1,2,4-triazol-1-yl-N,N,N',N'-tetramethylphosphonsäurediamid  
 EL: triamiphos (ISO); 5-αμνο-3-φαινυλο-1,2,4-τριαζολ-1-υλ-N,N,N',N'-τετραμεθυλοφωσφορώδες διαμίδιο  
 EN: triamiphos (ISO); 5-amino-3-phenyl-1,2,4-triazol-1-yl-N,N,N',N'-tetramethylphosphonic diamide  
 FR: triamiphos (ISO); diamide 5-amino-3-phényl-1,2,4-triazole-1-yl-N,N,N',N'-tétraméthylphosphonique; 5-amino-3-phenyl-1-bis(diméthylamino) phosphoryl-1H-1,2,4-triazole  
 IT: triamifos (ISO); diammide 5-ammino-3-fenil-1,2,4-triazol-1-il-N,N,N',N'-tetrametilfosfonica  
 NL: triamiphos (ISO); 5-amino-3-fenyl-1,2,4-triazol-1-yl-N,N,N',N'-tetramethylfosfondiamide  
 PT: triamifos (ISO); diamida 5-amino-3-fenil-1,2,4-triazol-1-ilo-N,N,N',N'-tetrametilfosfónica

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

T+ ; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 27/28
	S : (1/2-)22-28-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


19-8-1997

C.D.C. No. 263-495-3

No. 015-025-00-2

212

19-8-1997

19-8-1997

Tetraethylpyrophosphate

Tetraethylpyrophosphat

Tetraethylpyrophosphat

Tetraethylpyrophosphat

Tetraethylpyrophosphate

Tetraethylpyrophosphate de tetraéthyle

Tetraethylpyrophosphate di tetraetile

Tetraethylpyrophosphat

Tetraethylpyrophosphat

Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 27/28

N ; R 50

Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



R : 27/28-50

S : (1/2-)36/37/39-38-45-61

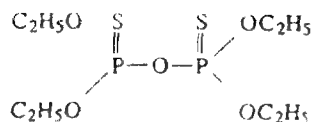
Concentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 3689-24-5

EEC No 222-995-2

No 015-027-00-3



- ES: sulfotep (ISO) : ditiopirofosfato de O,O,O,O-tetraetilo  
 DA: sulfotep (ISO) ; O,O,O,O-tetraethyldithiopyrophosphat  
 DE: sulfotep (ISO) ; O,O,O,O-Tetraethyldithiopyrophosphat  
 EL: sulfotep (ISO) : διθειοπυροφωσφορικός O,O,O,O-τετρααιθυλεστέρας  
 EN: sulfotep (ISO) ; O,O,O,O-tetraethyl dithiopyrophosphate  
 FR: sulfotep (ISO) ; dithiopyrophosphate de O,O,O,O-tetraéthyle  
 IT: sulfotep (ISO) ; ditiopirofosfato di O,O,O,O-tetraetile  
 NL: sulfotep (ISO) ; O,O,O,O-tetraethyldithiopyrofosfaat  
 PT: sulfotep (ISO) ; ditiopirofosfato de O,O,O,O-tetraetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T+ ; R 27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

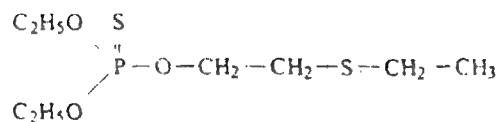
T+	
	R : 27/28
	S : (1/2-)23-28-36/37-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 298-03-3

EEC No 206-053-8

No 015-028-00-9



- ES : demeton-O (ISO) ; tiofosfato de O-2-etiltioetilo y de O,O-dietilo  
 DA : demeton-O (ISO) ; O,O-diethyl-O-2-ethylthioethylthiophosphat  
 DE : demeton-O (ISO) ; O,O-Diethyl-O-2-ethylthioethylthiophosphat  
 EL : demeton-O (ISO) ; θειοφωσφορικός O,O-διδαιθυλ-O-2(αιθυλοθειο)-αιθυλεστέρας  
 EN : demeton-O (ISO) ; O,O-diethyl-O-2-ethylthioethyl phosphorothioate  
 FR : démeton-O (ISO) ; thiophosphate de O,O-diéthyle et de O-2-éthylthioéthyle  
 IT : demeton-O (ISO) ; tiofosfato di O,O-dietile e O-2-etiltioetile  
 NL : demeton-O (ISO) ; O,O-diethyl-O-2-ethylthioethylthiofosfaat  
 PT : demetone-O (ISO) ; tiofosfato de O,O-dietilo e de O-2-etiltioetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T + ; R 27/28	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

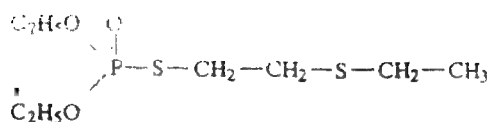
T +	N	
		R : 27/28-50
		S : (1/2-)28-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 126-75-0

EEC No 204-801-8

No 015-029-00-4




- ES: demeton-S (ISO); tiofosfato de dietilo y de S-2-etiltioetilo  
 DA: demeton-S (ISO); diethyl-S-2-ethylthioethylthiophosphat  
 DE: demeton-S (ISO); Diethyl-S-2-ethylthioethylthiophosphat  
 EL: demeton-S (ISO); θειοφωσφορικός διαιθυλ-S-(2-αιθυλοθειο)αιθυλεστέρας  
 EN: demeton-S (ISO); diethyl-S-2-ethylthioethyl phosphorothioate  
 FR: deméton-S (ISO); thiophosphate de diéthyle et de S-2-éthylthioéthyle  
 IT: demeton-S (ISO); tiofosfato di dietile e S-2-etiltioetile  
 NL: demeton-S (ISO); diethyl-S-2-ethylthioethylthiofosfaat  
 PT: demetone-S (ISO); fosforotioato de dietilo e S-2-etiltioetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+; R 27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

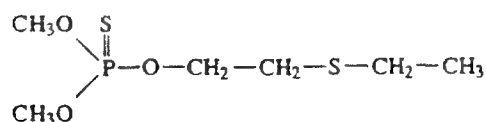
<p>T+</p> 	<p>R : 27/28</p> <p>S : (1/2-)28-36/37-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 867-27-6

EEC No 212-758-1

No 015-030-00-X



ES: demeton-O-metil (ISO); tiofosfato de O-2-etiltioetilo y de O,O-dimetilo

DA: demeton-O-methyl (ISO); O-2-ethylthioethyl-O,O-dimethylthiophosphat

DE: demeton-O-methyl (ISO); O-2-Ethylthioethyl-O,O-dimethylthiophosphat

EL: demeton-O-methyl (ISO); θειοφωσφορικός O-(2-αιθυλοθειο)αιθυλο-O,O-διμεθυλεστέρας

EN: demeton-O-methyl (ISO); O-2-ethylthioethyl O,O-dimethyl phosphorothioate

FR: démeton-O-méthyl (ISO); thiophosphate de O-2-éthylthioéthyle et de O,O-diméthyle

IT: demeton-O-metil (ISO); tiofosfato di O-2-etiltioetile e O,O-dimetile

NL: demeton-O-methyl (ISO); O-2-ethylthioethyl-O,O-dimethylthiofosfaat

PT: demetone-O-metilo (ISO); tiofosfato de O-2-etiltioetilo e O,O-dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

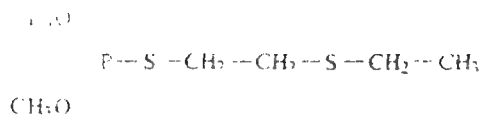
T	
	R : 25
	S : (1/2-)24-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 919-86-8

EEC No 213-052-6

No 015-031-00-5

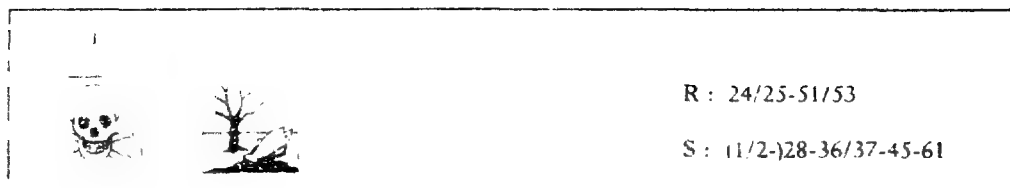


- ES demeton-S-metil (ISO): tiofostato de S-2-etiltioetilo y de dimetilo
- DA demeton-S-metnvl (ISO): S-2-ethylthioethyldimethylthiophosphat
- DE demeton-S-methyl (ISO): S-2-Ethylthioethyldimethylthiophosphat
- EL demeton-S-methyl (ISO): θειοοξωσφορικός S-(2-αιθυλοθειο)αιθυλ-διμεθυλεστέρας
- EN demeton-S-methyl (ISO): S-2-ethylthioethyl dimethyl phosphorothioate
- FR déméton-S-methyl (ISO): thiophosphate de S-2-éthylthioéthyle et de diméthyle
- IT demeton-S-metil (ISO): tiofostato di S-2-etiltioetile e dimetile
- NL demeton-S-methyl (ISO): S-2-ethylthioethylthiofostaat
- PT demetone-S-metilo (ISO): tiofostato de S-2-etiltioetilo e dimetilo

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24/25	N; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem



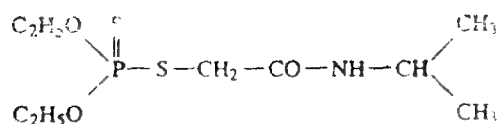
Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 2275-18-5

EEC No 218-893-2

No 015-032-00-0



- ES: protoato (ISO); ditiofosfato de O,O-dietilo y isopropilcarbamoilmetilo  
 DA: prothoat (ISO); O,O-diethylisopropylcarbamoilmethyldithiophosphat  
 DE: prothoat (ISO); O,O-Diethylisopropylcarbamoilmethyldithiophosphat  
 EL: prothoate (ISO); διθειοφωσφορικός O,O-διαιθυλ-ισοπροπυλοκαρβαμούλομεθυλεστέρας  
 EN: prothoate (ISO); O,O-diethyl isopropylcarbamoilmethyl phosphorodithioate  
 FR: prothoate (ISO); dithiophosphate de O,O-diéthyle et de S-(N- isopropylcarbamoil)méthyle  
 IT: protoato (ISO); ditiofosfato di O,O-dietile e isopropilcarbamoilmetile  
 NL: prothoat (ISO); O,O-diethylisopropylcarbamoilmethyldithiofosfaat  
 PT: protoato (ISO); ditiofosfato de O,O-dietilo e isopropilcarbamoilmetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

T+ ; R 27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

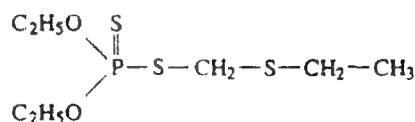
T+	
	R 27/28
	S. (1/2-)28-36/37-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 298-02-2

EEC No 206-052-2

No 015-033-00-6



- ES: forato (ISO); ditiofosfato de O,O-dietilo y etiltiometilo  
 DA: phorat (ISO); O,O-diethylethylthiomethyldithiophosphat  
 DE: phorat (ISO); O,O-Diethylethylthiomethyldithiophosphat  
 EL: phorate (ISO); διθειοφωσφορικός O,O-διαιθυλ-αιθυλοθειομεθυλεστέρας  
 EN: phorate (ISO); O,O-diethyl ethylthiomethyl phosphorodithioate  
 FR: phorate (ISO); dithiophosphate de O,O-diéthyle et de S-(éthylthiométhyle)  
 IT: forato (ISO); ditiofosfato di O,O-dietile e etiltiometile  
 NL: foraat (ISO); O,O-diethylethylthiomethyldithiofosfaat  
 PT: furatq (ISO); fosforotioato de O,O-dietilo e etiltiometilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T+; R 27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

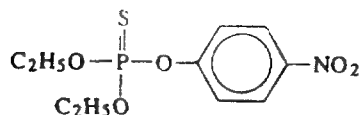
<p>T+</p> 	<p>R : 27/28</p> <p>S : (1/2-)28-36/37-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 56-38-2

EEC No 200-271-7

No 015-034-00-1




- ES: paration (ISO); tiofosfato de O,O-dietilo y O-4-nitrofenilo  
 DA: parathion (ISO); O,O-diethyl-O-4-nitrophenylthiophosphat  
 DE: parathion (ISO); O,O-Diethyl-O-4-nitrophenylthiophosphat  
 EL: parathion (ISO); θειοφωσφορικός O,O-διδαιθυλ-O-4-νιτροφαινυλεστέρας  
 EN: parathion (ISO); O,O-diethyl O-4-nitrophenyl phosphorothioate  
 FR: parathion (ISO); thiophosphate de O,O-diéthyle et de O-4-nitrophényle  
 IT: paration (ISO); tiofosfato di O,O-dietile e O-4-nitrofenile  
 NL: parathion (ISO); O,O-diethyl-O-4-nitrofenylthiofosfaat  
 PT: paratione (ISO); fosforotioato de O,O dietilo e O-4-nitrofenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T+; R 27/28

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

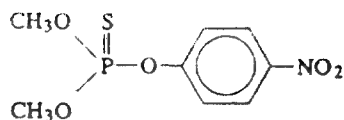
T+	N	
		R : 27/28-50/53
		S : (1/2-)28-36/37-45-60-61

Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 298-00-0

EEC No 206-050-1

No 015-035-00-7




- ES: paratouon - metil (ISO); tiofosfato de O,O-dimetilo y de O-4-nitrofenilo  
 DA: parathion - methyl (ISO); O,O-dimethyl-O-4-nitrophenylthiophosphat  
 DE: parathion - methyl (ISO); O,O-Dimethyl-O-4-nitrophenylthiophosphat  
 EL: parathion - methyl (ISO); θειοφωσφορικός O,O-διμεθυλ-O-4-νιτροφαινυλεστέρας  
 EN: parathion - methyl (ISO); O,O-dimethyl O-4-nitrophenyl phosphorothioate  
 FR: parathion - méthyl (ISO); thiophosphate de O,O-diméthyle et de O-4-nitrophényle  
 IT: paratouon - metil (ISO); tiofosfato di O,O-dimetile e O-4-nitrofenile  
 NL: parathion - methyl (ISO); O,O-dimethyl-O-4-nitrofenylthiofosfaat  
 PT: paratoune - metilo (ISO); fosforotioato de O,O-dimetilo e O-4-nitrofenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

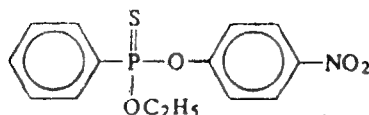
T+	
	R : 24-28
	S : (1/2-)28-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2104-64-5

EEC No 218-276-8

No 015-036-00-2



- ES: feniltiofosfonato de O-etilo y de O-4-nitrofenilo; EPN  
 DA: O-ethyl-O-4-nitrophenylphenylthiophosphonat; EPN  
 DE: O-Ethyl-O-4-nitrophenylphenylthiophosphonat  
 EL: EPN · φαινυλοθειοφωσφορώδης Ο-αιθυλ-Ο-4-νιτροφαινυλεστέρας  
 EN: O-ethyl O-4-nitrophenyl phenylphosphonothioate; EPN  
 FR: phénylthiophosphonate de O-éthyle et de O-(4-nitrophényle); EPN  
 IT: feniltiofosfonato di O-etile e O-4-nitrofenile  
 NL: O-ethyl-O-4-nitrofenylfenylthiofosfonaat  
 PT: feniltiofosfonato de O-etilo e O-4-nitrofenilo

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T+; R 27/28

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

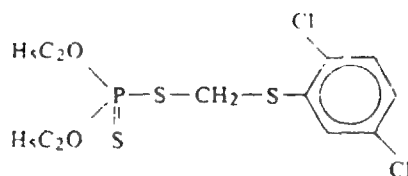
T+	N	
		R : 27/28-50/53
		S : (1/2-)22-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 2275-14-1

EEC No 218-892-7

No 015-037-00-8



- ES : fencaptan ; ditiofosfato de O,O-dietilo y de S-(2,5-diclorofeniltiometilo)
- DA : phencapton ; O,O-diethyl-S-(2,5-dichlorophenylthiomethyl)-dithiophosphat
- DE : Phenkapton ; S-(2,5-Dichlor-phenylthio)-methyl-O,O-diethyl-dithiophosphat
- EL : phenkapton· διθειοφωσφορικός O,O-διαιθυλο-S-(2,5-διχλωροφαινυλοθειο)-μεθυλεστέρας
- EN : phenkapton ; S-(2,5-dichlorophenylthiomethyl) O,O-diethyl phosphorodithioate
- FR : phenkapton ; dithiophosphate de O,O-diéthyle et de S-(2,5-dichlorophénylthio)méthyle
- IT : fenkapton ; O,O-dietyl-S-[(2,5-dicloro-fenil-tio)-metil]-ditiofosfato
- NL : phenkapton ; O,O-diethyl-S-[(2,5-dichloorfenylthio)-methyl]-dithiofosfaat
- PT : fencaptão , ditiofosfato de O,O-dietilo e de S-(2,5-diclorofeniltiometilo)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T ; R 23/24/25

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

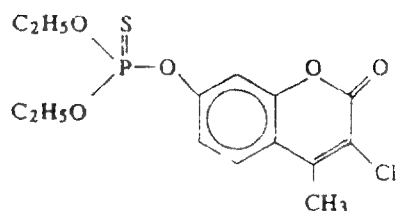
T	N	
		R : 23/24/25-50/53
		S : (1/2-)13-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 56-72-4

EEC No 200-285-3

No 015-038-00-3



ES: cumafos (ISO); tiofosfato de O-3-cloro-4-metilcumarin-7-ilo y de O,O-dietilo

DA: coumaphos (ISO); O-3-chlor-4-methylcumarin-7-yl-O,O-diethylthiophosphat

DE: coumaphos (ISO); O-3-Chlor-4-methylcumarin-7-yl-O,O-diethylthiophosphat

EL: coumaphos (ISO); θειοφωσφορικός O-(3-χλωρο-4-μεθυλοκουμαριν-7-υλ)-O,O-διαιθυλεστέρας

EN: coumaphos (ISO); O-3-chloro-4-methylcoumarin-7-yl O,O-diethyl phosphorothioate

FR: coumaphos (ISO); thiophosphate de O-3-chloro-4-méthylcoumarine-7-yle et de O,O diéthyle

IT: cumafos (ISO); tiofosfato di O-3-cloro-4-metilcumarin-7-ile e O,O-dietile

NL: cumafos (ISO); O-3-chloor-4-methylcumarine-7-yl-O,O-diethylthiofosfaat

PT: cumafos (ISO); monotiofosfato de O-3-cloro-4-metil-7-cumarinilo e O,O-dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ : R 28

Xn ; R 21

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

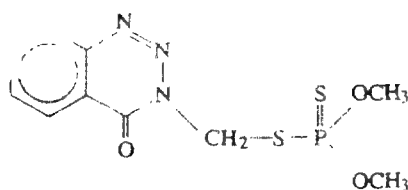
T+	N	
		R : 21-28-50/53
		S : (1/2-)28-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 86-50-0

EEC No 201-676-1

No 015-039-00-9



- ES: azintós-metil (ISO); ditiofosfato de O,O-dimetilo y de 4-oxobenzotriazin-3-ilmetilo  
 DA: azinphos-methyl (ISO); O,O-dimethyl-4-oxobenzotriazin-3-ylmethyldithiophosphat  
 DE: azinphos-methyl (ISO); O,O-Dimethyl-4-oxobenzotriazin-3-ylmethyldithiophosphat  
 EL: azinphos-methyl (ISO); διθειοφωσφορικός 4-οξοβενζοτριαζιν-3-υλο-μεθυλ-O,O-διμεθυλεστέρας  
 EN: azinphos-methyl (ISO); O,O-dimethyl 4-oxobenzotriazin-3-ylmethyl phosphorodithioate  
 FR: azinphos-méthyl (ISO); dithiophosphate de O,O-diméthyle et de 4-oxobenzotriazine-3-ylméthyle  
 IT: azinfos-metil (ISO); ditiofosfato di O,O-dimetile e ossobenzotriazin-3-ilmetile  
 NL: azinfos-methyl (ISO); O,O-dimethyl-4-oxobenzotriazine-3-ylmethyldithiofosfaat  
 PT: azinfos-metilo (ISO); fosforoditioato de O,O-dimetilo 4-oxobenzotriazina-3-ilmetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

T+	
	R : 24-28
	S : (1/2-)28-36/37-45

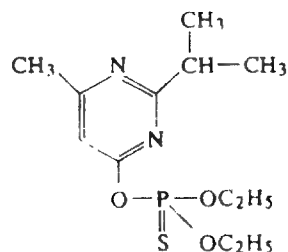
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 333-41-5

EEC No 206-373-8

No 015-040-00-4



ES: diazinon (ISO); dimpilato (DCI); tiofosfato de O,O-dietilo y de O-2-isopropil-6-metilpirimidin-4-ilo

DA: diazinon (ISO); O,O-diethyl-O-2-isopropyl-6-methylpyrimidin-4-ylthiophosphat

DE: diazinon (ISO); O,O-Diethyl-O-2-isopropyl-6-methylpyrimidin-4-ylthiophosphat

EL: diazinon (ISO); θειοφωσφορικός O,O-διαιθυλ-O-2-ισοπροπυλ-6-μεθυλοπυριμιδιν-4-υλεστέρας

EN: diazinon (ISO); O,O-diethyl O-2-isopropyl-6-methylpyrimidin-4-yl phosphorothioate

FR: diazinon (ISO); thiophosphate de O,O-diéthyle et de O-2-isopropyl-6-méthylpyrimidine-4-yle

IT: diazinon (ISO); tiofosfato di O,O-dietile e O-2-isopropil-6-metilpirimidin-4-ile

NL: diazinon (ISO); O,O-diethyl-O-2-isopropyl-6-methylpyrimidine-4-ylthiofosfaat

PT: diazinone (ISO); dimpilato (DCI); fosforotioato de O,O-dietil e O-2-isopropil-6-metil-4-pirimidinilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn; R 22

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

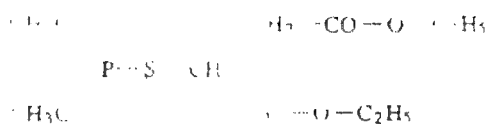
Xn	N	
		R : 22-50/53
		S : (2-)24/25-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 121-75-5

EC No 204-497-7

No 015-041-00-X



- ES malathion (ISO), ditiotostato de 1,2-bis(etoxicarbonil)etilo y de O,O-dimetilo, (di(etoxilcarbonylo)etil) succinato de dietilo
- DA malathion (ISO): 1,2-bis (ethoxycarbonyl) ethyl-O,O-dimethyldithiophosphat
- DE malathion (ISO), 1,2-Bis (ethoxycarbonyl) ethyl-O,O-dimethyldithiophosphat
- EL malathion (ISO): διθειοφωσφορικός 1,2-δις(αιθοξυκαρβονυλ)αιθυλ-Ο,Ο-διμεθυλεστέρας
- EN malathion (ISO), 1,2-bis (ethoxycarbonyl) ethyl O,O-dimethyl phosphorodithioate
- FR malathion (ISO), dithiophosphate de 1,2-bis (ethoxycarbonyl) éthyle et de O,O-diméthyle
- IT malation (ISO), ditiotostato di 1,2-bis (etossicarbonil) etile e O,O-dimetile
- NL malathion (ISO), 1,2-bis (ethoxycarbonyl) ethyl-O,O-dimethyldithiostaat
- PT malathion (ISO), ditiotostato de 1,2-bis(etoxicarbonil)etilo e O,O-dimetilo, (di(etoxilcarbonylo)etil) succinato de dietilo

Clasificación, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn: R 22

Etiquetada, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

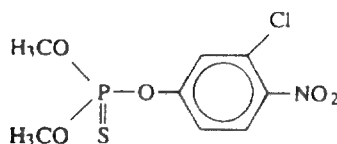


Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraço


Cas No 500-28-7

EEC No 207-902-5

No 015-042-00-5



ES: tiofosfato de *O,O*-dimetilo y de *O*-(3-cloro-4-nitrofenilo); clortion (nombre común no adoptado por ISO)

DA: methylchlorthion (ikke anerkendt af ISO); *O*-(3-chlor-4-nitrophenyl)-*O,O*-dimethylthiophosphat

DE: Chlorthion (nicht als ISO-Kurzname anerkannt); *O*-(3-Chlor-4-nitro-phenyl)-*O,O*-dimethyl-thiophosphat

EL: chlorthion · (ονομασία που δεν έχει υιοθετηθεί από την ISO) · θειοφωσφορικός *O,O*-διμεθυλο-*O*-(3-χλωρο-4-νιτρο)φαινυλ-εστέρας

EN: chlorthion (common name not adopted by ISO); *O*-(3-chloro-4-nitrophenyl) *O,O*-dimethyl phosphorothioate

FR: chlortion (nom commun non adopté par l'ISO); thiophosphate de *O,O*-diméthyle et de *O*-(3-chloro-4-nitrophényle)

IT: chlortion (denominazione non adottata dall'ISO); *O*-(3-cloro-4-nitro-fenil)-*O,O*-dimetil-tiofosfato


NL: chloorthion (benaming niet aanvaard door ISO); *O*-(3-chloor-4-nitrofenyl)-*O,O*-dimethyl-monothiofosfaat

PT: clortião (denominação vulgar não adoptada pela ISO); monotiofosfato de *O*-(3-cloro-4-nitrofenilo) e de *O,O*-dimetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

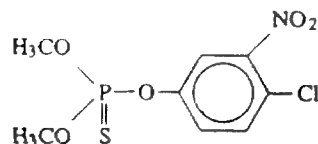
<p>Xn</p> 	<p>R : 20/21/22</p> <p>S : (2-)13</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 5826-76-6

EEC No —

No 015-043-00-0



- ES: tiofosfato de *O,O*-dimetilo y de *O*-(4-cloro-3-nitrofenilo); fosniclor  
 DA: phosnichlor; *O*-(4-chlor-3-nitrophenyl)-*O,O*-dimethylthiophosphat  
 DE: Phosnichlor; *O*-(4-Chlor-3-nitro-phenyl)-*O,O*-dimethyl-thiophosphat  
 EL: phosnichlor· θειοφωσφορικός *O,O*-διμεθυλο-*O*-(4-χλωρο-3-νιτρο)-φαινυλ-εστέρας  
 EN: phosnichlor; *O*-(4-chloro-3-nitrophenyl) *O,O*-dimethyl phosphorothioate  
 FR: nichlorfos; thiophosphate de *O,O*-diméthyle et de *O*-(4-chloro-3-nitrophényle)  
 IT: phosniclor; *O*-(4-cloro-3-nitro-fenil)-*O,O*-dimetil-tiofosfato  
 NL: phosnichloor; *O*-(4-chloor-3-nitrofenyl)-*O,O*-dimethyl-monothiofosfaat  
 PT: fosnicloro; monotiofosfato de *O*-(4-cloro-3-nitrofenilo) e de *O,O*-dimetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

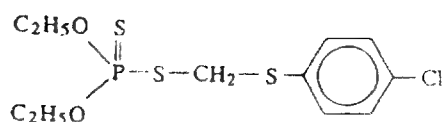
Xn	
	R : 20/21/22
	S : (2-)13

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 786-19-6

EEC No 212-324-I

No 015-044-00-6



- ES: carbofenotion (ISO) (DCI); ditiofosfato de 4-clorofeniltiometilo y de O,O-dietilo  
 DA: carbophenothion (ISO); 4-chlorphenylthiomethyl-O,O-diethyldithiophosphat  
 DE: carbophenothion (ISO); 4-Chlorphenylthiomethyl-O,O-diethyldithiophosphat  
 EL: carbophenothion διθειοφωσφορικός 4-χλωροφαινυλοθειομεθυλ-O,O-διαιθυλεστέρας  
 EN: carbophenothion (ISO); 4-chlorophenylthiomethyl O,O-diethyl phosphorodithioate  
 FR: carbophénotherion; dithiophosphate de 4-chlorophénylthiométhyle et de O,O-diéthyle  
 IT: carbofenotion (ISO); ditiofosfato di 4-clorofeniltiometile e O,O-dietile  
 NL: carbofenothion (ISO); 4-chloorfenylthiomethyl-O,O-diethyldithiofosfaat  
 PT: carbofenotione (ISO) (DCI); fosforoditioato de 4-clorofeniltiometilo e O,O-dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24/25

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

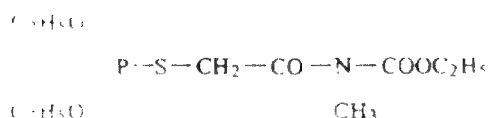
T	N	
		R : 24/25-50/53
		S : (1/2-)28-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 2595-54-2

EEC No 219-993-9

No 015-045-00-1



- ES : mecarbam (ISO) ; ditiofosfato de O,O-dietilo y N-etoxicarbonil-N-metilcarbamoilmetilo
- DA : mecarbam (ISO) , N-ethoxycarbonyl-N-methylcarbamoilmethyl-O,O-diethyldithiophosphat
- DE : Mecarbam (ISO) , N-Ethoxycarbonyl-N-methylcarbamoilmethyl-O,O-diethyldithiophosphat
- EL : mecarbam (ISO) : διθειοφωσφορικός Ν-αιθοξυκαρβονυλο-Ν-μεθυλοκαρβαμούλομεθυλ-Ο,Ο-διαιθυλεστέρας
- EN : mecarbam (ISO) , N-ethoxycarbonyl-N-methylcarbamoilmethyl O,O-diethyl phosphorodithioate
- FR : mecarbame (ISO) , dithiophosphate de N-éthoxycarbonyl-N-méthylcarbamoilméthyle et de O,O-diéthyle
- IT : mecarbame (ISO) : ditiofosfato di O,O-dietile e N-etossicarbonil-N-metilecarbamoilmetile
- NL : mecarbam (ISO) , N-ethoxycarbonyl-N-methylcarbamoilmethyl-O,O-diethyldithiofosfaat
- PT : mecarbame (ISO) , tiosforoditioato de N-etoxicarbonil-N-metilcarbamoilmetilo e de O,O-dietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T ; R 24/25

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

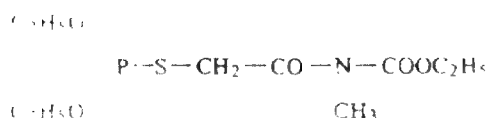
T	N	
		
		R 24/25-50/53
		S : (1/2-)36/37-45-60-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 2595-54-2

EEC No 219-993-9

No 015-045-00-1



- ES : mecarbam (ISO) ; ditiofosfato de O,O-dietilo y N-etoxicarbonil-N-metilcarbamoilmetilo
- DA : mecarbam (ISO) , N-ethoxycarbonyl-N-methylcarbamoilmethyl-O,O-diethyldithiophosphat
- DE : Mecarbam (ISO) , N-Ethoxycarbonyl-N-methylcarbamoilmethyl-O,O-diethyldithiophosphat
- EL : mecarbam (ISO) : διθειοφωσφορικός Ν-αιθοξυκαρβονυλο-Ν-μεθυλοκαρβαμοϋλομεθυλ-Ο,Ο-διαιθυλεστέρας
- EN : mecarbam (ISO) , N-ethoxycarbonyl-N-methylcarbamoilmethyl O,O-diethyl phosphorodithioate
- FR : mecarbame (ISO) , dithiophosphate de N-éthoxycarbonyl-N-méthylcarbamoilméthyle et de O,O-diéthyle
- IT : mecarbame (ISO) : ditiofosfato di O,O-dietile e N-etossicarbonil-N-metilecarbamoilmetile
- NL : mecarbam (ISO) , N-ethoxycarbonyl-N-methylcarbamoilmethyl-O,O-diethyldithiofosfaat
- PT : mecarbame (ISO) , tiosforoditioato de N-etoxicarbonil-N-metilcarbamoilmetilo e de O,O-dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T ; R 24/25

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		
		R 24/25-50/53
		S : (1/2)-36/37-45-60-61

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

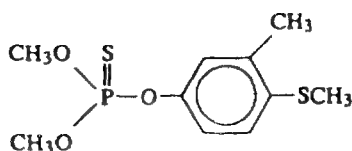





Cas No 55-38-9

EEC No 200-231-9

No 015-048-00-8



ES: fenthion (ISO); tiofosfato de O,O-dimetilo y de O-(4-metiltio-m-tolilo)

DA: fenthion (ISO); O,O-dimethyl-O-(4-methylthio-m-tolyl) thiophosphat

DE: fenthion (ISO); O,O-Dimethyl-O-(4-methylthio-m-tolyl) thiophosphat

EL: fenthion (ISO); θειοφωσφορικός O,O-διμεθυλ-Ο-(4-μεθυλοθειο-μ-τολουολεστέρας)

EN: fenthion (ISO); O,O-dimethyl-O-(4-methylthio-m-tolyl) phosphorothioate

FR: fenthion (ISO); thiophosphate de O,O-diméthyle et de O-(4-méthylthio-m-tolyle)

IT: fenthion (ISO); tiofosfato di O,O-dimetile e O-(4-metiltio-m-tolile)

NL: fenthion (ISO); O,O-dimethyl-O-(4-methylthio-m-tolyl) thiofosfaat

PT: fenthione (ISO); fosforotioato de O,O-dimetilo e C-(4-metiltio-m-tolido)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T; R 25

Xn; R 21

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

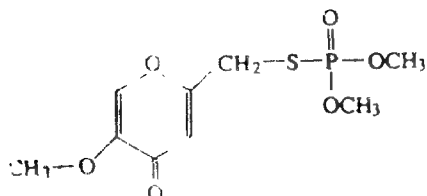
T	N	
		R : 21-25-50/53
		S : (1/2-)36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 2778-04-3

EEC No 220-472-3

No 015-049-00-3



- ES: endotion (ISO); tiofosfato de dimetilo y de S-5-metoxi-4-oxopiran-2-ilmetilo  
 DA: endotion (ISO); S-5-methoxy-4-oxopyran-2-ylmethyldimethylthiophosphat  
 DE: endotion (ISO); S-5-Methoxy-4-oxopyran-2-ylmethyldimethylthiophosphat  
 EL: endotion (ISO); θειοφωσφορικός S-5-μεθοξυ-4-οξοπυρανο-2-υλομεθυλο-διμεθυλεστέρας  
 EN: endotion (ISO); S-5-methoxy-4-oxopyran-2-ylmethyl dimethyl phosphorothioate  
 FR: endotion (ISO); thiophosphate de S-5-méthoxy-4-oxopyran-2-ylméthyle et de diméthyle  
 IT: endotion (ISO); tiofosfato di dimetile e S-5-metossi-4-ossopiran-2-ilmetile  
 NL: endotion (ISO); S-5-methoxy-4-oxopyran-2-ylmethyldimethylthiofosfaat  
 PT: endotione (ISO); fosforotioato de S-5-metoxi-4-oxopirano-2-ilmetilo e dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T; R 24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

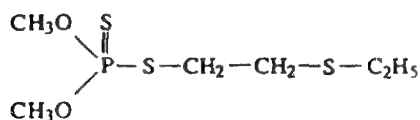
T	
	R : 24/25
	S : (1/2-)36/37-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 640-15-3

EEC No 211-362-6

No 015-050-00-9



ES: uometon (ISO); ditiofosfato de S-2-etiltioetilo y de O,O-dimetilo

DA: thiometon (ISO); S-2-ethylthioethyl-O,O-dimethyldithiophosphat

DE: Thiometon (ISO); S-2-Ethylthioethyl-O,O-dimethyldithiophosphat

EL: thiometon (ISO); διθειοφωσφορικός S-2-αιθυλοθειοαιθυλ-O,O-διμεθυλεστέρας

EN: thiometon (ISO); S-2-ethylthioethyl O,O-dimethyl phosphorodithioate

FR: thiometon (ISO); dithiophosphate de S-2-éthylthioéthyle et de O,O-diméthyle: dithiometon

IT: uometon (ISO); ditiofosfato di S-2-etiltioetile e O,O-dimetile

NL: thiometon (ISO); S-2-ethylthioethyl-O,O-dimethyldithiofosfaat


PT: uometon (ISO); ditiofosfato de O,O-dimetilo e de S-2-etiltioetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T; R 25

Xn; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

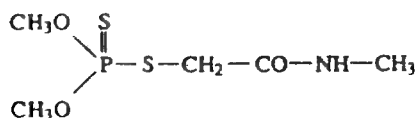
T	
	R : 21-25
	S : (1/2)-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 60-51-5

EEC No 200-480-3

No 015-051-00-4



- ES: dimetoato (ISO); ditiofosfato de metilcarbamoilmetilo y de O,O-dimetilo  
 DA: dimethoat (ISO); O,O-dimethylmethylcarbamoilmethyldithiophosphat  
 DE: dimethoat (ISO); O,O-Dimethylmethylcarbamoilmethyldithiophosphat  
 EL: dimethoate (ISO); διθειοφωσφορικός μεθυλοκαρβαμοϋλομεθυλ-O,O-διμεθυλεστέρας  
 EN: dimethoate (ISO); O,O-dimethyl methylcarbamoilmethyl phosphorodithioate  
 FR: diréthoate (ISO); dithiophosphate de méthylcarbamoilméthyle et de O,O-diméthyle  
 IT: dimetoato (ISO); diofosfato di metilcarbammoilmetile e O,O-dimetile  
 NL: dimethoat (ISO); O,O-dimethylmethylcarbamoilmethyldithiofosfaat  
 PT: dimetoato (ISO); fosforoditioato de O,O-dimetilo e metilcarbamoilmetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

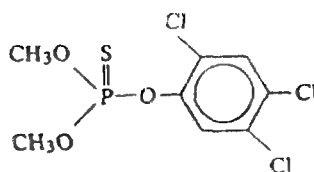
Xn	
	R : 21/22
	S : (2-)36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 299-84-3

EEC No 206-082-6

No 015-052-00-X



ES: fenclorfos (ISO); fenclofos (DCI); tiofosfato de O,O-dimetilo y de O-2,4,5-triclorofenilo

DA: fenchlorphos (ISO); O,O-dimethyl-O-2,4,5-trichlorphenylthiophosphat

DE: fenchlorphos (ISO); O,O-Dimethyl-O-2,4,5-trichlorphenylthiophosphat

EL: fenchlorphos (ISO); θειοφωσφορικός O,O-διμεθυλ-O-2,4,5-τριχλωροφαινυλεστέρας

EN: fenchlorphos (ISO); O,O-dimethyl O-2,4,5-trichlorophenyl phosphorothioate

FR: fenchlorphos (ISO); thiophosphate de O,O-diméthyle et de O-2,4,5-trichlorophényle

IT: fenclorfos (ISO); tiofosfato di O-2,4,5-triclorofenile e O,O-dimetile

NL: fenchloorphos (ISO); O-2,4,5-trichloorfenyl-O,O-dimethylthiofosfaat

PT: fenclorfos (ISO); tiofosfato de O,O-dimetilo e O-2,4,5-triclorofenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

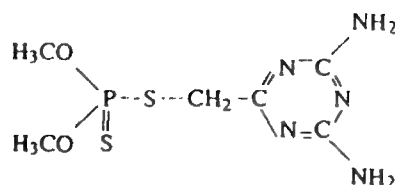
Xn	
	R : 21/22
	S : (2-)25-36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 78-57-9

EEC No 201-123-4

No 015-053-00-5



ES: menazon

DA: menazon

DE: Menazon

EL: menazon

EN: menazon

FR: menazon

IT: menazone; S-[(4,6-diamino-1,3,5-triazin-2-il)-metil] O,O-dimetilditiofosfato

NL: menazon

PT: menazon

FI: menatsoni

SV: menazon (ISO); S-4,6-diamino-1,3,5-triazin-2-ylmetyl-O,O-dimetylfosforoditioat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 22 | R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

Xn



R: 22-52/53

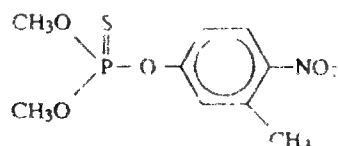
S: (2)-61

*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationgränser*


Cas No 122-14-5

EEC No 204-524-2

No 015-054-00-0



ES: fenitrothion (ISO); tiofosfato de O,O-dimetilo y de O-4-nitro-m-tolilo

DA: fenitrothion (ISO); O,O-dimethyl-O-4-nitro-m-tolylthiophosphat

DE: fenitrothion (ISO); O,O-Dimethyl-O-4-nitro-m-tolylthiophosphat

EL: fenitrothion (ISO); θειοφωσφορικός O,O-διμεθυλ-O-4-νιτρο-μ-τολουολεστέρας

EN: fenitrothion (ISO); O,O-dimethyl O-4-nitro-m-tolyl phosphorothioate

FR: fénitrothion (ISO); thiophosphate de O,O-diméthyle et de O-4-nitro-m-tolyle

IT: fenitrothion (ISO); tiofosfato di O,O-dimetile e O-4-nitro-m-tolile

NL: fenitrothion (ISO); O,O-dimethyl-O-4-nitro-m-tolylthiofosfaat

PT: feniltrotione (ISO); fosforotioato de O,O-dimetilo e O-4-nitro-m-tolilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Roetelagem

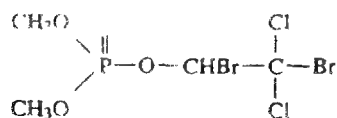
Xn	N	
		R: 22-50/53
		S: (2-)-60-61

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrație


Cas No 300-76-5

EEC No 206-098-3

No 015-055-00-6



ES: naled (ISO): fosfato de 1,2-dibromo-2,2-dicloroetilo y de dimetilo

DA: naled (ISO): 1,2-dibrom-2,2-dichlorethyldimethylphosphat

DE: Naled (ISO): 1,2-Dibrom-2,2-dichlorethyldimethylphosphat

EL: naled (ISO): φωσφορικός 1,2-διβρωμο-2,2-διχλωροαιθυλο-διμεθυλεστέρας

BN: naled (ISO): 1,2-dibromo-2,2-dichloroethyl dimethyl phosphate

FR: naled (ISO): phosphate de O-1,2-dibromo-2,2-dichloroéthyle et de 2,0-diméthyle

IT: naled (ISO): fosfato di 1,2-dibromo-2,2-dicloroetile e dimetile

NL: naled (ISO): 1,2-dibroom-2,2-dichloorethyldimethylfosfaat

PT: naled (ISO): fosfato de 1,2-dibromo-2,2-dicloroetilo e de dimetilo

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 21/22

Xi; R 36/38

Piquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R: 21/22-36/38 S: (2-)36/37

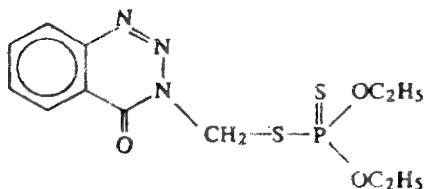
Limites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraç3o




Cas No 2642-71-9

EEC No 220-147-6

No 015-056-00-1



ES: azinfos-etil (ISO); ditiofosfato de O,O-dietilo y de 4-oxobenzotriazin-3-ilmetilo

DA: azinphos-ethyl (ISO); O,O-diethyl-4-oxobenzotriazin-3-ylmethyl dithiophosphat

DE: azinphos-ethyl (ISO); O,O-Diethyl-4-oxobenzotriazin-3-ylmethyl dithiophosphat

EL: azinphos-ethyl (ISO); διθειοφωσφορικός O,O-διαιθυλο-4-οξοβενζοτριαζιν-3-υλμεθυλεστέρας

EN: azinphos-ethyl (ISO); O,O-diethyl 4-oxobenzotriazin-3-ylmethyl phosphorodithioate

FR: azinphos-ethyl (ISO); dithiophosphate de O,O-diéthyle et de 4-oxobenzotriazine-3-ylméthyle

IT: azinphos-etil (ISO); ditiofosfato di O,O-dietile e 4-ossobenzotriazin-3-ilmetile

NL: azinfos-ethyl (ISO); O,O-diethyl-4-oxobenzotriazine-3-il methyl dithiofosfaat

PT: azinfos-etilo (ISO); ditiofosfato de O,O-dietilo e 4-oxobenzotriazina-3-ilmetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

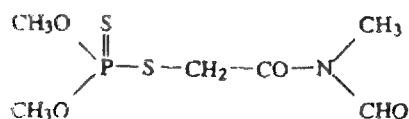
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2540-82-1

EEC No 219-818-6

No 015-057-00-7



- ES: formotion (ISO); ditiوسفato de N-formil-N-metilcarbamoilmetilo y de O,O-dimetilo  
 DA: formotion (ISO); N-formyl-N-methylcarbamoilmethyl-O,O-dimethyldithiophosphat  
 DE: formotion (ISO); N-Formyl-N-methylcarbamoilmethyl-O,O-dimethyldithiophosphat  
 EL: formotion (ISO); διθειοφωσφορικός Ν-φορμυλο-Ν-μεθυλοκαρβαμουλομεθυλ-Ο,Ο-διμεθυλεστέρας  
 EN: formotion (ISO); N-formyl-N-methylcarbamoilmethyl O,O-dimethyl phosphorodithioate  
 FR: formotion (ISO); dithiophosphate de N-formyl-N-méthylcarbamoilméthyle et de O,O-diméthyle  
 IT: formotion (ISO); ditiوسفato di N-formil-N-metilcarbamoilmetile e O,O-dimetile  
 NL: formotion (ISO); N-formyl-N-methylcarbamoilmethyl-O,O-dimethyldithiofosfaat  
 PT: formotion (ISO); ditiوسفato de N-formil-N-metilcarbamoilmetilo e O,O-dimetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

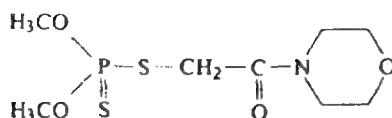
Xn	
	R : 21/22 S : (2-)36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 144-41-2

EEC No 205-628-0

No 015-058-00-2





- ES: morfotion ; ditiofosfato de O,O-dimetilo y de S-(morfolinocarbonil)metilo  
 DA: morphothion ; O,O-dimethyl-S-(morpholinocarbonylmethyl)-dithiophosphat  
 DE: Morphotion ; O,O-Dimethyl-S-(morpholino-carbonyl)-methyl-dithiophosphat  
 EL: morphothion διθειοφωσφορικός O,O-διμεθυλο-S-(μορφολινο-καρβονυλο)-μεθυλ-εστέρας  
 EN: morphothion ; O,O-dimethyl-S-(morpholinocarbonylmethyl) phosphorodithioate  
 FR: morphothion ; dithiophosphate de O,O-diméthyle et de S-(morpholinocarbonyl)méthyle  
 IT: morphothion ; O,O-dimetil-S-[(morfolin-carbonil)-metil]-ditiofosfato  
 NL: morphothion ; O,O-dimethyl-S-[(morfolino-carbonyl)-methyl]-dithiofosfaat  
 PT: morfotião ; ditiofosfato de O,O-dimetilo e de S-(morfolinocarbonilmetilo)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T ; R 23/24/25    N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

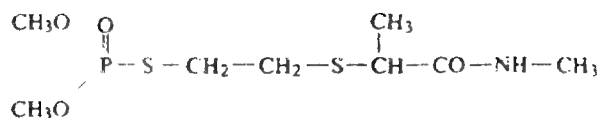
T	N	
		R : 23/24/25-50/53
		S : (1/2-)13-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 2275-23-2

EEC No 218-894-8

No 015-059-00-8




- ES : vamidothion (ISO) ; tiofosfato de S-2-(1-metilcarbamoiletilio) etilo y de dimetilo  
 DA : vamidothion (ISO) ; dimethyl-S-2-(1-methylcarbamoylethylthio) ethylthiophosphat  
 DE : Vamidothion (ISO) ; Dimethyl-S-2-(1-methylcarbamoylethylthio) ethylthiophosphat  
 EL : vamidothion (ISO) ; θειοφωσφορικός S-2-(1-μεθυλοκαρβαμοϋλαιθυλοθειο)αιθυλο-διμεθυλεστέρας  
 EN : vamidothion (ISO) ; O,O-dimethyl S-2-(1-methylcarbamoylethylthio) ethyl phosphorothioate  
 FR : vamidothion (ISO) ; thiophosphate de S-2-(1-méthylcarbamoylethylthio)éthyle et de O,O-diméthyle  
 IT : vamidothion (ISO) ; tiofosfato di S-2-(1-metilcarbamoiletilio) etile e dimetile  
 NL : vamidothion (ISO) ; dimethyl-S-2-(1-methylcarbamoylethylthio) ethylthiofosfaat  
 PT : vamidotione (ISO) ; fosforotioato de dimetilo e de S-2-(1-metilcarbamoiletilio)etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T ; R 25	Xn ; R 21	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

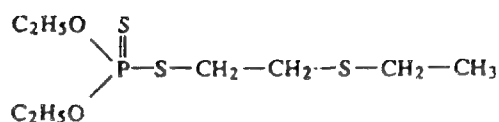
T	N	
		R : 21-25-50
		S : (1/2)-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 298-04-4

EEC No 206-054-3

No 015-060-00-3



- ES: disulfoton (ISO); ditiofosfato de O,O-dietilo y de S-2-etiltioetilo  
 DA: disulfoton (ISO); O,O-diethyl-2-ethylthioethyldithiophosphat  
 DE: disulfoton (ISO); O,O-Diethyl-2-ethylthioethyldithiophosphat  
 EL: disulfoton (ISO); διθειοφωσφορικός O,O-διαιθυλο-2-αιθυλοθειο-αιθυλεστέρας  
 EN: disulfoton (ISO); O,O-diethyl 2-ethylthioethyl phosphorodithioate  
 FR: disulfoton (ISO); dithiophosphate de O,O-diéthyle et de 2-éthylthioéthyle  
 IT: disulfoton (ISO); ditiofosfato di O,O-dietile e 2-etiltioetile  
 NL: disulfoton (ISO); O,O-diethyl-2-ethylthioethyldithiofosfaat  
 PT: disulfoton (ISO); ditiofosfato de O,O-dietilo e de S-2-etiltioetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

T+ ; R 27/28      N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetsatura, Kenmerken, Rotulagem*

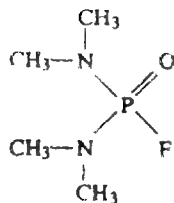
T+	N	
		R : 27/28-50/53
		S : (1/2-)28-36/37-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 115-26-4

EEC No 204-076-8

No 015-061-00-9




ES: dimefox (ISO); fluoro tetrametilfosforodiamídico  
 DA: dimefox (ISO); tetramethylphosphordiamidsyrefluorid  
 DE: dimefox (ISO); Tetramethylphosphordiamidsäurefluorid  
 EL: dimefox (ISO); τετραμεθυλοφωσφοροδιαμιδικό φθορίδιο  
 EN: dimefox (ISO); tetramethylphosphorodiamidic fluoride  
 FR: dimefox (ISO); fluorure tétraméthylphosphorodiamidique  
 IT: dimefox (ISO); fluoruro tetrametilfosforodiammidico  
 NL: dimefox (ISO); tetramethylfosforodiamidefluoride  
 PT: dimefox (ISO); fluoreto de tetrametilfosforodiamídico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T+</p> 	<p>R : 27/28</p> <p>S : (1/2-)23-28-36/37-38-45</p>
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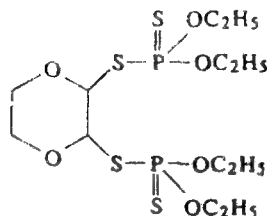
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 78-34-2

EEC No 201-107-7

No 015-063-00-X



- ES: dioxation (ISO)(DCI); di(ditiofosfato) de 1,4-dioxano-2,3-diilo y de O,O,O',O'-tetraetilo
- DA: dioxathion (ISO); 1,4-dioxan-2,3-diyl-O,O,O',O'-tetraethylidi (dithiophosphat)
- DE: dioxathion (ISO); 1,4-Dioxan-2,3-diyl-O,O,O',O'-tetraethylidi (dithiophosphat)
- EL: dioxathion (ISO) · δι(διθειοφωσφορικό) O,O,O',O'-τετρααιθυλ-1,4-διοξανο-2,3-διύλιο
- EN: dioxathion (ISO); 1,4-dioxan-2,3-diyl-O,O,O',O'-tetraethyl di(phosphorodithioate)
- FR: dioxathion (ISO); di(dithiophosphate) de 1,4-dioxan- 2,3-diyle et de O,O,O',O'-tetraéthyle
- IT: dioxation (ISO); di(ditiofosfato) di 1,4-diossan-2,3-diile e O,O,O',O'-tetraetile
- NL: dioxathion (ISO); 1,4-dioxaan-2,3-diyl-O,O,O',O'-tetraethylidi(dithiofosfaat)
- PT: dioxatione (ISO); di(fosforoditioato) de 1,4-dioxano-2,3-diilo e O,O,O',O'-tetraetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 24-26/28

S : (1/2-)28-36/37-45

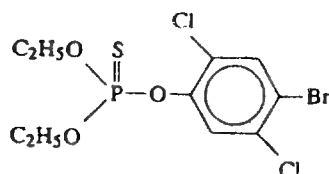
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 4824-78-6

EEC No 225-399-0

No 015-064-00-5



ES: bromofos-etil (ISO); tiofosfato de O-4-bromo-2,5-diclorofenilo y de O,O-dietilo

DA: bromophos-ethyl (ISO); O-4-brom-2,5-dichlorophenyl-O,O-diethylthiophosphat

DE: bromophos-ethyl (ISO); O-4-Brom-2,5-dichlorophenyl-O,O-diethylthiophosphat

EL: bromophos-ethyl (ISO); θειοφωσφορικός O-4-βρωμο-2,5-διχλωροφαινυλ-O,O-διαιθυλεστέρας

EN: bromophos-ethyl (ISO); O-4-bromo-2,5-dichlorophenyl O,O-diethyl phosphorothioate

FR: bromophos-éthyl (ISO); thiophosphate de O-4-bromo-2,5-dichlorophényle et de O,O-diéthyle

IT: bromofos-etil (ISO); tiofosfato di O-4-bromo-2,5-diclorofenile e O,O-dietile

NL: bromofos-ethyl (ISO); O-4-broom-2,5-dichloorfenyl-O,O-diethylthiofosfaat

PT: bromofos-etilo (ISO); tiofosfato de O-4-bromo-2,5-diclorofenilo e O,O-dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Xn; R 21

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

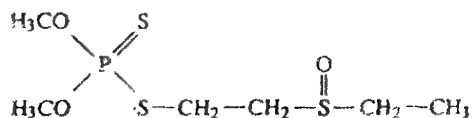
T	N	
		R : 21-25-50/53
		S : (1/2-)28-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2703-37-9

EEC No —

No 015-065-00-0



ES: ditiofosfato de O,O-dimetilo y de S-(2-etilsulfinil-etilo)

DA: S-2-ethylsulfinyl-ethyl-O,O-dimethyl-dithiophosphat

DE: S-2-Ethylsulfinyl-ethyl-O,O-dimethyl-dithiophosphat

EL: διθειοφωσφορικός O,O-διμεθυλο-S-(2-αιθυλοσουλφινυλο)-αιθυλ-εστέρας

EN: S-[2-(ethylsulphinyl)ethyl] O,O-dimethyl phosphorodithioate

FR: dithiophosphate de O,O-diméthyle et de S(2-éthylsulfinyl-éthyle)

IT: S-2-etil-sulfiniletil-O,O-dimetil-ditiofosfato

NL: S-2-ethyl-sulfinylethyl-O,O-dimethyl-dithiofosfaat

PT: ditiofosfato de S-(etilsulfiniletilo) e de O,O-dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

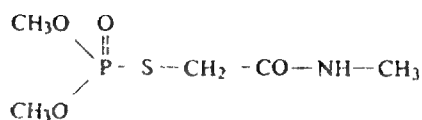
T+	
	R : 26/27/28
	S : (1/2-)13-28-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 1113-02-6

EEC No 214-197-8

No 015-066-00-6



ES: ometoato (ISO); tiofosfato de O,O-dimetilo y de S-metilcarbamoilmetilo

DA: omethoat (ISO); O,O-dimethyl-S-methylcarbamoilmethylthiophosphat

DE: Omethoat (ISO); O,O-Dimethyl-S-methylcarbamoilmethylthiophosphat

EL: omethoate (ISO); θειοφωσφορικός O,O-διμεθυλ-S-μεθυλοκαρβαμολομεθυλεστέρας

EN: omethoate (ISO); O,O-dimethyl S-methylcarbamoilmethyl phosphorothioate

FR: omethoate (ISO); thiophosphate de O,O-diméthyle et de S-méthylcarbamoilméthyle

IT: ometoato (ISO); tiofosfato di O,O-dimetile e S-metilcarbamoilmetile

NL: omethoat (ISO); O,O-dimethyl-S-methylcarbamoilmethylthiofosfaat

PT: ometoato (ISO); tiofosfato de O,O-dimetilo e S-metilcarbamoil metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25    Xn; R 21    N; R 50

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

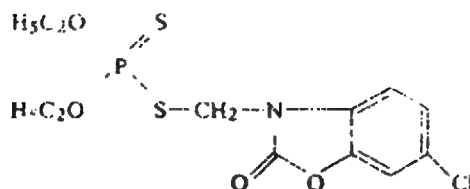
T	N	
		R : 21-25-50
		S : (1/2-23-36/37-45-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2310-17-0

EEC No 218-996-2

No 015-067-00-1





- ES: fosalon ; ditiofosfato de O,O-dietilo y de S-(6-cloro-2-oxo-2H-benzo 1,3-3-oxazolil)metilo  
 DA: phosalon ; O,O-diethyl-S-(6-chlor-2-oxo-benz(b)1,3-oxalin-3-yl)-methyl-dithiophosphat  
 DE: Phosalon ; O,O-Diethyl-S-(6-chlor-2-oxo-benz(b)1,3-oxalin-3-yl)-methyl-dithiophosphat  
 EL: phosalone· διθειοφωσφορικός O,O-διδαιθυλο-S-(6-χλωρο-2-οξοδενζοξαζολιν-3-υλο)-μεθυλεστέρας  
 EN: phosalone ; S-(6-chloro-2-oxobenzoxazolin-3-ylmethyl) OO-diethyl phosphorodithioate  
 FR: phosalone ; dithiophosphate de O,O-diéthyle et de S-(6-chloro-2-oxo-2H-benzo[*b*] 1,3-oxazole-3-yl)méthyle  
 IT: fosalone ; O,O-dietil-S-[(6-cloro-2-osso-1,3-benzossazolin-3-il)-metil]-ditiofosfato  
 NL: phosalon ; O,O-diethyl-S-[(6-chloor-2-oxo-benzoxazolin-3-yl)-methyl]-dithiofosfaat  
 PT: fosalone ; ditiofosfato de S-[(6-cloro-2-oxobenzoxaline-3-il)metilo] e de O,O-dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T ; R 25    Xn ; R 21    N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

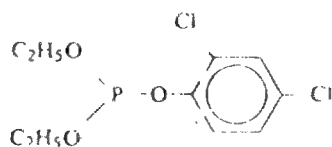
T	N	
		R : 21-25-50/53
		S : (1/2-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 97-17-6

EEC No 202-564-5

No 015-068-00-7



- ES : diclofention (ISO) ; tiofosfato de O-2,4-diclorofenilo y de O,O-dietilo  
 DA : dichlofenthion (ISO) ; O-2,4-dichlorphenyl-O,O-diethylthiophosphat  
 DE : dichlofenthion (ISO) ; O-2,4-Dichlorphenyl-O,O-diethylthiophosphat  
 EL : dichlofenthion (ISO) ; θειοφωσφορικός O-2,4-διχλωροφαινυλ-O,O-διαιθυλεστέρας  
 EN : dichlofenthion (ISO) ; O-2,4-dichlorophenyl O,O-diethyl phosphorothioate  
 FR : dichlofenthion (ISO) ; thiophosphate de O-2,4-dichlorophényle et de O,O-diéthyle  
 IT : diclofention (ISO) ; tiofosfato di O-2,4-diclorofenile e O,O-dietile  
 NL : dichlofenthion (ISO) ; O-2,4-dichloorfenyl-O,O-diethylthiofosfaat  
 PT : diclofentione (ISO) ; fosforotioato de O-2,4-diclorofenilo e O,O-dietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

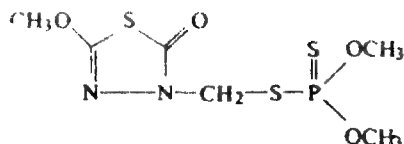
Xn	N	
		R : 22-50/53 S : (2)-60-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 950-37-8

EEC No 213-449-4

No 015-069-00-2



ES : metidation (ISO) ; ditiofosfato de 2,3-dihidro-5-metoxi-2-oxo-1,3,4-tiadiazol-3-ilmetilo y O,O-dimetilo

DA : methidathion (ISO) ; 2,3-dihydro-5-methoxy-2-oxo-1,3,4-thiadiazol-3-ylmethyl-O,O-dimethyldithiophosphat

DE : methidathion (ISO) ; 2,3-Dihydro-5-methoxy-2-oxo-1,3,4-thiadiazol-3-ylmethyl-O,O-dimethyldithiophosphat

EL : methidathion (ISO) ; διθειοφωσφορικός 2,3-διυδρο-5-μεθοξυ-2-οξο-1,3,4-θειαδιαζολ-3-υλμεθυλ-O,O-διμεθυλεστέρας

EN : methidathion (ISO) ; 2,3-dihydro-5-methoxy-2-oxo-1,3,4-thiadiazol-3-ylmethyl-O,O-dimethylphosphorodithioate

FR : methidathion (ISO) ; dithiophosphate de 2,3-dihydro-5-méthoxy-2-oxo-1,3,4-thiadiazole-3-ylméthyle et de O,O-diméthyle ; dithiophosphate de O,O-diméthyle et de S{5-métoxy-2-oxo-2,3-dihydro-1,3,4-thiadiazole-3-yl)méthyle

IT : metidation (ISO) ; ditiofosfato di 2,3-diidro-5-metossi-2-osso-1,3,4-tiadiazol-3-ilmetile e O,O-dimetile

NL : methidathion (ISO) ; 2,3-dihydro-5-methoxy-2-oxo-1,3,4-thiadiazol-3-ylmethyl-O,O-dimethyldithiophosfaat

PT : metidation (ISO) ; ditiofosfato de 2,3-dihidro-5-metoxi-2-oxo-1,3,4-tiadiazol-3-ilmetilo e O,O-dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T+ ; R 28	Xn ; R 21	N ; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

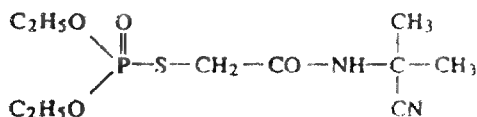
T+	N	
		R : 21-28-50/53
		S : (1/2-)22-28-36/37-45-60-61

Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 3734-95-0

EEC No 223-099-4

No 015-070-00-8



- ES: ciantoato (ISO); tiofosfato de S-N-(1-ciano-1-metiletil)carbamoilmetilo y de O,O-dietilo  
 DA: cyanthoat (ISO); S-(N-(1-cyano-1-methylethyl) carbamoylmethyl)-O,O-diethylthiophosphat  
 DE: cyanthoat (ISO); S-(N-(1-Cyan-1-methylethyl) carbamoylmethyl)-O,O-diethylthiophosphat  
 EL: cyanthoate (ISO); θειοφωσφορικός S-(N-1-κυανο-1-μεθυλαιθυλο)καρβαμούλομ' ουλ-O,O-διαιθυλεστέρας  
 EN: cyanthoate (ISO); S-(N-(1-cyano-1-methylethyl)carbamoylmethyl) O,O-diethyl phosphorothioate  
 FR: cyanthoate (ISO); thiophosphate de S-(N-(1-cyano-1-méthyléthyl)carbamoylméthyle) et de O,O-diéthyle  
 IT: ciantoato (ISO); tiofosfato di S-(N-(1-ciano-1-metiletil)carbammoilmetile) e O,O-dietile  
 NL: cyaanthoat (ISO); S-(N-(1-cyaan-1-methylethyl)carbamoylmethyl)-O,O-diethylthiofosfaat  
 PT: ciantoato (ISO); tiofosfato de S-N-(1-ciano-1-metiletil)carbamoilmetilo e de O,O-dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R 24-28

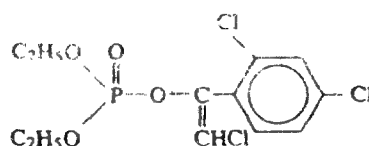
S: (1/2-)36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration Limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 470-90-6

EEC No 207-432-0

No 015-071-00-3



- ES: clorfenvinfos (ISO); fosfato de 2-cloro-1-(2,4-diclorofenil) vinilo y de dietilo  
 DA: chlorfenvinphos (ISO); 2-chlor-1-(2,4-dichlorophenyl) vinyl diethylphosphat  
 DE: chlorfenvinphos (ISO); 2-Chlor-1-(2,4-dichlorophenyl) vinyl diethylphosphat  
 EL: chlorfenvinphos (ISO) φωσφορικός 2-χλωρο-1-(2,4-διχλωροφαινυλο)δινυλο-διαιθυλεστέρας  
 EN: chlorfenvinphos (ISO); 2-chloro-1-(2,4 dichlorophenyl) vinyl diethyl phosphate  
 FR: chlorfenvinphos (ISO); phosphate de 2-chloro-1-(2,4-dichlorophényl) vinyle et de diéthyle  
 IT: clorfenvinfos (ISO); fosfato di 2-cloro-1-(2,4-diclorofenil) vinile e dietile  
 NL: chloorfenvinfos (ISO); 2-chloor-1-(2,4-dichloorfenyl) vinyl diethylfosfaat  
 PT: clorfenvinfos (ISO); fosfato de 2-cloro-1-(2,4-diclorofenil) vinilo e dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	N	
		R: 24-28-50/53
		S: (1/2)-28-36/37-45-60-61

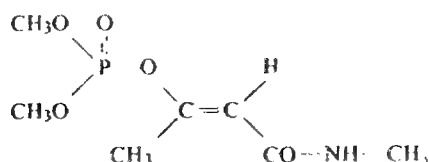
Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 6923-22-4

EEC No 230-042-7

No 015-072-00-9



ES: monocrotofos.(ISO); fosfato de dimetilo y 1-metil-2-(metilcarbarnail)vinilo

DA: monocrotophos (ISO); dimethyl-1-methyl-2-(methylcarbamoyl)vinylphosphat

DE: monocrotophos (ISO); Dimethyl-1-methyl-2-(methylcarbamoyl)vinylphosphat

EL: monocrotophos (ISO): φωσφορικός 1-μεθυλο-2-(μεθυλοκαρβαμυλο)δινυλο-διμεθυλεστέρας

EN: monocrotophos (ISO); dimethyl-1-methyl-2-(methylcarbamoyl)vinyl phosphate

FR : monocrotophos (ISO) ; phosphate de diméthyle et de CIS-1-méthyl-2-(N-méthylcarbamoyl)vinyle

IT: monocrotofos (ISO); fosfato di dimetile e 1-metil-2-(metilcarbammoil) vinile

NL: monocrofos (ISO); dimethyl-1-methyl-2-(methylcarbamoyl)vinylfosfaat

PT: monocrotofos (ISO); fosfato de dimetilo e 1-metil-2-(metilcarbamoil) vinilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T + : R 28

T: R 24

**N ; R 50-53**

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T<sub>4</sub>

N



**R : 24-28-50/53**

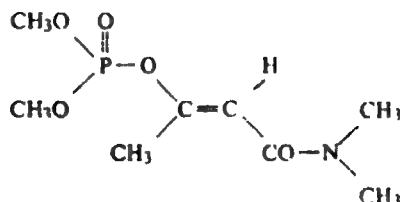
S: (1/2-)23-36/37-45-60-61

*Limites de concentração, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 141-66-2

EEC No 205-494-3

No 015-073-00-4



- ES: dicrotofos (ISO); fosfato de (Z)-2-dimetilcarbamoil-1-metilvinilo y de dimetilo  
 DA: dicrotophos (ISO); (Z)-2-dimethylcarbamoil-1-methylvinildimethylphosphat  
 DE: dicrotophos (ISO); (Z)-2-Dimethylcarbamoil-1-methylvinildimethylphosphat  
 EL: dicrotophos (ISO); φωσφορικός (Z)-2-διμεθυλοκαρβαμοϊλο-1-μεθυλοβινυλο-διμεθυλεστέρας  
 EN: dicrotophos (ISO); (Z)-2-dimethylcarbamoil-1-methylvinyl dimethyl phosphate  
 FR: dicrotophos (ISO); phosphate de (Z)-2-diméthylcarbamoil-1-méthylvinyle et de diméthyle  
 IT: dicrotofos (ISO); fosfato di (Z)-2-dimetilcarbamoil-1-metilvinile e dimetile  
 NL: dicrotofos (ISO); (Z)-2-dimethylcarbamoil-1-methylvinildimethylfosfaat  
 PT: dicrotofos (ISO); fosfato de (Z)-2-dimetilcarbamoil-1-metilvinilo e dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

T+ ; R 28	T ; R 24	N ; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

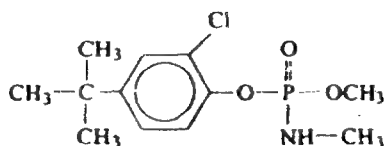
T+	N	
		R : 24-28-50/53
		S : (1/2-)28-36/37-45-60-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 299-86-5

EEC No 206-083-1

No 015-074-00-X



ES : cruformato (ISO) ; metilfosforamidato de 4-terc-butil-2-clorofenilo y de metilo

DA : cruformat (ISO) ; 4-tert-butyl-2-chlorophenylmethylmethylphosphoramidat

DE : cruformat (ISO) ; 4-tert-Butyl-2-chlorophenyl(methyl)methylamidophosphat

EL : cruformat (ISO) ; μεθυλοφωσφοραμιδικό 4-τερτ-δουτυλο-2-χλωροφαινύλιο και μεθύλιο

EN : cruformat (ISO) ; 4-tert-butyl-2-chlorophenyl methyl methylphosphoramidate

FR : cruformate (ISO) ; méthylphosphoramidate de 4-tert-butyl-2-chlorophényle et de méthyle

IT : cruformato (ISO) ; metilfosforoamidato di 4-terz-butil-2-clorofenile e metile

NL : cruformaat (ISO) ; 4-tert-butyl-2-chloorfenylmethylmethylfosforamidaat

PT : cruformato (ISO) ; metilfosforamidato de 4-terc-butil-2-clorofenilo e metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 21/22 N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

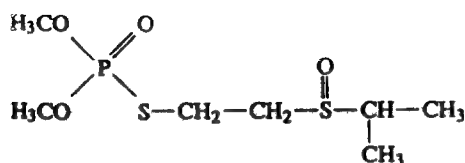
Xn	N	
		R : 21/22-50/53
		S : (2-)36/37-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2635-50-9

EEC No —

No 015-075-00-5



ES: tiofosfato de O,O-dimetilo y de S-(2-isopropilsulfinil-etilo)

DA: S-2-ethylsulfinyl-isopropyl-O,O-dimethyl-thiophosphat

DE: S-2-Ethylsulfinyl-isopropyl-O,O-dimethyl-thiophosphat

EL: θειοφωσφορικός O,O-διμεθυλο-S-(2-ισοπροπυλοσουλφινυλο)-αιθυλ-εστέρας

BN: S-[2-(isopropylsulphinyl)ethyl] O,O-dimethyl phosphorothioate

FR: thiophosphate de O,O-diméthyle et de S-(2-isopropylsulfinyl-éthyle)

IT: S-2-etil-sulfinil-isopropil-O,O-dimetil-monotiofosfato

NL: S-2-ethyl-sulfinyl-isopropyl-O,O-dimethyl-monothiofosfaat

PT: tiofosfato de S-(2-isopropilsulfinil)etilo e de O,O-dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 23/24/25

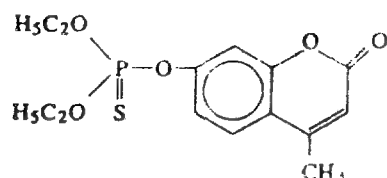
S : (1/2)-13-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 299-45-6

EEC No —

No 015-076-00-0



ES: tiofosfato de O,O-dietilo y de O-(4-metil-7-cumarinilo)

DA: O,O-diethyl-O-(4-methyl-7-coumarinyl)-thiophosphat

DE: O,O-Diethyl-O-(4-methyl-cumarin-7-yl)-thiophosphat

EL: θειοφωσφορικός O,O-διδαιθυλο-O-(4-μεθυλο-κουμαριν-7-υλ)-εστέρας

EN: O,O-diethyl O-(4-methylcoumarin-7-yl) phosphorothioate

FR: thiophosphate de O,O-diéthyle et de O-(4-méthyl-7-couraminyle)

IT: O,O-diétile-O-(4-metilmcumarin-7-il)-tiofosfato

NL: O,O-diethyl-O-(4-methylcumarin-7-yl)-thiofosfaat

PT: tiofosfato de O,O-dietilo e de O-(4-metil-7-cumarinilo)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 26/27/28

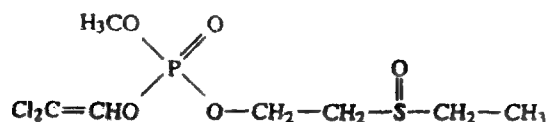
S : (1/2-)13-28-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 7076-53-1

EEC No

No 015-077-00-6



ES: fosfato de metilo de 2,2-diclorovinilo y de 2-etilsulfinil-etilo

DA: O-(2,2-dichlorovinyl)-O-methyl-O-(2-ethylsulfinyl-ethyl)-phosphat

DE: O-(2,2-Dichlor-vinyl)-O-methyl-O-(2-ethylsulfinyl-ethyl)-phosphat

BL: φωσφορικός μεθυλο-2,2-διχλωροβινυλο-2-αιθυλοσουλφινυλ-αιθυλ-εστέρας

BN: 2,2-dichlorovinyl 2-ethylsulphinyethyl methyl phosphate

FR: phosphate de méthyle, de 2,2-dichlorovinyle et de 2-éthylsulfinyl-é-nyle

IT: O-(2,2-dicloro-vinil)-O-metil-O-(2-etil-solfinil-etil)-fosfato


NL: O-(2,2-dichloorvinyl)-O-methyl-O-(2-ethylsulfinyl-ethyl)-fosfaat

PT: fosfato de 2,2-diclorovinilo, de 2-etilssulfiniletilo e de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

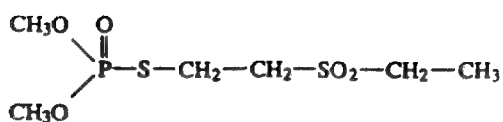
T	
	R : 23/24/25
	S : (1/2-)13-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No 17040-19-6

EEC No 241-109-5

No 015-078-00-1



ES: demeton-S-metilsulfona; tiofosfato de S-2-etilsulfoniletilo y de dimetilo

DA: demeton-S-methylsulfon; S-2-ethylsulfonylethyl dimethyl thiophosphat

DE: Demeton-S-methylsulfon; S-2-Ethylsulfonylethyl dimethyl thiophosphat

EL: demeton-S-methylsulfon · θειοφωσφορικός S-2-αιθυλοσουλφονυλαιθυλο-διμεθυλεστέρας

EN: demeton-S-methylsulphon; S-2-ethylsulphonylethyl dimethyl phosphorothioate

FR: déméton-S-méthylsulfone; thiophosphate de S-2-éthylsulfonyléthyle et de diméthyle

IT: demeton-S-metilsolfone; tiofosfato di S-2-etilsolfoniletile e dimetile

NL: demeton-S-methylsulfon; S-2-ethylsulfonylethyl dimethyl thiofosfaat

PT: demeton-S-metilssulfona; tiofosfato de S-2-etilssulfoniletilo e de dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Xn; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R: 21-25

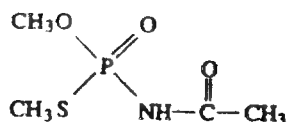
S: (1/2-)22-28-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 30560-19-1

EEC No 250-241-2

No 015-079-00-7



ES: acefato (ISO); acetiltiofosforamidato de O,S-dimetilo  
 DA: acephat (ISO); O,S-dimethylacetylthiophosphoramidat  
 DE: acephat (ISO); O,S-Dimethylacetamidothiophosphat  
 EL: acephate (ISO); ακετυλοθειοφωσφοραμιδικός O,S-διμεθυλεστέρας  
 EN: acephate (ISO); O S-dimethyl acetylphosphoramidothioate  
 FR: acephate (ISO); acétylthiophosphoramidate de O,S-diméthyle  
 IT: acefato (ISO); acetiltiofosforamidato di O,S-dimetile  
 NL: acefaat (ISO); O,S-dimethylacetylthiofosforamidaat  
 PT: acefato (ISO)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2-)36

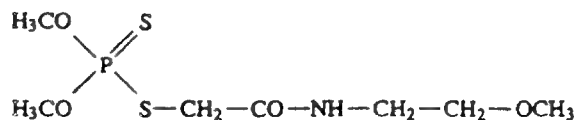
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 919-76-6

EEC No —

No 015-080-00-2



BS: amidition (ISO); ditiolfosfato de O,O-dimetilo y de 2-metoxietilcarbamoilmetilo

DA: amidithion (ISO); 2-methoxyethylcarbamoilmethyl-O,O-dimethyldithiophosphat

DE: amidithion (ISO); 2-Methoxyethylcarbamoilmethyl-O,O-dimethyldithiophosphat

EL: amidithion (ISO); διθειοφωσφορικός 2-μεθοξυαιθυλοκαρβαμυλομεθυλ-O,O-διμεθυλεστέρας

EN: amidithion (ISO); 2-methoxyethylcarbamoilmethyl O,O-dimethyl phosphorodithioate

FR: amidithion (ISO); dithiophosphate de 2-méthoxyéthylcarbamoilméthyle et de O,O-diméthyle

IT: amidition (ISO); ditiolfosfato di O,O-dimetile e 2-metossietilcarbamoilmetile

NL: amidithion (ISO); 2-methoxyethylcarbamoylethyl-O,O-dimethyldithiofosfaat

PT: ar: ditione (ISO); fosforoditioato de O,O-dimetilo e 2-metoxietilcarbamoilmetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22

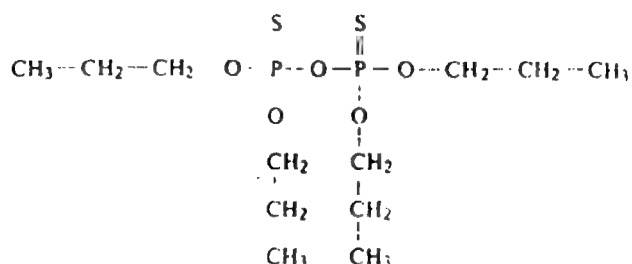
S : (2-)24-36

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 3244-90-4

EEC No 221-817-0

No 015-081-00-8



ES : ditiopirofosfato de O,O,O',O'-tetrapropilo

DA : O,O,O',O'-tetrapropyl-dithiopyrophosphat

DE : O,O,O',O'-Tetrapropyldithiopyrophosphat

EL : διθειοπυροφωσφορικός O,O,O',O'-τετραπροπυλεστέρας

EN : O,O,O',O'-tetrapropyl dithiopyrophosphate

FR : dithiopyrophosphate de O,O,O',O'-tétrapropyle

IT : ditiopirofosfato di O,O,O',O'-tetrapropile

NL : O,O,O',O'-tetrapropyl-dithiopyrofosfaat



PT : ditiopirofosfato de O,O,O',O'-tetrapropilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xn ; R 21/22

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

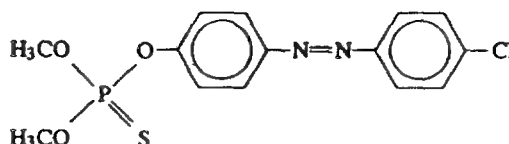
Xn	N	
		R : 21/22-50/53 S : (2-)36/37-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 5834-96-8

EEC No 227-419-3

No 015-082-00-3



ES: azotoato; tiofosfato de O,O-dimetilo y de O-[4-(4-clorofenilazo)fenilo]

DA: azothoat; O-4-(4-chlor-phenylazo)-phenyl-O,O-dimethyl-thiophosphat

DE: Azothoat; O-4-(4-Chlor-phenylazo)-phenyl-O,O-dimethyl-thiophosphat

EL: azothoate · θειοφωσφορικός O,O-διμεθύλ-Ο-(4-4-χλωροφαινυλαζο)-φαινυλ-εστέρας

EN: azothoate; O-4-(4-chlorophenylazo)phenyl O,O-dimethyl phosphorothioate

FR: azothoate; thiophosphate de O,O-diméthyle et de O-[4-(4-chlorophénylazo)phényle]

IT: azotoato; tiofosfato di O-[4-(4-chlorofenilazo)-fenile] e di O,O-dimetile

NL: azothoat; O-4-(4-chloor-fenylazo)-fenyl-O,O-dimethylthiofosfaat

PT: azotato; tiofosfato de O-4-(4-clorofenilazo)fenilo e de O,O-dimetilo

Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20/22
	S : (2-)13

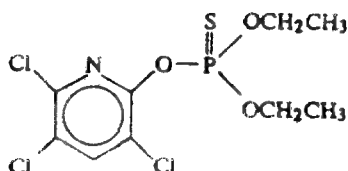
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo




Cas No 2921-88-2

EEC No 220-864-4

No 015-084-00-4



- ES: clorpirifos (ISO); tiofosfato de O,O-dietilo y de O-3,5,6-tricloro-2-piridilo  
 DA: chlorpyrifos (ISO); O,O-diethyl-O-3,5,6-trichlor-2-pyridylthiophosphat  
 DE: Chlorpyrifos (ISO); O,O-Diethyl-O-3,5,6-trichlor-2-pyridylthiophosphat  
 EL: chlorpyrifos (ISO); θειοφωσφορικός O,O-διααιθυλ-O-3,5,6-τριχλωρο-2-πυριδυλεστέρας  
 EN: chlorpyrifos (ISO); O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate  
 FR: chlorpyrifos (ISO); thiophosphate de O,O-diéthyle et de O-3,5,6-trichloro-2-pyridyle  
 IT: clorpirifos (ISO); tiofosfato di O,O-dietile e O-3,5,6-tricloro-2-piridile  
 NL: chloorpyrifos (ISO); O,O-diethyl-O-3,5,6-trichloor-2-pyridylthiofosfaat  
 PT: clorpirifos (ISO); fosforotioato de O,O-dietilo e O-3,5,6-tricloro-2 piridilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24/25

N; R 50-53

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

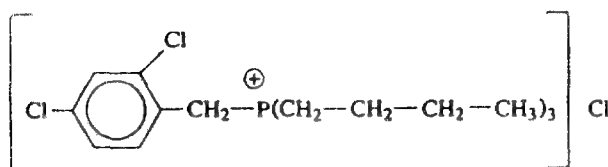
T	N	
		R : 24/25-50/53
		S : (1/2-)28-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 115-78-6

EEC No 204-105-4

No 015-085-00-X



- ES: cloruro de clorfonio (ISO); cloruro de tributil (2,4-diclorobencil)fosfonio  
 DA: chlorphoniumchlorid (ISO); tributyl (2,4-dichlorbenzyl) phosphoniumchlorid  
 DE: Chlorphoniumchlorid (ISO); Tributyl (2,4-dichlorbenzyl) phosphoniumchlorid  
 BL: chlorphonium chloride (ISO); χλωριούχο τριβουτυλο-(2,4-διχλωροβενζυλο)φωσφόνιο  
 BN: chlorphonium chloride (ISO); tributyl (2,4-dichlorbenzyl) phosphonium chloride  
 FR: chlorure de chlorfonicum (ISO); chlorure de tributyl (2,4-dichlorobenzyl) phosphonium  
 IT: cloruro di clorfonio (ISO); cloruro di tributil (2,4-diclorobenzil) fosfonio  
 NL: chloorfoniumchloride (ISO); tributyl (2,4-dichloorbenzyl) fosfoniumchloride  
 PT: cloreto de clorónio (ISO); cloreto de tributil (2,4-diclorobenzil) fosfónio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 25	Xn; R 21	Xi; R 36/38
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

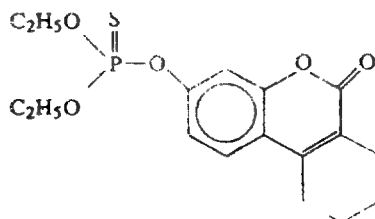
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 572-48-5

EEC No —

No 015-086-00-5



- ES: cumitoato (ISO); tiofosfato de O,O-dietilo y de O-7,8,9,10-tetrahidro-6-oxobenzo(c)cromen-3-ilo
- DA: coumidoat (ISO); O,O-diethyl-O-7,8,9,10-tetrahydro-6-oxo-benzo(c)chromen-3-ylthiophosphat
- DE: coumidoat (ISO); O,O-Diethyl-O-7,8,9,10-tetrahydro-6-oxo-benzo(c)chromen-3-ylthiophosphat
- EL: coumidoate (ISO); θειοφωσφορικός O,O-διαιδυλο-O-(7,8,9,10-τετραύδρο-6-οξοβενζο(c)χρωμεν-3-υλ-εστέρας
- EN: coumidoate (ISO); O,O-diethyl O-7,8,9,10-tetrahydro-6-oxo-benzo(c)chromen-3-yl phosphorothioate
- FR: coumidoate (ISO); thiophosphate de O,O-diéthyle et de O-7,8,9,10-tétrahydro-6-oxo- benzo(c)chromen-3-yle
- IT: cumitoato (ISO); tiofosfato di O,O-dietile e O-7,8,9,10-tetraidro-6-osso-benzo(c)cromen-3-ile
- NL: coumidoaat (ISO); O,O-diethyl-O-7,8,9,10-tetrahydro-6-oxo-benzo(c)chromen-3-ylthiofosfaat
- PT: cumitoato (ISO); tiofosfato de O,O-dietilo e de O-7,8,9,10-tetraidro-6-oxobenzo(c)cromeno-3-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

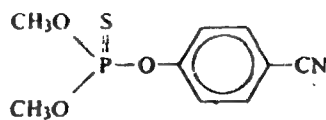
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2636-26-2

EEC No 220-130-3

No 015-087-00-0



- ES : cianofos (ISO) ; tiofosfato de O-4-cianofenilo y de O,O-dimetilo  
 DA : cyanophos (ISO) ; O-4-cyanophenyl-O,O-dimethylthiophosphat  
 DE : cyanophos (ISO) ; O-4-Cyanphenyl-O,O-dimethylthiophosphat  
 EL : cyanophos (ISO) ; θειοφωσφορικό O-4-κυανοφαινύλιο και O,O-διμεθύλιο  
 EN : cyanophos (ISO) ; O-4-cyanophenyl O,O-dimethyl phosphorothioate  
 FR : cyanophos (ISO) ; thiophosphate de O-4-cyanophényle et de O,O-diméthyle  
 IT : cianofos (ISO) ; tiofosfato di O-4-cianofenile e O,O-dimetile  
 NL : cyanofos (ISO) ; O-4-cyaanfenyl-O,O-dimethylthiofosfaat  
 PT : cianofos (ISO) ; tiofosfato de O-4-cianofenilo e de O,O-dimetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 21/22	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	N	
		R : 21/22-50/53
		S : (2-)36/37-60-61

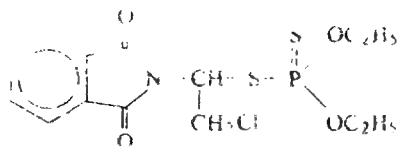
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 10311-84-9

EEC No 233-689-3

No 015-088-00-6



- ES : dialifos (ISO) ; ditiófosfato de 2-cloro-1-ftalimidoetilo y de O,O-diètilo  
 DA : dialifos (ISO) ; 2-chlor-1-phthalimidoethyl-O,O-diethyldithiophosphat  
 DE : dialifos (ISO) ; 2-Chlor-1-phthalimidoethyl-O,O-diethyldithiophosphat  
 EL : dialifos (ISO) ; διθειοφωσφορικό 2-χλωρο-1-φθαλιμιδοαιθύλιο και O,O-διαιθύλιο  
 EN : dialifos (ISO) ; 2-chloro-1-phthalimidoethyl O,O-diethyl phosphorodithioate  
 FR : dialifos (ISO) ; dithiophosphate de 2-chloro-1-phthalimidoéthyle et de O,O-diéthyle  
 IT : dialifos (ISO) ; ditiófosfato di 2-cloro-1-ftalimidoetile e O,O-dietile  
 NL : dialifos (ISO) ; 2-chloor-1-ftaalimidoethyl-O,O-diethyldithiofosfaat  
 PT : dialifos (ISO) ; ditiófosfato de 2-cloro-1-ftalimidoetilo e de O,O-dietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

T+ ; R 28	T ; R 24	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

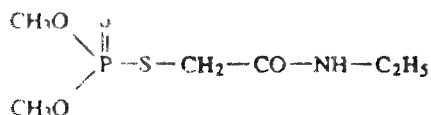
T+	N	
		R : 24-28-50/53
		S : (1/2-)28-36/37-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 116-01-8

EEC No 204-121-1

No 015-089-00-1



ES: etoato-metil (ISO); ditiofosfato de etilcarbamoilmetilo y de O,O-dimetilo

DA: ethoat-methyl (ISO); ethylcarbamoilmethyl-O,O-dimethyldithiophosphat

DE: ethoat-methyl (ISO); Ethylcarbamoilmethyl-O,O-dimethyldithiophosphat

EL: ethoate-methyl (ISO); διθειοφωσφορικός αιθυλοκαρβαμυλομεθυλ-O,O-διμεθυλεστέρας

EN: ethoate-methyl (ISO); ethylcarbamoilmethyl O,O-dimethyl phosphorodithioate

FR: éthoate-méthyle (ISO); dithiophosphate d'éthylcarbamoilméthyle et de O,O-diméthyle

IT: etoato-metil (ISO); ditiofosfato di etilcarbamoilmetile e O,O-dimetile


NL: ethoatmethyl (ISO); ethylcarbamoilmethyl-O,O-dimethyldithiofosfaat

PT: etoato-metilo (ISO); ditiofosfato de etilcarbamoilmetilo e O,O-dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

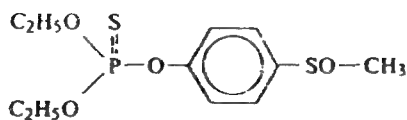
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> Xn   </div> <div> R : 21/22  S : (2-)36/37 </div> </div>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 115-90-2

EEC No 204-114-3

No 015-090-00-7



ES : fensulfotion (ISO) ; τιοσφάτο de O,O-dietilo y de O-4-metilsulfinilfenilo

DA : fensulfothion (ISO) ; O,O-diethyl-O-4-methylsulfinylphenylthiophosphat

DE : fensulfothion (ISO) ; O,O-Diethyl-O-4-methylsulfinylphenylthiophosphat

EL : fensulfothion ; θειοφωσφορικός O,O-διαιδυλ-O-4-μεθυλοσουλφινυλοφαινυλεστέρας

EN : fensulfothion (ISO) ; O,O-diethyl O-4-methylsulfinylphenyl phosphorothioate

FR : fensulfothion (ISO) ; thiophosphate de O,O-diéthyle et de O-4-méthylsulfinylphényle

IT : fensulfothion (ISO) ; tiofosfato di O,O-dietile e O-4-metilsulfinifenile

NL : fensulfothion (ISO) ; O,O-diethyl-O-4-methylsulfinylphenylthiofosfaat



PT : fensulfotion (ISO) ; τιοσφάτο de O,O-dietilo e O-4-metilsulfinilfenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 27/28

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Eticbettatura, Kenmerken, Rotulagem

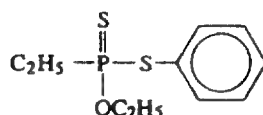
T+	N	
		R : 27/28-50/53
		S : (1/2-)23-28-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 944-22-9

EEC No 213-408-0

No 015-091-00-2



- ES: fonofos (ISO); etilditiofosfonato de O-etilo y de fenilo  
 DA: fonofos (ISO); O-ethylphenylethylthiophosphonat  
 DE: fonofos (ISO); O-Ethylphenylethylthiophosphonat  
 EL: fonofos (ISO); αιθυλοδιθειοφωσφορώδης Ο-αιθυλο-φαινυλεστέρας  
 EN: fonofos (ISO); O-ethyl phenyl ethylphosphonodithioate  
 FR: fonofos (ISO); éthylthiophosphonate de O-éthyle et de phényle  
 IT: fonofos (ISO); etilditiofosfonato di O-etile e fenile  
 NL: fonofos (ISO); O-ethylphenylethylthiophosfaat  
 PT: fonofos (ISO); etilditiofosfonato de O-etilo e fenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 27/28

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	N	
		R : 27/28-50/53
		S : (1/2-)28-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 4104-14-7

EEC No 223-874-7

No 015-092-00-8

- ES: fosacetima (ISO); N-acetimidoditiofosforamidato de O,O-bis(4-clorofenilo)
- DA: phosacetim (ISO); O,O-bis(4-chlorphenyl)-N-acetimidoylthiophosphoramidat
- DE: phosacetum (ISO); O,O-Bis(4-chlorphenyl)-N-acetimidoylthiophosphoramidat
- EL: phosacetum (ISO); Ν-ακετιμιδοϋλοθειοφωσφοραμιδικός Ο,Ο-δις(4-χλωροφαινυλ)εστέρας
- EN: phosacetim (ISO); O,O-bis(4-chlorophenyl) N-acetimidoylphosphoramidothioate
- FR: phosacétime (ISO); N-acétimidoylthiophosphoramidate de O,O-bis(4-chlorophényle)
- IT: fosacetima (ISO); N-acetimidoditiofosforammidato di O,O-bis(4-clorofenile)
- NL: fosacetim (ISO); O,O-bis(4-chloorfenyl)-N-acetimidoylthiofosforamidaat
- PT: foscetima (ISO); N-acetimidoditiofosforamidado de O,O-bis(4-clorofenilo)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 27/28	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

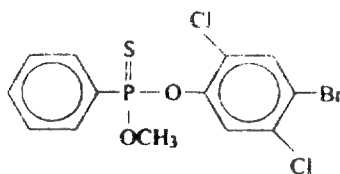
T+	N	
		
		R : 27/28-50/53
		S : (1/2-)28-36/37-45-60-61

*Limites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 21609-90-5

EEC No 244-472-8

No 015-093-00-3



- ES : leptofos (ISO) ; feniltiofosfonato de O-4-bromo-2,5-diclorofenilo y de O-metilo  
 DA : leptophos (ISO) ; O-4-brom-2,5-dichlorphenyl-O-methylphenylthiophosphonat  
 DE : leptophos (ISO) ; O-4-Brom-2,5-dichlorphenyl-O-methylphenylthiophosphonat  
 EL : leptophos (ISO) ; φαινυλοθειοφωσφορικός O-4-δρώμο-2,5-διχλωροφαινυλ-Ο-μεθυλεστέρας  
 EN : leptophos (ISO) ; O-4-bromo-2,5-dichlorophenyl O-methyl phenylphosphorothioate  
 FR : leptophos (ISO) ; phénylthiophosphonate de O-4-bromo-2,5-dichlorophényle et de O-méthyle  
 IT : leptofos (ISO) ; feniltiofosfato di O-4-bromo-2,5-diclorofenile e O-metile  
 NL : leptofos (ISO) ; O-4-broom-2,5-dichloorfenyl-O-methylfenylthiofosfonaat  
 PT : leptofos (ISO) ; feniltiofosfonato de O-4-bromo-2,5-diclorofenilo e O-metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação*

T ; R 25-39/25	Xn ; R 21	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

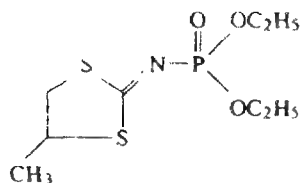
T	N	
		R : 21-25-39/25-50/53
		S : (1/2-)25-36/37/39-45-60-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 950-10-7

EEC No 213-447-3

No 015-094-00-9



- ES : mefosfolan (ISO) ; 4-metil-1,3-ditiolan-2-ilidenfosforamidato de dietilo  
 DA : mephosfolan (ISO) ; diethyl-4-methyl-1,3-dithiolan-2-ylidenphosphoramidat  
 DE : mephosfolan (ISO) ; Diethyl-4-methyl-1,3-dithiolan-2-ylidenphosphoramidat  
 EL : mephosfolan (ISO) ; 4-μεθυλο-1,3-διθειολαν-2-υλιδενοφωσφοραμιδικός διαιθυλεστέρας  
 EN : mephosfolan (ISO) ; diethyl 4-methyl-1,3-dithiolan-2-ylidenephosphoramidate  
 FR : mephosfolan (ISO) ; N-(4-méthyl-1,3-dithiolanne-2-ylidène)phosphoramidate de diéthyle  
 IT : mefosfolan (ISO) ; 4-metil-1,3-ditiolan-2-ilidenfosforammidato di dietile  
 NL : mefosfolan (ISO) ; diethyl-4-methyl-1,3-dithiolaan-2-ylideenfosforamidaat  
 PT : mefosfolan (ISO) ; 4-metil-1,3-ditiolano-2-ilidenofosforamidato de dietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T+ ; R 27/28

N ; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquétage, Etichettatura, Kenmerken, Rotulagem*

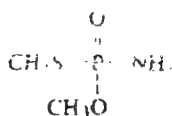
T+	N	
		R : 27/28-51/53
		S : (1/2-)36/37/39-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 10265-92-6

EEC No 233-606-0

No 015-095-00-4



- ES : metamidofos (ISO) ; tiofosforamidato de O,S-dimetilo  
 DA : methamidophos (ISO) ; O,S-dimethylthiophosphoramidat  
 DE : methamidophos (ISO) ; O,S-Dimethylamidothiophosphat  
 EL : methamidophos (ISO) ; θειοφωσφοραμιδικό O,S-διμεθύλιο  
 EN : methamidophos (ISO) ; O,S-dimethyl phosphoramidothioate  
 FR : methamidophos (ISO) ; thiophosphoramidate de O,S-diméthyle  
 IT : metamidofos (ISO) ; tiofosforammidato di O,S-dimetile  
 NL : methamidofos (ISO) ; O,S-dimethylthiofosforamidaat  
 PT : metamidofos (ISO) ; tiofosforamidato de O,S-dimetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

T+ ; R 28	T ; R 24	Xi ; R 36	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	N	
		R : 24-28-36-50
		S : (1/2-)22-28-36/37-45-61

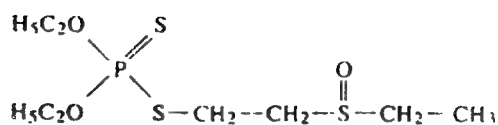
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 2497-07-6

EEC No 219-679-1

No 015-096-00-X



ES: oxidisulfoton; ditiolfosfato de O,O-dietilo y de S-(2-etilsulfinil)etilo

DA: oxydisulfoton; O,O-diethyl-S-2-ethylsulfinyl-ethyl-dithiophosphat

DE: Oxydisulfoton; O,O-Diethyl-S-2-ethylsulfinyl-ethyl-dithiophosphat

EL: oxydisulfoton; διθειοφωσφορικός O,O-διαιθυλο-S-(2-αιθυλοσουλφινυλο)-αιθυλεστέρας

EN: oxydisulfoton; O O-diethyl S-[2-(ethylsulphinyl)ethyl] phosphorodithioate

FR: oxydisulfoton; dithiophosphate de O,O-diéthyle et de S-(2-éthylsulfinyléthyle)

IT: ossidissulfoton; ditiolfosfato di O,O-dietile e di S-2-(etilsulfinil)-etile

NL: oxydisulfoton; O,O-diethyl-S-[2-(ethylsulfinyl)-ethyl]dithiofosfaat

PT: oxidissulfotão; ditiolfosfato de O,O-dietilo e de S-(2-etilsulfiniletilo)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

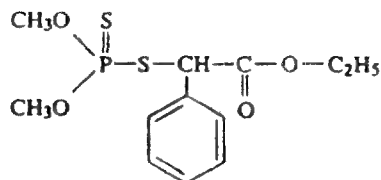
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2597-03-7

EEC No 219-997-0

No 015-097-00-5



- ES: fentoato (ISO); 2-(dimetoxifosfinotioiltio)-2-fenilacetato de etilo  
 DA: phenthoat (ISO); ethyl-2-(dimethoxythiophosphinoylthio)-2-phenylacetat  
 DE: Phenthoat (ISO); Ethyl-2-(dimethoxythiophosphinoylthio)-2-phenylacetat  
 EL: phenthoate (ISO); 2-(διμεθοξυφωσφινοθειοϋλοθειο)-2-φαινυλοξικός αιθυλεστέρας  
 EN: phenthoate (ISO); ethyl 2-(dimethoxyphosphinothioylthio)-2-phenylacetate  
 FR: phenthoate (ISO); 2-(diméthoxyphosphinothioylthio)-2-phénylacétate d'éthyle  
 IT: fentoato (ISO); 2-(dimetossifosfinotioiltio)-2-fenilacetato di etile  
 NL: feenthoaat (ISO); ethyl-2-(dimethoxyfosfinothioylthio)-2-fenylacetaat  
 PT: fentoato (ISO); 2-(dimetoxifosfonotioiltio)-2-fenilacetato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

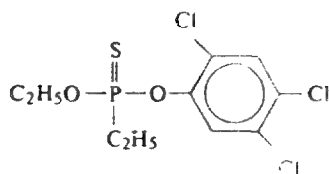
Xn	
	R : 21/22
	S : (2-)22-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 327-98-0

EEC No 206-326-1

No 015-098-00-0



ES : tricloronato (ISO) ; etiltiofosfonato de O-etilo y de O-(2,4,5-triclorofenilo)

DA : trichloronat (ISO) ; O-ethyl-O-2,4,5-trichlorophenylethylthiophosphonat

DE : trichloronat (ISO) ; O-Ethyl-O-2,4,5-trichlorophenylethylthiophosphonat

EL : trichloronate (ISO) ; αιθυλοθειοφωσφορώδης Ο-2,4,5-τριχλωροφαινυλ-Ο-αιθυλεστερας

EN : trichloronate (ISO) ; O-ethyl O-2,4,5-trichlorophenyl ethylphosphonothioate

FR : trichloronate (ISO) ; éthylthiophosphonate de O-éthyle et de O-(2,4,5-trichlorophényle)

IT : tricloronato (ISO) ; etiltiofosfonato di O-etile e O-2,4,5-triclorofenile

NL : trichloronaat (ISO) ; O-ethyl-O-2,4,5-trichloorfenylethylthiofosfonaat

PT : tricloronat (ISO) ; etiltiofosfonato de O-etilo e O-2,4,5-triclorofenilo


Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T+ ; R 28

T ; R 24

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

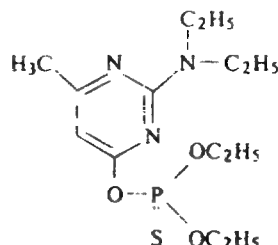
T+	N	
		R : 24-28-50/53
		S : (1/2-)23-28-36/37-45-60-61

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 23505-41-1

EEC No 245-704-0

No 015-099-00-6



- ES : pirimifos-etilo (ISO) ; tiofosfato de O,O-dietilo y O,2-dietilamino-6-metilpirimidin-4-ilo  
 DA : pirimiphos-ethyl (ISO) ; O,O-diethyl-O-2-diethylamino-6-methylpyrimidin-4-ylthiophosphat  
 DE : pirimiphos-ethyl (ISO) ; O,O-Diethyl-O-2-diethylamino-6-methylpyrimidin-4-ylthiophosphat  
 EL : pirimiphos-ethyl (ISO) ; θειοφωσφορικό O-2-δαιθυλαμινο-6-μεθυλοκυριμιδιν-4-ύλιο και O,O-δαιθυλίιο  
 EN : pirimiphos-ethyl (ISO) ; O,O-diethyl O-2-diethylamino-6-methylpyrimidin-4-yl phosphorothioate  
 FR : pyrimiphos-éthyl (ISO) ; thiophosphate de O-2-diéthylamino-6-méthylpyrimidine-4-yle et de O,O-diéthyle  
 IT : pirimifos-etile (ISO) ; tiofosfato di O-2-dietilammino-6-metilpirimidin-4-ile e O,O-dietile  
 NL : pirimifos-ethyl (ISO) ; O,O-diethyl-O-2-diethylamino-6-methylpyrimidin-4-ylthiofosfaat  
 PT : pirimifos-etil (ISO) ; tiofosfato de O,O-dietilo e O-2-dietilamino-6-metilpirimidina-4-ilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

T ; R 25	Xn ; R 21	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

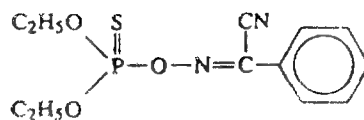
T	N	
		R : 21-25-50/53
		S : (1/2)-23-36/37-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 14816-18-3

EEC No 238-887-3

No 015-100-00-X



- ES : foxim (ISO)(DCI) ; alfa-(dietoxifosfinotioilimino)fenilacetoni-trilo  
 DA : phoxim (ISO) ; alpha-(diethoxyphosphinothioylimino) phenylacetoni-tril  
 DE : Phoxim (ISO) ; alpha-(Diethoxyphosphinothioylimino) phenylacetoni-tril  
 EL : phoxim (ISO) ; αφα-(διαιθοξυφωσφινοθειουλιμινο)φαινυλακετονιτρίλιο  
 EN : phoxim (ISO) ; alpha-(diethoxyphosphinothioylimino) phenylacetoni-trile  
 FR : phoxime (ISO) ; alpha-(diéthoxyphosphinothioylimino)phénylacéto-nitrile  
 IT : foxima (ISO) ; alpha-(dietossifosfinotioilimmino) fenilacetoni-trile  
 NL : foxim (ISO) ; alpha-(diethoxyfosfinothioylimino)fenylacetoni-tril  
 PT : foxime (ISO)(DCI) ; alfa-(dietoxifosfinotioilimino) fenilacetoni-trilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

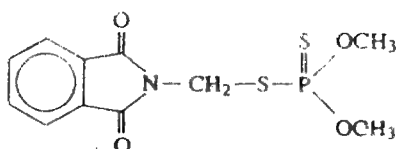
Xn	
	R : 22
	S : (2-)36

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 732-11-6

EEC No 211-987-4

No 015-101-00-5



- ES: fosmet (ISO); ditiofosfato de ftalimidometilo y de O,O-dimetilo  
 DA: phosmet (ISO); O,O-dimethylphthalimidomethyldithiophosphat  
 DE: Phosmet (ISO); O,O-Dimethylphthalimidomethyldithiophosphat  
 EL: phosmet (ISO); διθειωφωσφορικός O,O-διμεθυλ-φθαλιμιδομεθυλεστέρας  
 EN: phosmet (ISO); O,O-dimethyl phthalimidomethyl S-phosphorodithioate  
 FR: phosmet (ISO); dithiophosphate de O,O-diméthyle et de S-phthalimidométhyle  
 IT: fosmet (ISO); ditiofosfato di O,O-dimetile e ftalimidometile  
 NL: fosmet (ISO); O,O-dimethylftaalimidomethyldithiofosfaat  
 PT: fosmete (ISO); fosforoditioato de O,O-dimetilo e de ftalimidometilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

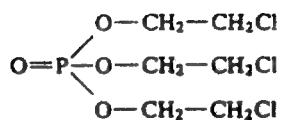
Xn	
	R : 21/22
	S : (2-)22-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 115-96-8

EEC No 204-118-5

No 015-102-00-0



ES: fosfato de tris(2-cloroetilo)

DA: tri-(2-chlorethyl)-phosphat

DE: Tris(2-chlorethyl)-phosphat

EL: φωσφορικός τρι-(2-χλωροαιθυλ)-εστέρας

EN: tris(2-chloroethyl) phosphate

FR: phosphate de tris (2-chloroéthyle)

IT: tris(2-cloroetil) fosfato

NL: tris(2-chloorethyl) fosfaat

PT: fosfato de tris(2-cloroetilo)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22-36/38 S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xn; R 22-36/38

Cas No 7789-60-8

EEC No 232-178-2

No 015-103-00-6

PBr<sub>3</sub>

ES: tribromuro de fósforo

DA: phosphortribromid

DE: Phosphortribromid

EL: τριβρωμιούχος φωσφόρος

EN: phosphorus tribromide

FR: tribromure de phosphore

IT: fosforo tribromuro

NL: fosfortribromide

PT: tribrometo de fósforo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classificatie, Classificatien, Classificazione, Indeling, Classificação

R 14

C; R 34

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 14-34-37

S : (1/2)-16-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrație




Cas No 1314-80-3

EEC No 215-242-4

No 015-104-00-1



ES: pentasulfuro de difósforo

DA: phosphorpentasulfid

DE: Diphosphorpentasulfid; Phosphorpentasulfid

EL: πενταθειούχος φωσφόρος

EN: phosphorus pentasulphide

FR: pentasulfure de diphosphore; pentasulfure de phosphore

IT: fosforo pentasolfuro

NL: fosforpentasulfide

PT: pentassulfureto de difósforo



Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

R 29

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

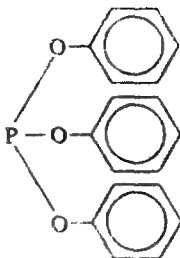
F	Xn	
		R : 11-20/22-29
		S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 101-02-0

EEC No 202-908-4

No 015-105-00-7



ES: fosfito de trifenilo

DA: triphenylphosphit

DE: Triphenylphosphit

EL: φωσφορώδης τριφαινυλεστέρας

EN: triphenyl phosphite

FR: phosphite de triphényle

IT: trifenil fosfito

NL: trifenyfosfiet

PT: fosfito de trifenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/38

S : (2-)28

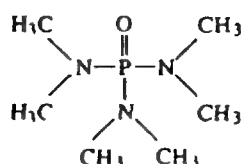
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ S %	Xi; R 36/38

Cas No 680-31-9

EEC No 211-653-8

No 015-106-00-2



ES: hexametiltriāmida fosfórica

DA: hexamethylphosphortriamid

DE: Hexamethylphosphorsäuretriamid

EL: εξαμεθυλοφωσφορικό τριαμίδιο

EN: hexamethylphosphoric triamide; hexamethylphosphoramide

FR: triamide hexaméthylphosphorique; hexaméthylphosphoramide

IT: esamettilfosforo triamide

NL: hexamethylfosforzuurtriamide; hexamethylfosforamide

PT: triāmida hexamettilfosfórica

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45 Muta. Cat. 2; R 46

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

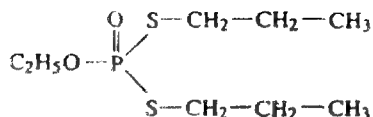
<p>T</p> 	<p>R : 45-46</p> <p>S : 53-45</p>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 13194-48-4

EEC No 236-152-1

No 015-107-00-8



- ES: etoprofos (ISO); ditiofosfato de etilo y de S,S-dipropilo  
 DA: ethoprophos (ISO); ethyl-S,S-dipropyldithiophosphat  
 DE: ethoprophos (ISO); Ethyl-S,S-dipropyldithiophosphat  
 EL: ethoprophos (ISO); διθειόφωσφορικός αιθυλ-S,S-διπροκυλεστέρας  
 EN: ethoprophos (ISO); ethyl S,S-dipropyl phosphorodithioate  
 FR: ethoprophos (ISO); dithiophosphate d'éthyle et de S,S-dipropyle  
 IT: etoprofos (ISO); ditiofosfato di etile e S,S-dipropile  
 NL: ethoprofos (ISO); ethyl-S,S-dipropyldithiofosfaat  
 PT: etoprofos (ISO); ditiofosfato de etilo e S,S-dipropilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

T+; R 27

T; R 25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

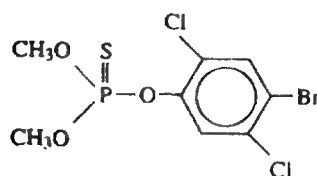
T+	
	R: 25-27 S: (1/2-)36/37/39-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 2104-96-3

EEC No 218-277-3

No 015-108-00-3



ES: bromofos (ISO); tiofosfato de O-4-bromo-2,5-diclorofenilo y de O,O-dimetilo

DA: bromophos (ISO); O-4-brom-2,5-dichlorphenyl-O,O-dimethylthiophosphat

DE: bromophos (ISO); O-4-Brom-2,5-dichlorphenyl-O,O-dimethylthiophosphat

EL: bromophos (ISO); θειοφωσφορικός O-4-βρωμο-2,5-διχλωροφαινυλ-O,O-διμεθυλεστέρας

EN: bromophos (ISO); O-4-bromo-2,5-dichlorophenyl O,O-dimethyl phosphorothioate

FR: bromophos (ISO); thiophosphate de O-4-bromo-2,5-dichlorophényle et de O,O-diméthyle

IT: bromofos (ISO); tiofosfato di O-4-bromo-2,5-diclorofenile e O,O-dimetile

NL: bromofos (ISO); O-4-broom-2,5-dichloorfenyl-O,O-dimethylthiofosfaat

PT: bromofos (ISO); tiofosfato de O-4-bromo-2,5-diclorofenilo e O,O-dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

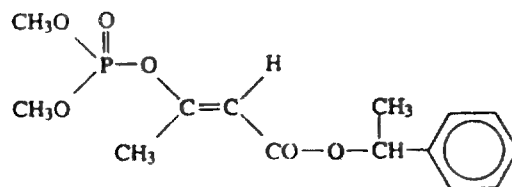
Xn	
	R : 22
	S : (2-)36

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7700-17-6

EEC No 231-720-5

No 015-109-00-9




- ES: crotoxfos (ISO); 3-(dimetoxifosfiniloxi) isocrotonato de 1-feniletilo  
 DA: crotoxyphos (ISO); 1-phenylethyl-3-(dimethoxyphosphinyloxy) isocrotonat  
 DE: crotoxyphos (ISO); 1-Phenylethyl-3-(dimethoxyphosphinyloxy) isocrotonat  
 EL: crotoxyphos (ISO); 3-(διμεθοξυφωσφινυλοξυ)ισοκροτωνικός 1-φαινυλαιθυλεστέρας  
 EN: crotoxyphos (ISO); 1-phenylethyl 3-(dimethoxyphosphinyloxy) isocrotonate  
 FR: crotoxyphos (ISO); 3-(diméthoxyphosphinyloxy) isocrotonate de 1-phényléthyle  
 IT: crotoxfas (ISO); 3-(dimetossifosfinilossi) isocrotonato di 1-feniletile  
 NL: crotoxyfos (ISO); 1-fenylethyl-3-(dimethoxyfosfinyloxy) isocrotonaat  
 PT: crotoxfos (ISO); 3-(dimetoxifosfiniloxi) isocrotonato de 1-feniloetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

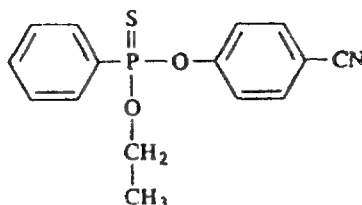
T	
	R : 24/25 S : (1/2-)28-36/37-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 13067-93-1

EEC No —

No 015-110-00-4



- ES: cianofenfos (ISO); feniltiofosfonato de O-4-cianofenilo y de O-etilo  
 DA: cyanofenphos (ISO); O-4-cyanophenyl-O-ethylphenylthiophosphonat  
 DE: Cyanofenphos (ISO); O-4-Cyanophenyl-O-ethylphenylthiophosphonat  
 EL: cianofenfos (ISO); φαινυλοθειοφωσφορώδης O-4-κυανοφαινυλ-O-αιθυλεστέρας  
 EN: cyanofenphos (ISO); O-4-cyanophenyl O-ethyl phenylphosphonothioate  
 FR: cyanofenphos (ISO); phénylthiophosphonate de O-4-cyanophényle et de O-éthyle  
 IT: cianofenfos (ISO); feniltiofosfonato di O-4-cianofenile e O-etile  
 NL: cyanofenfos (ISO); O-4-cyaanfenyl-O-ethylfenylthiofosfonaat  
 PT: cianofenfos (ISO); feniltiofosfonato de O-4-cianofenilo e de O-etilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T; R 25-39/25

Xn; R 21

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

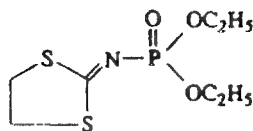
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 21-25-36-39/25</p> <p>S : (1/2)-36/37-45</p> </div> </div>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No 947-02-4

EEC No 213-423-2

No 015-111-00-X



- ES: fosfolan (ISO); 1,3-ditiolan-2-ilidenfosforamidato de dietilo  
 DA: phosfolan (ISO); diethyl-1,3-dithiolan-2-ylidenphosphoramidat  
 DE: Phosfolan (ISO); Diethyl-1,3-dithiolan-2-ylidenphosphoramidat  
 EL: phosfolan (ISO); 1,3-διθειολανο-2-υλιδενοφωσφοραμιδικός διαιθυλεστέρας  
 EN: phosfolan (ISO); diethyl 1,3-dithiolan-2-ylidenephosphoramidate  
 FR: phospholan (ISO); 1,3-dithiolanne-2-ylidènéphosphoramidate de diéthyle  
 IT: fosfolan (ISO); 1,3-ditiolan-2-ilidenfosforamidato di dietile  
 NL: fosfolan (ISO); diethyl-1,3-dithiolaan-2-ylideenfosforamidaat  
 PT: fosfolão (ISO); 1,3-ditiolano-2-ilidenfosforamidato de dietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	
	R : 27/28
	S : (1/2-)28-36/37-45

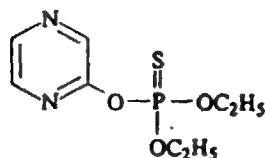
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 297-97-2

EEC No 206-049-6

No 015-112-00-5



ES: tiofosfato de O,O-dietilo y de O-pirazin-2-ilo; tionazina

DA: O,O-diethyl-O-pyrazin-2-ylthiophosphat; thionazin

DE: O,O-Diethyl-O-pyrazin-2-ylthiophosphat; Thionazin

EL: thionazin · θειωφωσφορικός O,O-διαιθυλ-O-πυραζιν-2-υλεστέρας

EN: O,O-diethyl O-pyrazin-2-yl phosphorothioate; thionazin

FR: thiophosphate de O,O-diéthyle et de O-pyrazin-2-yle; thionazine

IT: tiofosfato di O,O-dietile e O-pirazin-2-ile; tionazina

NL: O,O-diethyl-O-pyrazine-2-ylthiofosfaat; thionazine


PT: fosforotioato de O,O-dietilo e de O-(pirazina-2-ilo); tionazina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T+ ; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 27/28

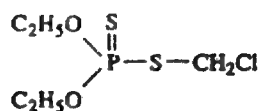
S : (1/2-)36/37/39-38-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 24934-91-6

EEC No 246-538-1

No 015-114-00-6



- ES: clormefos (ISO); ditiofosfato de S-clorometilo y de O,O-dietilo  
 DA: chlormephos (ISO); S-chlormethyl-O,O-diethyldithiophosphat  
 DE: Chlormephos (ISO); S-Chlormethyl-O,O-diethyldithiophosphat  
 EL: chlormephos (ISO) · διθειοφωσφορικός S-χλωρομεθυλ-O,O-διαιθυλεστέρας  
 EN: chlormephos (ISO); S-chloromethyl O,O-diethyl phosphorodithioate  
 FR: chlorméphos (ISO); dithiophosphate de S-chlorométhyle et de O,O-diéthyle  
 IT: clormefos (ISO); ditiofosfato di S-clorometile e O,O-dietile  
 NL: chloormefos (ISO); S-chloormethyl-O,O-diethyldithiofosfaat  
 PT: clormefos (ISO); ditiofosfato de S-clorometilo e de O,O-dietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

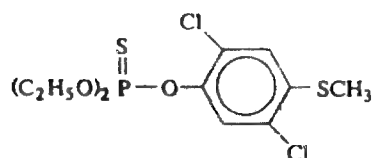
<p>T+</p> 	<p>R : 27/28</p> <p>S : (1/2-)28-36/37-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 21923-23-9

EEC No 244-663-6

No 015-115-00-1



ES: clortiofos (ISO)

DA: chlorthiophos (ISO)

DE: Chlorthiophos (ISO)

EL: chlorthiophos (ISO) θειοφωσφορικός Ο-4-μεθυλοθειο-2,5-διχλωροφαινυλ-Ο,Ο-διαιθυλεστέρας

EN: chlorthiophos (ISO)

FR: chlorthiophos (ISO)

IT: clortiofos (ISO)

NL: chloorthiophos (ISO)

PT: clortiofos (ISO)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 24-28

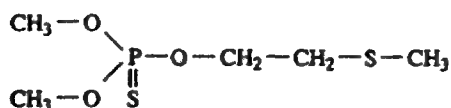
S : (1/2-)28-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 682-80-4

EEC No 211-666-9

No 015-116-00-7



- ES: demefion-O (ISO); tiofosfato de O,O-dimetilo y de O-2-metiltioetilo  
 DA: demephion-O (ISO); O,O-dimethyl-O-2-methylthioethylthiophosphat  
 DE: Demephion-O (ISO); O,O-Dimethyl-O-2-methylthioethylthiophosphat  
 EL: demephion-O (ISO); θειοφωσφορικός O,O-διμεθυλ-O-2-(μεθυλοθειο)αιθυλεστέρας  
 EN: demephion-O (ISO); O,O-dimethyl O-2-methylthioethyl phosphorothioate  
 FR: déméphion-O (ISO); thiophosphate de O,O-diméthyle et de O-2-méthylthioéthyle  
 IT: demefion-O (ISO); tiofosfato di O,O-dimetile e O-2-metiltioetile  
 NL: demefion-O (ISO); O,O-dimethyl-O-2-methylthioethylthiofosfaat  
 PT: demefion-O (ISO); tiofosfato de O,O-dimetilo e de O-2-metiltioetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

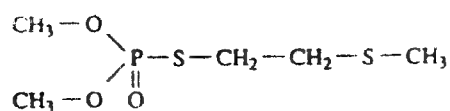
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 2587-90-8

EEC No 219-971-9

No 015-117-00-2



ES: demefion-S (ISO); tiofosfato de O,O-dimetilo y de S-2-metiltioetilo

DA: demephion-S (ISO); dimethyl-S-2-methylthioethylthiophosphat

DE: Demephion-S (ISO); Dimethyl-S-2-methylthioethylthiophosphat

EL: demephion-S (ISO); θειωφωσφορικός διμεθυλ-S-2-(μεθυλοθειο)αιθυλεστέρας

EN: demephion-S (ISO); O,O-dimethyl S-2-methylthioethyl phosphorothioate

FR: déméphion-S (ISO); thiophosphate de O,O-diméthyle et de S-2-méthylthioéthyle

IT: demefion-S (ISO); tiofosfato di dimetile e S-2-metiltioetile

NL: demefion-S (ISO); dimethyl-S-2-methylthioethylthiofosfaat

PT: demefion-S (ISO); tiofosfato de dimetilo e de S-2-metiltioetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 28

T ; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

T+



R 24-28

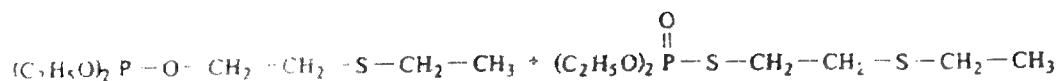
S : (1/2-)28-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 8065-48-3

EEC No —

No 015-118-00-8



ES: demeton

DA: demeton

DE: Demeton

EL: demeton θειοφωσφορικός O-2 (αιθυλοθειο)αιθυλ-O,O-δισυλκεστέρας και θειοφωσφορικός S-2-(αιθυλοθειο)αιθυλ-O,O-δισυλκεστέρας

EN: demeton

FR: déméton

IT: demeton



NL: demeton

PT: demeton

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T+ ; R 27/28 N ; R 50

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

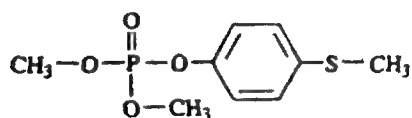
T+	N	
		R : 27/28-50
		S : (1/2)-28-36/37-45-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 3254-63-5

EEC No —

No 015-119-00-3



ES: fosfato de dimetilo y de 4-(metiltio)fenilo

DA: dimethyl-4-(methylthio)phenylphosphat

DE: Dimethyl-4-(methylthio)phenylphosphat

EL: φωσφορικός διμεθυλο-4-(μεθυλοθειο)φαινυλεστέρας

EN: dimethyl 4-(methylthio)phenyl phosphate

FR: phosphate de diméthyle et de 4-(méthylthio)phényle

IT: fosfato di dimetile e 4-(metiltio)fenile


NL: dimethyl-4-(methylthio)fenylfosfaat

PT: fosfato de dimetilo e de 4-(metiltio)fenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

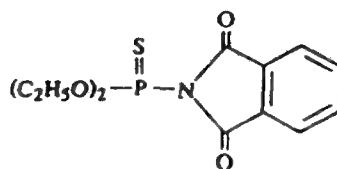
T+	
	R : 27/28
	S : (1/2-)28-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 5131-24-8

EEC No 225-875-8

No 015-120-00-9



ES: ftalimidotiofosfonato de O,O-dietilo

DA: O,O-diethylphthalimidothiophosphonat

DE: O,O-Diethylphthalimidothiophosphonat

EL: ditalimfos · φθαλμιδοθειοφωσφορώδης O,O-διαιθυλεστέρας

EN: O,O-diethyl phthalimidophosphonothioate; ditalimfos

FR: phthalimidothiophosphonate de O,O-diéthyle; ditalimfos

IT: ftalimidotiofosfonato di O,O-dietile

NL: O,O-diethylftaalimidothiophosfonaat

PT: ftalimidofosfonotioato de O,O-dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 38 R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 38-43
	S : (2-)36/37

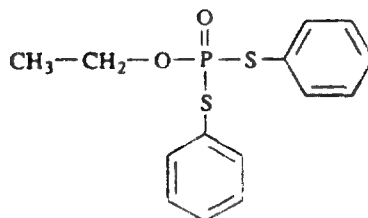
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 17109-49-8

EEC No 241-178-1

No 015-121-00-4



- ES: edifenfos (ISO); ditiofosfato de O-etilo y de S,S-difenilo  
 DA: edifenphos (ISO); ethyl-S,S-diphenyldithiophosphat  
 DE: Edifenphos (ISO); Ethyl-S,S-diphenyldithiophosphat  
 EL: edifenphos (ISO); διθειοφωσφορικός αιθυλο-S,S-διφαινυλεστέρας  
 EN: edifenphos (ISO); O-ethyl S,S-diphenyl phosphorodithioate  
 FR: edifenphos (ISO); dithiophosphate de O-éthyle et de S,S-diphényle  
 IT: edifenfos (ISO); ditiofosfato di etile e S,S-difenile  
 NL: edidenfos (ISO); ethyl-S,S-difenyldithiofosfaat  
 PT: edifenfos (ISO); ditiofosfato de etilo e de S,S-difenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

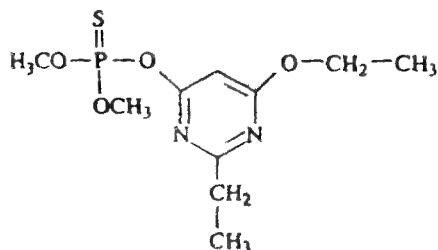
T	
	R : 23/24/25
	S : (1/2-)28-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 38260-54-7

EEC No 253-855-9

No 015-122-00-X



ES: tiofosfato de O-6-etoxi-2-etilpirimidin-4-ilo y de O,O-dimetilo; etrimfos

DA: O-6-ethoxy-2-ethylpyrimidin-4-yl-O,O-dimethylthiophosphat; etrimfos

DE: O-6-Ethoxy-2-ethylpyrimidin-4-yl-O,O-dimethylthiophosphat; Etrimfos

EL: etrimfos · θειοφωσφορικός O-6-αιθοξύ-2-αιθυλοπυριμιδιν-4-υλ-O,O-διμεθυλεστέρας

EN: O-6-ethoxy-2-ethylpyrimidin-4-yl O,O-dimethylphosphorothioate; etrimfos

FR: thiophosphate de O-6-éthoxy-2-éthylpyrimidine-4-yle et de O,O-diméthyle; étrimfos

IT: tiofosfato di O-6-etossi-2-etilpirimidin-4-ile e di O,O-dimetile; etrimfos

NL: O-6-ethoxy-2-ethylpyrimidine-4-yl-O,O-dimethylthiofosfaat; etrimfos

PT: tiofosfato de O,O-dimetilo e de O,6-etoxi-2-etilpirimidin-4-ilo; etrimfos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

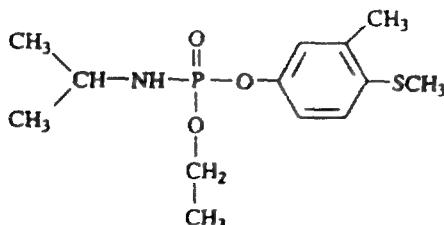
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 22224-92-6

EEC No 244-848-1

No 015-123-00-5



ES: fenamifos (ISO); N-isopropilfosforamidato de etilo y de 4-metiltio-m-tolilo

DA: fenamiphos (ISO); ethyl-4-methylthio-m-tolyl-N-isopropylphosphoramidat

DE: Fenamiphos (ISO); Ethyl-4-methylthio-m-tolyl-N-isopropylphosphoramidat

EL: fenamiphos (ISO); N-ισοπροπυλοφωσφοραμιδικός αιθυλο-4-μεθυλοθειο-μ-τολουολεστέρας

EN: fenamiphos (ISO); ethyl-4-methylthio-m-tolyl isopropyl phosphoramidate

FR: phénamiphos (ISO); N-isopropylphosphoramidate d'éthyle et de 4-méthylthio-m-tolyle

IT: fenamifos (ISO); N-isopropilfosforamidato di etile e 4-metiltio-m-tolile

NL: fenamifos (ISO); ethyl-4-methylthio-m-tolyl-N-isopropylfosforamidaat

PT: fenamifos (ISO); N-isopropilfosforamidato de etilo e de 4-metiltio-m-tolilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 28

T; R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 24-28

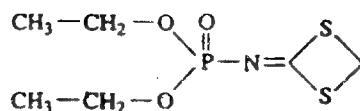
S : (1/2-)23-28-36/37-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 21548-32-3

EEC No 244-437-7

No 015-124-00-0



ES: 1,3-ditieta-2-ilidenofosforamidato; fostietan

DA: diethyl-1,3-dithietan-2-ylidenphosphoramidat; fosthietan

DE: Diethyl-1,3-dithietan-2-ylidenphosphoramidat; Posthietan

EL: fosthietan · 1,3-διθειεταν-2-υλιδενοφωσφοραμιδικός διαιθυλεστέρας

EN: diethyl 1,3-dithietan-2-ylidenephosphoramidate; fosthietan

FR: 1,3-dithiétane-2-ylidenephosphoramidate de diéthyle; fosthiétan

IT: 1,3-ditieta-2-ilidenefosforamidato; fostietan

NL: diethyl-1,3-dithietaan-2-ylideenfosforamidaat; fosthietan

PT: 1,3-ditietano-2-ilidenofosforamidado; fostietão

Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

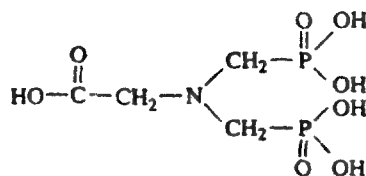
T+	
	R : 27/28
	S : (1/2-)36/37-45

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2439-99-8

EEC No 219-468-4

No 015-125-00-6




- ES: glifosina (ISO); N,N-bis(fosfonometil)glicina  
 DA: glyphosin (ISO); N,N-bis(phosphonomethyl)glycin  
 DE: Glyphosin (ISO); N,N-Bis(phosphonomethyl)glycin  
 EL: glyphosine (ISO); N,N-δισ(φωσφορωδομεθυλο)γλυκίνη  
 EN: glyphosine (ISO); N,N-bis(phosphonomethyl)glycine  
 FR: glyphosine (ISO); N,N-bis(phosphonométhyl)glycine  
 IT: glifosina (ISO); N,N-bis(fosfonometil)glicina  
 NL: glyfosine(ISO); N,N-bis(fosfonomethyl)glycine  
 PT: glifosina (ISO); N,N-bis(fosfonometil)glicina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

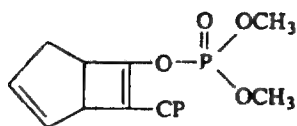
Xi  	R : 41  S : (2-)26
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo*


Cas No 23560-59-0

EEC No 245-737-0

No 015-126-00-1



ES: heptenofos (ISO); fosfato de 7-clorobiciclo(3.2.0)hepta-2,6-dien-6-ilo y de dimetilo

DA: heptenophos (ISO); 7-chlorobicyclo(3.2.0)hepta-2,6-dien-6-yl dimethylphosphat

DE: Heptenophos (ISO); 7-Chlorbicyclo(3.2.0)hepta-2,6-dien-6-yl dimethylphosphat

EL: heptenophos (ISO); φωσφορικός 7-χλωροδικυκλο(3.2.0)επτα-2,6-διεν-6-υλο-διμεθυλεστέρας

EN: heptenophos (ISO); 7-chlorobicyclo(3.2.0)hepta-2,6-dien-6-yl dimethyl phosphate

FR: hepténophos (ISO); phosphate de 7-chlorobicyclo[3.2.0]hepta-2,6-diène-6-yle et de diméthyle

IT: eptenofos (ISO); fosfato di 7-clorobiciclo(3.2.0)epete-2,6-dien-6-ile e dimetile


NL: heptenofos (ISO); 7-chloorbicyclo(3.2.0)hepta-2,6-dieen-6-yl dimethylfosfaat

PT: heptenofos (ISO); fosfato de 7-clorobiciclo(3.2.0)hepta-2,6-dieno-6-ilo e de dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

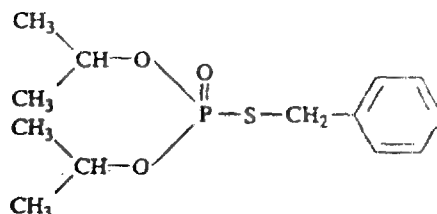
T	
	R : 25
	S : (1/2-)23-28-37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 26087-47-8

EEC No 247-449-0

No 015-127-00-7



ES: uofosfato de S-bencilo y de diisopropilo

DA: S-benzyl diisopropylthiophosphat

DE: S-Benzyl diisopropylthiophosphat

EL: ιπροβενφός · θειοφωσφορικός S-δενζυλο-δισοπροπυλεστέρας

EN: S-benzyl diisopropyl phosphorothioate; iprobenfos

FR: thiophosphate de S-benzyle et de O,O-diisopropyle; iprobenfos

IT: uofosfato di S-benzile e diisopropile

NL: S-benzyl diisopropylthiofosfaat

PT: uofosfato de S-benzilo e de diisopropilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

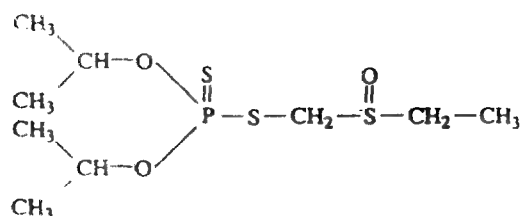
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 5827-05-4

EEC No —

No 015-128-00-2



ES : ditiofosfato de S-etilsulfinilmetilo y de O,O-diisopropilo

DA : S-ethylsulfinylmethyl-O,O-diisopropyldithiophosphat

DE : S-Ethylsulfinylmethyl-O,O-diisopropyldithiophosphat

EL : IPSP : διθειοφωσφορικός S-αιθυλοσουλφινυλομεθυλ-O,O-διισοπροπυλεστέρας

EN : S-ethylsulphinylmethyl O,O-diisopropylphosphorodithioate ; IPSP

FR : dithiophosphate de S-éthylsulfinylméthyle et de O,O-diisopropyle

IT : ditiofosfato di S-etilsulfinilmetile e O,O-diisopropile

NL : S-ethylsulfinylmethyl-O,O-diisopropyldithiofosfaat


PT : ditiofosfato de O,O-diisopropilo e de S-etilsulfinilmetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 27

T ; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 25-27
	S : (1/2-)28-36/37-45

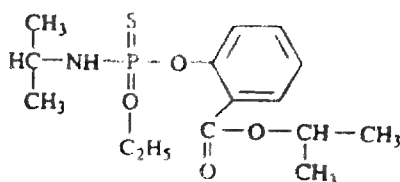
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 25311-71-1

EEC No 246-814-1

No 015-129-00-8



ES: isofenfos (ISO); N-isopropiltiofosforamidato de O-etilo y de O-2-isopropoxycarbonilfenilo

DA: isofenphos (ISO); O-ethyl-O-2-isopropoxycarbonylphenyl-N-isopropylthiophosphoramidat

DE: Isofenphos (ISO); O-Ethyl-O-2-isopropoxycarbonylphenyl-N-isopropylthiophosphoramidat

EL: isofenphos (ISO); N-ισοπροπυλοθειωφωσφοραμιδικός Ο-αιθυλ-Ο-2-ισοπροποξυκαρβονυλοφαινυλεστέρας

EN: isofenphos (ISO); O-ethyl O-2-isopropoxycarbonylphenyl-isopropylphosphoramidothioate

FR: isophenphos (ISO); N-isopropylthiophosphoramidate de O-éthyle et de O-2-isopropoxycarbonylphényle

IT: isofenfos (ISO); N-isopropiltiofosforamidato di O-etile e O-2-isopropossicarbonilfenile

NL: isofenfos (ISO); O-ethyl-O-2-isopropoxycarbonylphenyl-N-isopropylthiofosforamidaat

PT: isofenfos (ISO); N-isopropiltiofosforamidado de O-etilo e de O-2-isopropoxycarbonilfenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Indeling, Classificação

T; R 24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

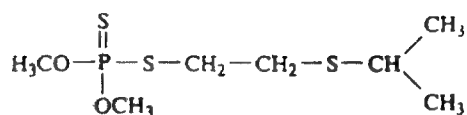
<p>T</p> 	<p>R : 24/25</p> <p>S : (1/2-)36/37-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 36614-38-7

EEC No —

No 015-130-00-3



ES: ditiofosfato de S-2-isopropiltioetilo y de O,O-dimetilo

DA: S-2-isopropylthioethyl-O,O-dimethyldithiophosphat

DE: S-2-Isopropylthioethyl-O,O-dimethyldithiophosphat

EL: isothioate (ISO): διθειοφωσφορικός S-2-ισοπροπυλοθειοαιθυλ-O,O-διμεθυλεστέρας

EN: S-2-isopropylthioethyl O,O-dimethyl phosphorodithioate; isothioate (ISO)

FR: dithiophosphate de S-2-isopropylthioéthyle et de O,O-diméthyle; isothioate (ISO)

IT: ditiofosfato di S-2-isopropiltioetile e O,O-dimetile

NL: S-2-isopropylthioethyl-O,O-dimethyldithiofosfaat

PT: ditiofosfato de O,O-dimetilo e de S-2-isopropiltioetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

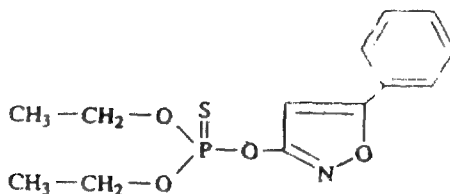
T	
	R : 24/25
	S : (1/2-)28-36/37-45

Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 18854-01-8

EEC No 242-624-8

No 015-131-00-9



ES: tiofosfato de O,O-dietilo y de O-5-fenilisoxazol-3-ilo

DA: O,O-diethyl-O-5-phenylisoxazol-3-ylthiophosphat

DE: O,O-Diethyl-O-5-phenylisoxazol-3-ylthiophosphat

EL: isoxathion (ISO) · θειοφωσφορικός O,O-διαιθυλ-O-5-φαινυλισοξαζολ-3-υλεστέρας

EN: O,O-diethyl O-5-phenylisoxazol-3-ylphosphorothioate; isoxathion (ISO)

FR: thiophosphate de O,O-diéthyle et de O-5-phénylisoxazole-3-yle; isoxathion (ISO)

IT: tiofosfato di O,O-dietile e O-5-fenilisossazol-3-ile

NL: O,O-diethyl-O-5-fenylisoxazool-3-ylthiofosfaat

PT: tiofosfato de O,O-dietilo e O-5 fenilisoxazol-3-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

T; R 24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

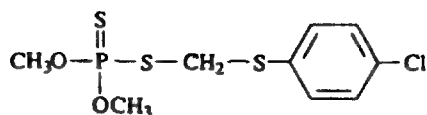
T	
	R : 24/25
	S : (1/2-)28-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 953-17-3

EEC No —

No 015-132-00-4



ES: ditiofosfato de S-(clorofeniltiometilo) y de O,O-dimetilo

DA: S-(chlorphenylthiomethyl)-O,O-dimethyldithiophosphat

DE: S-(Chlorphenylthiomethyl)-O,O-dimethyldithiophosphat

EL: methylcarbophenothione · διθειοφωσφορικής S-(χλωροφαινυλοθειομεθυλ)-O,O-διμεθυλεστέρας

EN: S-(chlorophenylthiomethyl) O,O-dimethylphosphorodithioate; methylcarbophenothione

FR: dithiophosphate de S-(4-chlorophénylthiométhyle) et de O,O-diméthyle

IT: ditiofosfato di S-(clorofeniltiometile) e O,O-dimetile

NL: S-(chloorfenylthiomethyl)-O,O-dimethyldithiofosfaat

PT: ditiofosfato de S-(clorofeniltiometilo) e de O,O-dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T; R 24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

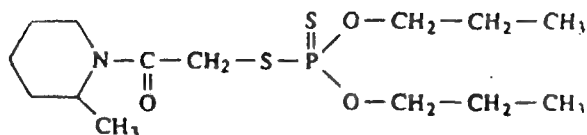
T	
	R : 24/25
	S : (1/2-)28-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 24151-93-7

EEC No —

No 015-133-00-X



- ES: piperofos (ISO); ditiofosfato de S-2-metilpiperidinocarbonilmetil-O,O-dipropilo  
 DA: piperophos (ISO); S-2-methylpiperidinocarbonylmethyl-O,O-dipropyldithiophosphat  
 DE: Piperophos (ISO); S-2-Methylpiperidinocarbonylmethyl-O,O-dipropyldithiophosphat  
 EL: piperophos (ISO); διθειοφωσφορικός S-2-μεθυλοπιπεριδινοκαρβονυλομεθυλο-O,O-διπροπυλεστέρας  
 EN: piperophos (ISO); S-2-methylpiperidinocarbonylmethyl-O,O-dipropyl phosphorodithioate  
 FR: piperophos (ISO); dithiophosphate de S-2-méthylpipéridinocarbonylméthyle et de O,O-dipropyle  
 IT: piperofos (ISO); ditiofosfato di S-2-metilpiperidinocarbonilmetil-O,O-dipropile  
 NL: piperofos (ISO); S-2-methylpiperidinocarbonylmethyl-O,O-dipropyldithiofosfaat  
 PT: piperofos (ISO); ditiofosfato de O,O-dipropilo e de S-2-metilpiperidinocarbonilmetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificaçào

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

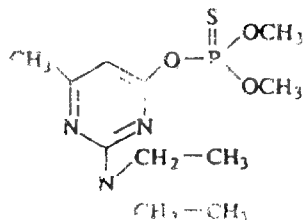
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 29232-93-7

EEC No 249-528-5

No 015-134-00-5



- ES: pirimifos-metil (ISO); tiofosfato de O-(2-dietilamino-6-metilpirimidin-4-ilo) y de O,O-dimetilo
- DA: pirimifos-methyl (ISO); O-(2-diethylamino-6-methylpyrimidin-4-yl)-O,O-dimethylthiophosphat
- DE: Pirimifos-methyl (ISO); O-(2-Diethylamino-6-methylpyrimidin-4-yl)-O,O-dimethylthiophosphat
- EL: pirimifos-methyl (ISO); θειοφωσφορικός O-(2-διαεθυλαμινο-6-μεθυλοπυριμιδιν-4-υλ)-O,O-διμεθυλεστέρας
- EN: pirimifos-methyl (ISO); O-(2-diethylamino-6-methylpyrimidin-4-yl) O,O-dimethyl phosphorothioate
- FR: pyrimifos-méthyl (ISO); thiophosphate de O-(2-diéthylamino-6-méthylpyrimidine-4-yle) et de O,O-diméthyle
- IT: pirimifos-metil (ISO); tiofosfato di O-(2-dietilammino-6-metilpirimidin-4-ile) e O,O-dimetile
- NL: pirimifos-methyl (ISO); O-(2-diethylamino-6-methylpyrimidins-4-yl)-O,O-dimethylthiofosfaat
- PT: pirimifos-metil (ISO); tiofosfato de O-(2-dietilamino-6-metilpirimidina-4-il) e de O,O-dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

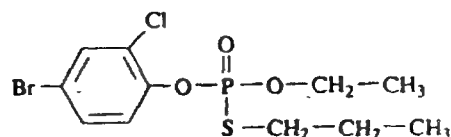
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 41198-08-7

EEC No 255-255-2

No 015-135-00-0



ES: tiofosfato de O-(4-bromo-2-clorofenilo) de O-etilo y de S-propilo; profenofos

DA: O-(4-brom-2-chlorphenyl)-O-ethyl-S-propylthiophosphat; profenofos

DE: O-(4-Brom-2-chlorphenyl)-O-ethyl-S-propylthiophosphat; profenofos

EL: profenofos · θειοφωσφορικός O-(4-δρωμο-2-χλωροφαινυλ)-O-αιθυλο-S-πρόπυλεστέρας

EN: O-(4-bromo-2-chlorophenyl) O-ethyl S-propyl phosphorothioate; profenofos

FR: thiophosphate de O-(4-bromo-2-chlorophényle), O-éthyle et de S-propyle; profénofos

IT: tiofosfato di O-(4-bromo-2-clorofenile) di O-etile e S-propile; profenofos

NL: O-(4-broom-2-chloorfenyl)-O-ethyl-S-propylthiofosfaat; profenofos

PT: tiofosfato de O-(4-bromo-2-clorofenilo) de O-etilo e de S-propilo; profenofos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

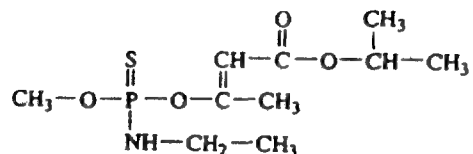
Xn	
	R : 20/21/22
	S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 31218-83-4

EEC No 250-517-2

No 015-136-00-6




- ES : (etilamido)tiوسفato de O-etilo y de O-[(2-isopropoxycarbonil)-1-metil]vinilo  
 DA : O-ethyl-O-[(2-isopropoxycarbonyl)-1-methyl]vinyl(ethylamido)thiophosphat  
 DE : O-Ethyl-O-[(2-isopropoxycarbonyl)-1-methyl]vinyl(ethylamido)thiophosphat  
 EL : propetamphos (ISO) · (αιθυλαμιδο)θειοφωσφορικός Ο-αιθυλ-Ο[(2-ισοπροποξυκαρβονυλο)-1-μεθυλο]=δινυλεστέρας  
 EN : isopropyl 3-ethylamino(methoxy)phosphinothioxyloxy)isocrotonate ; propetamphos (ISO)  
 FR : 3-[(éthylamino)méthoxyphosphinothioyl]oxy]crotonate d'isopropyle ; propétamphos (ISO)  
 IT : (etilammido)tiوسفato di O-etile e O-[(2-isopropossicarbonil)-1-metil]vinile  
 NL : O-ethyl O-[(2-isopropoxycarbonyl)-1-methyl]vinyl(ethylamido)thiofosfaat  
 PT : (etilamido)tiوسفato de O-etilo e de O-[(2-isopropoxycarbonil)-1-metil]vinilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T ; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 25
	S : (1/2-)37-45

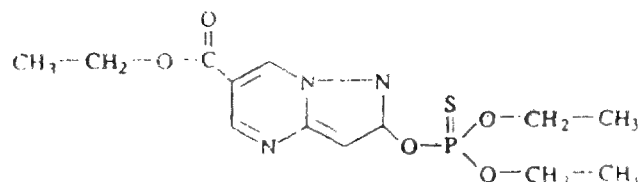
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 13457-18-6

EEC No 236-656-1

No 015-137-00-1



- ES : pirazofos (ISO) ; tiofosfato de O,O-dietilo y de O-(6-etoxicarbonil-5-metilpirazolo(2,3-a)pirimidin-2-ilo)
- DA : pyrazophos (ISO) ; O,O-diethyl-O-(6-ethoxycarbonyl-5-methylpyrazolo(2,3-a)pyrimidin-2-yl)thiophosphat
- DE : Pyrazophos (ISO) ; O,O-Diethyl-O-(6-ethoxycarbonyl-5-methylpyrazolo(2,3-a)pyrimidin-2-yl)thiophosphat
- EL : pyrazophos (ISO) ; θειοφωσφορικός O,O-διαιθυλ-O-(6-αιθοξυκαρβονυλ-5-μεθυλ-πυραζολο(2,3α)-πυριμιδιν-2-υλ)εστέρας
- EN : pyrazophos (ISO) ; O,O-diethyl O-(6-ethoxycarbonyl-5-methylpyrazolo(2,3-a)pyrimidin-2-yl) phosphorothioate
- FR : pyrazophos (ISO) ; thiophosphate de O,O-diéthyle et de O-(6-éthoxycarbonyl-5-méthylpyrazolo[1,5-a]-pyrimidine-2-yle)
- IT : pirazofos (ISO) ; tiofosfato di O,O-dietile e O-(6-etossicarbonil-5-metilpirazolo(2,3-a)pirimidin-2-ile)
- NL : pyrazofos (ISO) ; O,O-diethyl-O-(6-ethoxycarbonyl-5-methylpyrazolo(2,3-a)pyrimidine-2-yl)thiofosfaat
- PT : pirazofos (ISO) ; tiofosfato de O,O-dietilo e de O-(6-etoxicarbonil-5-metilpirazolo(2,3-a)pirimidin-2-ilo)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etskettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

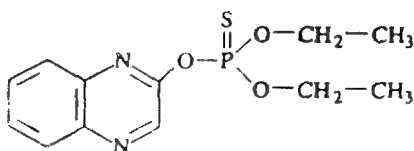
Xn	
	R 22
	S (2)

Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 13593-03-8

EEC No 237-031-6

No 015-138-00-7



- ES : quinalfos (ISO) ; tiofosfato de O,O-dietilo y de O-quinoxalin-2-ilo  
 DA : quinalphos (ISO) ; O,O-diethyl-O-quinoxalin-2-ylthiophosphat  
 DE : Quinalphos (ISO) ; O,O-Diethyl-O-chinoxalin-2-ylthiophosphat  
 EL : quinalphos (ISO) ; θειοφωσφορικός O,O-διαιθυλ-O-κιννοξάλιν-2-υλεστέρας  
 EN : quinalphos (ISO) ; O,O-diethyl-O-quinoxalin-2-yl phosphorothioate  
 FR : quinalphos (ISO) ; chinalphos ; thiophosphate de O,O-diéthyle et de O-quinoxaline-2-yle  
 IT : quinalfos (ISO) ; tiofosfato di O,O-dietile e O-chinossalin-2-ile  
 NL : quinalfos (ISO) ; O,O-diethyl-O-chinoxaline-2-ylthiofosfaat  
 PT : quinalfos (ISO) ; tiofosfato de O,O-dietilo e de O-quinoxalin-2-ilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T ; R 25

Xn ; R 21

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

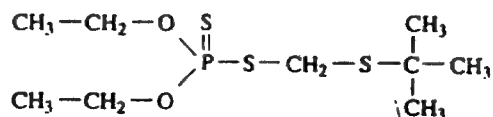
<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 20px;"> <p>T</p>  </div> <div> <p>R : 21-25</p> <p>S : (1/2-)22-36/37-45</p> </div> </div>	

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 13071-79-9

EEC No 235-963-8

No 015-139-00-2



ES: tiofosfato de S-terc-butiltiometilo y de O,O-dietilo; terbufos

DA: S-tert-butylthiomethyl-O,O-diethyldithiophosphat; terbufos

DE: S-tert-Butylthiomethyl-O,O-diethyldithiophosphat; Terbufos

EL: terbufos · θειοφωσφορικός S-τερτ.-δουτυλοθειομεθυλ-Ο,Ο-διαεθυλεστέρας

EN: S-tert-butylthiomethyl O,O-diethylphosphorodithioate; terbufos

FR: dithiophosphate de S-tert-butylthiométhyle et de O,O-diéthyle; terbufos

IT: tiofosfato di S-terz-butiltiometile e O,O-dietile; terbufos

NL: S-tert-butylthiomethyl-O,O-diethyldithiofosfaat; terbufos

PT: tiofosfato de S-terc-butiltiometilo e de O,O-dietilo; terbufos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

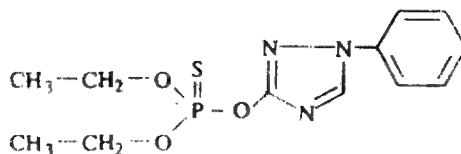
T+	
	R : 27/28
	S : (1/2-)36/37-45

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 24017-47-8

EEC No 245-986-5

No 015-140-00-8



ES: triazofos (ISO); tiofosfato de O,O-dietilo y de O-1-fenil-1,2,4-triazol-3-ilo

DA: triazophos (ISO); O,O-diethyl-O-1-phenyl-1,2,4-triazol-3-ylthiophosphat

DE: Triazophos (ISO); O,O-Diethyl-O-1-phenyl-1,2,4-triazol-3-ylthiophosphat

EL: triazophos (ISO); θειοφωσφορικός O,O-διαιθύλιο και O-1-φαινυλο-1,2,4-τριαζολ-3-ύλιο

EN: triazophos (ISO); O,O-diethyl-O-1-phenyl-1,2,4-triazol-3-yl phosphorothioate

FR: triazophos (ISO); thiophosphate de O,O-diéthyle et de O-(1-phényl-1,2,4-triazole-3-yle)

IT: triazofos (ISO); tiofosfato di O,O-dietile e O-1-fenil-1,2,4-triazol-3-ile

NL: triazofos (ISO); O,O-diethyl-O-1-fenyl-1,2,4-triazool-3-ylthiofosfaat

PT: triazofos (ISO); tiofosfato de O,O-dietilo e de O-1-fenil-1,2,4-triazol-3-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

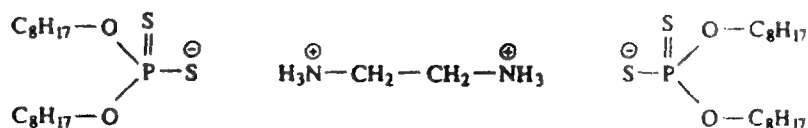
T	
	R : 24/25
	S : (1/2-)23-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No 400-520-1

No 015-141-00-3



ES: ditiofosfato de etilendiamonio y O,O-bis(octilo), mezcla de isómeros

DA: ethylendiammonium-O,O-bis(octyl)dithiophosphat, blanding af isomerer

DE: Ethylendiammonium-O,O-bis(octyl)dithiophosphat, Isomerengemisch

EL: διθειοφωσφορικό αιθυλενοδιαμμώνιο O,O-δίζ(οκτυλιο), μείγμα ισομερών

EN: ethylenediammonium O,O-bis(octyl) phosphorodithioate, mixed isomers

FR: dithiophosphate d'éthylènediammonium et de O,O-bis(octyle), mélange disomères

IT: ditiofosfato di etilendiammonio e O,O-bis(ottile), miscela di isomeri

NL: ethyleendiammonium-O,O-bis(octyl)dithiofosfaat, mengsel van isomeren

PT: ditiofosfato de etilenodiamónio e O,O-bis(octilo), mistura de isómeros

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34	Xn; R 22	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	N	
		
		R : 22-34-50/53
		S : (1/2-)24/25-26-28-39 -45-60-61

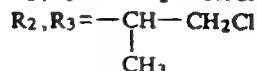
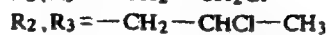
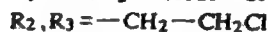
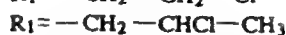
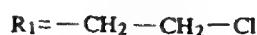
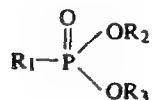
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo




Cas No —

EEC No 401-740-0

No 015-143-00-4



*Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de.*

ES: 2-cloroetilfosfonato de 2-cloroetilo y de cloropropilo, mezcla de isómeros

DA: 2-chlorethyl-chlorpropyl-2-chlorethylphosphonat, blanding af isomerer

DE: 2-Chlorethyl-chlorpropyl-2-chlorethylphosphonat, Isomerengemisch

EL: 2-χλωροαιθυλοφωσφονικο-2-χλωροαιθύλιο χλωροπροπύλιο, μείγμα ισομερών

EN: 2-chloroethyl chlorpropyl 2-chloroethylphosphonate, mixture of isomers

FR: 2-chloroethylphosphonate de 2-chloroéthyle et de chloropropyle, mélange d'isomères

IT: 2-cloroetilfosfonato di 2-cloroetile e cloropropile, miscela di isomeri

NL: 2-chloorethyl-chloorpropyl-2-chloorethylfosfonaat, mengsel van isomeren

PT: 2-cloroetilfosfonato de 2-cloroetilo e de cloropropilo, mistura de isómeros

*y, og, und, και, and, et, e, en, e:*

ES: 2-cloropropilfosfonato de 2-cloroetilo y de cloropropilo, mezcla de isómeros

DA: 2-chlorethyl-chlorpropyl-2-chlorpropylphosphonat, blanding af isomerer

DE: 2-Chlorethyl-chlorpropyl-2-chlorpropylphosphonat, Isomerengemisch

EL: 2-χλωροπροπυλοφωσφονικο-2-χλωροαιθύλιο χλωροπροπύλιο, μείγμα ισομερών

EN: 2-chloroethyl chlorpropyl 2-chloropropylphosphonate, mixture of isomers

FR: 2-chloropropylphosphonate de 2-chloroéthyle et de chloropropyle, mélange d'isomères

IT: 2-cloropropilfosfonato di 2-cloroetile e cloropropile, miscela di isomeri

NL: 2-chloorethyl-chloorpropyl-2-chloorpropylfosfonaat, mengsel van isomeren

PT: 2-cloropropilfosfonato de 2-cloroetilo e de cloropropilo, mistura de isómeros

Cas No

EEC No 401-740-0

No 015-143-00-4

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22

S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*

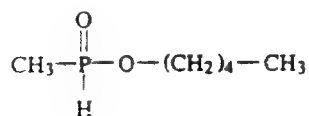



Cas No 87025-52-3

EEC No 402-090-0

No 015-144-00-X

*Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de:*



ES: metilfosfinato de pentilo

DA: pentylmethylphosphinat

DE: Pentylmethylphosphinat

EL: μεθυλοφωσφινικό πεντύλιο

EN: pentyl methylphosphinate

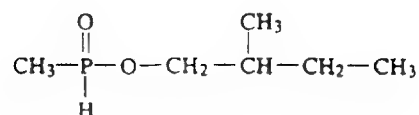
FR: methylphosphinate de pentyle

IT: metilfosfinato di pentile

NL: pentylmethylfosfinaat

PT: metilfosfinato de pentilo

*y, og, und, και, and, et, e, en, e:*



ES: metilfosfinato de 2-metilbutilo

DA: 2-methylbutylmethylphosphinat

DE: 2-Methylbutylmethylphosphinat

EL: μεθυλοφωσφινικό 2-μεθυλοβουτύλιο

EN: 2-methylbutyl methylphosphinate

FR: methylphosphinate de 2-méthylbutyle

IT: metilfosfinato di 2-metilbutile

NL: 2-methylbutylmethylfosfinaat

PT: metilfosfinato de 2-metilbutilo

Cas No 87025-52-3


EEC No 402-090-0

No 015-144-00-X

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>C</p> 	<p>R : 34</p> <p>S : (1/2-)26-36/37/39-45</p>
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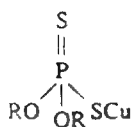
*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No 401-520-4

No 015-145-00-5

*Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de.*



R is C<sub>3</sub>H<sub>7</sub> and/or C<sub>6</sub>H<sub>13</sub>

ES: ditiofosfato de cobre(I) y de O,O-diisopropilo

DA: kobber(I)-O,O-diisopropyldithiophosphat

DE: Kupfer(I)-O,O-diisopropyldithiophosphat

EL: διθειοφωσφορικό χαλκός(I) O,O-δισοπροπύλιο

EN: copper(I) O,O-diisopropyl phosphorodithioate

FR: dithiophosphate de cuivre(I) et de O,O-diisopropyle

IT: ditiofosfato di rame(I) e O,O-diisopropile

NL: koper(I)-O,O-diisopropyldithiofosfaat

PT: ditiofosfato de cobre(I) e O,O-diisopropilo

*y, og, und, και, and, et, e, en, e:*

ES: ditiofosfato de cobre(I), O-isopropilo y de O-(4-metilpent-2-ilo)

DA: kobber(I)-O-isopropyl-O-(4-methylpent-2-yl)dithiophosphat

DE: Kupfer(I)-O-isopropyl-O-(4-methylpent-2-yl)dithiophosphat

EL: διθειοφωσφορικό χαλκός(I) O-ισοπροπύλιο O-(4-μεθυλοπεντ-2-ύλιο)

EN: copper(I) O-isopropyl O-(4-methylpent-2-yl) phosphorodithioate

FR: dithiophosphate de cuivre(I), d'isopropyle et de O-(4-méthylpent-2-yle)

IT: ditiofosfato di rame(I), O-isopropile e O-(4-metilpent-2-ile)

NL: koper(I)-O-isopropyl-O-(4-methylpent-2-yl)dithiofosfaat

PT: ditiofosfato de cobre(I), O-isopropilo e O-(4-metilpent-2-ilo)

*y, og, und, και, and, et, e, en, e:*

ES: ditiofosfato de cobre(I) y de O,O-bis(4-metilpent-2-ilo)

DA: kobber(I)-O,O-bis(4-methylpent-2-yl)dithiophosphat

DE: Kupfer(I)-O,O-bis(4-methylpent-2-yl)dithiophosphat

EL: διθειοφωσφορικό χαλκός(I) O,O-δισ(4-μεθυλοπεντ-2-ύλιο)

EN: copper(I) O,O-bis(4-methylpent-2-yl) phosphorodithioate

FR: dithiophosphate de cuivre(I) et de O,O-bis(4-méthylpent-2-yle)

IT: ditiofosfato di rame(I) e O,O-bis(4-metilpent-2-ile)

NL: koper(I)-O,O-bis(4-methylpent-2-yl)dithiofosfaat

PT: ditiofosfato de cobre(I) e O,O-bis(4-metilpent-2-ilo)

Cas No

EEC No 401-520-4

No 015-145-00-5

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

N



R : 50/53

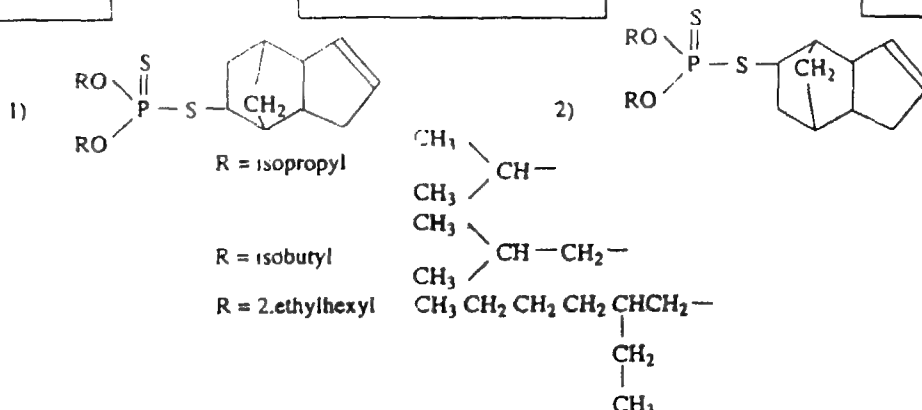
S : 60-61

*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No 401-850-9

No 015-146-00-0



ES: ditiofosfato de S-triciclo(5.2.1.0' 2,6)deca-3-eno-8(o 9)-ilo, O-(isopropilo o isobutilo o 2-etilhexilo) y de O-(isopropilo o isobutilo o 2-etilhexilo)

DA: S-(triciclo(5.2.1.0' 2,6)deca-3-en-8(eller 9)-yl)-O-(isopropyl eller isobutyl eller 2-ethylhexyl)-O-(isopropyl eller isobutyl eller 2-ethylhexyl)dithiophosphat

DE: S-(Triciclo(5.2.1.0' 2,6)deca-3-en-8(oder 9)-yl)-O-(isopropyl oder isobutyl oder 2-ethylhexyl)-O-(isopropyl oder isobutyl oder 2-ethylhexyl)dithiophosphat

EL: διθειοφωσφορικό S-(τρικυκλο(5.2.1.0' 2,6)δεκα-3-εν-8(η 9)ύλιο O-(ισοπροπύλιο η ισοβουτύλιο η 2-αιθυλεξύλιο)O-(ισοπροπύλιο η ισοβουτύλιο η 2-αιθυλεξύλιο)

EN: S-(triciclo(5.2.1.0' 2,6)deca-3-en-8(or 9)-yl)-O-(isopropyl or isobutyl or 2-ethylhexyl)-O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate

FR: dithiophosphate de S-(triciclo(5.2.1.0' 2,6)déca-3-ène-8(ou 9)-yle, de O-(isopropyle ou isobutyle ou 2-éthylhexyle) et de O-(isopropyle ou isobutyle ou 2-éthylhexyle)

IT: ditiofosfato di S-triciclo(5.2.1.0' 2,6)deca-3-en-8(o 9)-ile, O-(isopropile o isobutile o 2-etilesile) e O-(isopropile o isobutile o 2-etilesile)


NL: S-(triciclo(5.2.1.0' 2,6)deca-3-een-8(of 9)-yl)-O-(isopropyl of isobutyl of 2-ethylhexyl)-O-(isopropyl of isobutyl of 2-ethylhexyl)dithiofosfaat

PT: ditiofosfato de S-triciclo(5.2.1.0' 2,6)deca-3-eno-8(ou 9)-ilo, O-(isopropilo ou isobutilo ou 2-etilhexilo) e O-(isopropilo ou isobutilo ou 2-etilhexilo)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

N	
	R : 50/53 S : 60-61

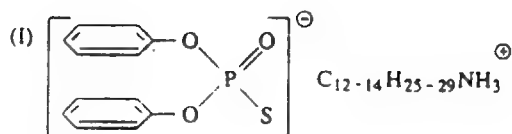
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No —

EEC No 400-930-0

No 015-147-00-6

*Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de:*



- ES: tiofosfato de C12-14-terc-alquilamonio y de difenilo  
 DA: C12-14-tert-alkylammoniumdiphenylthiophosphat  
 DE: C12-14-tert-alkylammoniumdiphenylthiophosphat  
 EL: θειοφωσφορικόC12-14-τερτ-αλκυλαμμώνιο και διφαινύλιο  
 EN: C12-14-tert-alkylammonium diphenyl phosphorothioate  
 FR: thiophosphate de C12-14-tert-alkylammonium et de diphényle  
 IT: tiofosfato di C12-14-terz-alchilammonio e difenile  
 NL: C12-14-tert-alkylammoniumdifenylthiofosfaat  
 PT: tiofosfato de C12-14-terc-alquilammonio e difenilo

*y, og, und, και, and, et, e, en, e:*

(II)



- ES: sulfuro (o disulfuro) de dinonilo  
 DA: dinonylsulfid (eller -disulfid)  
 DE: Dinonylsulfid (oder -disulfid)  
 EL: σουλφίδιο (ή δισουλφίδιο) του δινονυλίου  
 EN: dinonyl sulphide (or disulphide)  
 FR: sulfure (ou disulfure) de dinonyle  
 IT: sulfuro (o disulfuro) di dinonile  
 NL: dinonylsulfide (of disulfide)  
 PT: sulfureto (ou dissulfureto) de dinonilo

No 015-147-00-6

Classification - Classificazione, Indeling, Classificação

38-41	N	R 51-53	R 43
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Labeling, Etikettering, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem



R : 38-41-43-51/53

S : (2-)24-26-37/39-61

Concentration limits, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limite de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Class No 5-43-45

C No 403-070-4

No 015-148-00-1

H<sub>2</sub>O, P

COOH

COOH

L. 10-11-1997 (Gazzetta Ufficiale)

L. 10-11-1997 (Gazzetta Ufficiale)

L. 10-11-1997 (Gazzetta Ufficiale)

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L. 10-11-1997 (Gazzetta Ufficiale)

L. 10-11-1997 (Gazzetta Ufficiale)

L. 10-11-1997 (Gazzetta Ufficiale)

R 34

R 43

L. 10-11-1997 (Gazzetta Ufficiale)



R 34-43

S: (1/2)-26-36/37/39-45

L. 10-11-1997 (Gazzetta Ufficiale)




Cas No —

EEC No 403-470-9

No 015-149-00-7

R

( ) P - R<sub>1</sub>R<sub>3</sub>

*Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de :*

ES : oxido de trioctilfosfina  
 DA : trioctylphosphinoxid  
 DE : Trioctylphosphinoxid  
 EL : οξείδιο της τριοκτυλοφωσφίνης  
 EN : trioctylphosphine oxide  
 FR : oxyde de trioctylphosphine  
 IT : ossido di triottilfosfina  
 NL : trioctylfosfineoxide  
 PT : oxido de trioctilfosfina

*y, og, und, και, and, et, e, en, e :*

ES : oxido de trihexilfosfina  
 DA : trihexylphosphinoxid  
 DE : Trihexylphosphinoxid  
 EL : οξείδιο της τριεξυλοφωσφίνης  
 EN : trihexylphosphine oxide  
 FR : oxyde de trihexylphosphine  
 IT : ossido di triesilfosfina  
 NL : trihexylfosfineoxide  
 PT : oxido de trihexilfosfina

*y, og, und, και, and, et, e, en, e :*

ES : oxido de hexildiocetilfosfina  
 DA : hexyldioctylphosphinoxid  
 DE : Hexyldioctylphosphinoxid  
 EL : οξείδιο της εξυλοδιοκτυλοφωσφίνης  
 EN : hexyldioctylphosphine oxide  
 FR : oxyde d'hexyldioctylphosphine  
 IT : ossido di esildiottilfosfina  
 NL : hexyldioctylfosfineoxide  
 PT : oxido de hexyldioctilfosfina

„, og, und, και, and, et, e, en . . e :

ES : oxido de dihexilottilfosfina  
 DA : dihexyloctylphosphinioxid  
 DE : Dihexyloctylphosphinioxid  
 EL : οξείδιο της διεξυλοκτυλοφωσφίνης  
 EN : dihexyloctylphosphine oxide  
 FR : oxyde de dihexyloctylphosphine  
 IT : ossido di diesilottilfosfina  
 NL : dihexyloctylfosfineoxide  
 PT : oxido de dihexilottilfosfina

*Clasificación, Klasificering, Einstufung, Ταξινόμηση Classification, Classification Classificazione, Indeling, Classificação*

C, R 34	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

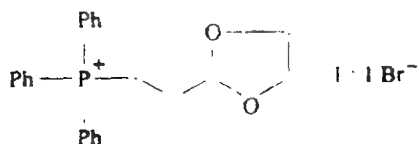
C	N	
		R : 34-50/53 S : (1/2-)26-36/37/39-45-60-61

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 86608-70-0

EEC No 404-940-6

No 015-150-00-2



ES: bromuro de (2-(1,3-dioxolan-2-il)etil)trifenilfosfonio

DA: (2-(1,3-dioxolan-2-yl)ethyl)triphenylphosphoniumbromid

DE: (2-(1,3-Dioxolan-2-yl)ethyl)triphenylphosphoniumbromid

EL: βρωμίδιο του (2-(1,3-διοξολαν-2-υλο)αιθυλο)τριφαινυλοφωσφονίου

EN: (2-(1,3-dioxolan-2-yl)ethyl)triphenylphosphonium bromide

FR: bromure de (2-(1,3-dioxolanne-2-yl)éthyl)triphénylphosphonium

IT: bromuro di (2-(1,3-diossolan-2-il)etil)trifenilfosfonio

NL: (2-(1,3-dioxolaan-2-yl)ethyl)trifenylfosfoniumbromide

PT: brometo de (2-(1,3-dioxolano-2-il)etil)trifenilfosfónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22/R 33

Xi; R 41

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-33-41-52/53

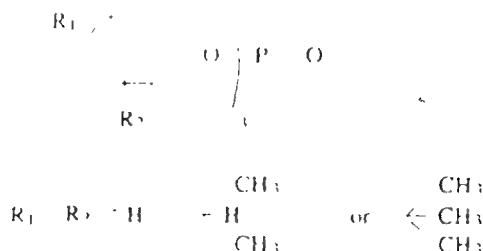
S : (2-)22-26-39-61

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

FEC No 405-010-2

No 015-151-00-8




- ES: fosfato de tris(isopropil/terc-butilfenilo)  
 DA: tris(isopropyl/tert-butylphenyl)phosphat  
 DE: Tris(isopropyl/tert-butylphenyl)phosphat  
 EL: φωσφορικό τρις(ισοπροπυλο/τερτ-δουτυλοφαινύλιο)  
 EN: tris(isopropyl/tert-butylphenyl) phosphate  
 FR: phosphate de tris(isopropyl/tert-butylphényle)  
 IT: fosfato di tris(isopropil/terz-butilfenile)  
 NL: tris(isopropyl/tert-butylfenyl)fosfaat  
 PT: fosfato de tris(isopropil/terc-butilfenilo)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

N	
	R : 51/53
	S : 61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7783-06-4

EEC No 231-977-3

No 016-001-00-4

H<sub>2</sub>S

ES: sulfuro de hidrógeno

DA: hydrogensulfid

DE: Hydrogensulfid; Schwefelwasserstoff

EL: σουλφίδιο του υδρογόνου

EN: hydrogen sulphide

FR: sulfure d'hydrogène

IT: solfuro di idrogeno; idrogeno solforato

NL: hydrogeensulfide

PT: sulfureto de hidrogénio




FI: rikkivety; vetysulfidi

SV: vatesulfid; svavelväte

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indelning, Classificação, Luokitus, Klassificering*

F +; R 12	T +; R 26	N; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

F +	T +	N	
			
			R: 12-26-50
			S: (1/2-)9-16-28-36/37-45-61

*Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*

C ≥ 10 %	T +, R 26
5 % ≤ C < 10 %	T; R 23
1 % ≤ C < 5 %	Xn; R 20

NOTA 5

Cas No 21109-95-5

EEC No 244-214-4

No 016-002-00-X

BaS

ES: sulfuro de bario

DA: bariumsulfid

DE: Bariumsulfid

EL: θειούχο βάριο

EN: barium sulphide

FR: sulfure de baryum

IT: solfuro di bario; bario solfuro

NL: bariumsulfide

PT: sulfureto de bário

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

R 31

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20/22-31

S : (2-)28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 50864-67-0

EEC No 256-814-3

No 016-003-00-5

 $BaS_n$ 

ES: polisulfuros de bario

DA: bariumpolysulfider

DE: Bariumpolysulfide

EL: πολυθειούχο βάριο

EN: barium polysulphides

FR: polysulfures de baryum

IT: polisolfuri di bario; bario polisolfuri

NL: bariumpolysulfiden

PT: polissulfuretos de bário

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

R 31

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 31-36/37/38

S : (2-)28

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 20548-54-3

EEC No 243-873-5

No 016-004-00-0

CaS

ES: sulfuro de calcio

DA: calciumsulfid

DE: Calciumsulfid

EL: θειούχο ασβέστιο

EN: calcium sulphide

FR: sulfure de calcium

IT: solfuro di calcio; calcio solfuro

NL: calciumsulfide

PT: sulfureto de cálcio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

R 31

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 31-36/37/38

S : (2-)28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 1344-81-6

EEC No 215-709-2

No 016-005-00-6

CaS<sub>n</sub>

ES: polisulfuros de calcio

DA: calciumpolysulfider

DE: Calciumpolysulfide

EL: πολυθειούχο ασβέστιο

EN: calcium polysulphides

FR: polysulfures de calcium

IT: polisolfuri di calcio; calcio polisolfuri

NL: calciumpolysulfiden

PT: polissulfuretos de cálcio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 31

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 31-36/37/38

S : (2-)28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1312-73-8

EEC No 215-197-0

No 016-006-00-1

 $K_2S$ 

ES: sulfuro de potasio

DA: kaliumsulfid

DE: Kaliumsulfid

EL: θειούχο κάλιο

EN: potassium sulphide

FR: sulfure de potassium

IT: solfuro di potassio; potassio solfuro

NL: kaliumsulfide

PT: sulfureto de potássio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

R 31

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 31-34

S : (1/2-)26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 37199-66-9

EEC No 253-390-1

No 016-007-00-7

K<sub>2</sub>S<sub>8</sub>

ES: polisulfuros de potasio

DA: kaliumpolysulfider

DE: Kaliumpolysulfide

EL: πολυθειούχο κάλιο

EN: potassium polysulphides

FR: polysulfures de potassium

IT: polisolfuri di potassio; potassio polisolfuri

NL: kaliumpolysulfiden

PT: polissulfuretos de potássio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

R 31

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R: 31-34

S: (1/2-)26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 9080-17-5

EEC No 232-989-1

No 016-008-00-2



ES: polisulfuros de amonio

DA: ammoniumpolysulfider

DE: Ammoniumpolysulfide

EL: πολυθειούχο αμμώνιο

EN: ammonium polysulphides

FR: polysulfures d'ammonium

IT: polisolfuri di ammonio; ammonio polisolfuri

NL: ammoniumpolysulfiden

PT: polissulfuretos de amónio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

C; R 34

R 31

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R : 31-34

S : (1/2-)26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 5 %	C; R 31-34
1 % ≤ C < 5 %	Xi; R 31-36/38

Cas No 1313-82-2

EEC No 215-211-5

No 016-009-00-8




ES: sulfuro de sodio  
 DA: natnumsulfid  
 DE: Natriumsulfid  
 EL: θειούχο νάτριο  
 EN: sodium sulphide  
 FR: sulfure de sodium  
 IT: solfuro di sodio  
 NL: natnumsulfide  
 PT: sulfureto de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

R 31

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	<p>R : 31-34</p> <p>S : (1/2-)26-45</p>

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1344-08-7

FEC No 215-686-9

No 016-010-00-3

 $\text{Na}_2\text{S}_x$ 

ES: polisulfuros de sodio

DA: natnumpolysulfider

DE: Natriumpolysulfide

EL: πολυθειούχο νάτριο

EN: sodium polysulphides

FR: polysulfures de sodium

IT: polisolfuri di sodio; sodio polisolfuri

NL: natnumpolysulfiden

PT: polissulfuretos de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

R 31

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R : 31-34

S : (1/2-)26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7446-09-5

CEC No 231/95


No 016-011-00-9

ES: dióxido de azufre  
 DA: svovldioxid  
 DE: Schwefeldioxid  
 EL: διοξειδίο του θείου  
 EN: sulphur dioxide  
 FR: dioxyde de soufre  
 IT: diossido di zolfo  
 NL: zwaveldioxide  
 PT: dióxido de enxofre  
 FI: rikkidioksidi  
 SV: svaveldioxid

*Classification: Klassifisering, klassifizierung, ταξινόμηση, classificazione, Classificazione, Classificação, Luokitus, Käsikirjoitus*  
*Classification: Classificazione, Indeling, Classificação, Luokitus, Käsikirjoitus*

T, R 23	C, R 34
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling*  
*Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markering*

	<p>R:</p> <p>S: 11-12-9 26-36/37-38-40</p>
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*Limits de concentration, Konzentrationsgrenzen, Konzentrationsgrenzen, όρια συγκεντρώσεων, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitojaukumat, Konzentrationsgrenzen*

$C \geq 20 \%$	T, R 23/34
$5 \% \leq C < 20 \%$	Xn, R 20-34
$0.5 \% \leq C < 5 \%$	Xn, R 36/37/38

Cas No 10025-67-9

EEC No 233-036-2

No 016-012-00-4



ES dicloruro de diazurre  
 DA disvovdichlorid  
 DE Dischwefeldichlond  
 EL μονοχλωριουχο θειο  
 EN disulphur dichloride  
 FR monochlorure de soufre  
 IT monoclورو di zolfo; zolfo monoclورو  
 NL zwavelchloride  
 PT dicloreto de diénxotro


*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

R 14

C; R 34

Xi; R 37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	R : 14-34-37 S : (1/2)-26-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 10545-99-0

EEC No 234-129-0

No 016-013-00-X

SCl<sub>2</sub>

ES: dicloruro de azufre

DA: svovldichlorid

DE: Schwefeldichlorid

EL: διχλωριούχο θείο

EN: sulphur dichloride

FR: dichlorure de soufre

IT: dicloro di zolfo; zolfo dicloruro

NL: zwaveldichloride

PT: dicloreto de enxofre

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

R 14

C; R 34

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R: 14-34-37

S: (1/2-)26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 13451-08-6

EEC No —

No 016-014-00-5

SCl<sub>4</sub>

ES: tetracloruro de azufre

DA: svovltetrachlorid

DE: Schwefeltetrachlorid

EL: τετραχλωριούχο θείο

EN: sulphur tetrachloride

FR: tetrachlorure de soufre

IT: tetracloruro di zolfo; zolfo tetracloruro

NL: zwavelchloride

PT: tetracloreto de enxofre

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

R 14

C; R 34

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R: 14-34-37

S: (1/2-)26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãu


Cas No 7719-09-7

EEC No 231-748-8

No 016-015-00-0



ES: cloruro de tionilo

DA: thionylchlorid

DE: Thionylchlorid

EL: θειονυλοχλωρίδιο

EN: thionyl chloride

FR: chlorure de thionyle

IT: cloruro di tionile; tionile cloruro

NL: thionylchloride

PT: cloreto de tionilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

R 14

C; R 34

Xi; R 37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

C



R : 14-34-37

S : (1/2-)26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7791-25-5

EEC No 232-245-6

No 016-016-00-6



ES: cloruro de sulfonilo

DA: sulfurylchlorid

DE: Sulfurylchlorid

EL: σουλφουρυλογλωρίδιο

EN: sulphuryl chloride

FR: chlorure de sulfuryle

IT: cloruro di solforile; solforile cloruro

NL: sulfurylchloride

PT: cloreto de sulfúrio


Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 14

C; R 34

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 14-34-37 S : (1/2-)26-45

*límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7790-94-5

EEC No 232-234-6

No 016-017-00-1



ES: ácido clorosulfónico

DA: chlorsulfonsyre

DE: Chlorschwefelsäure; Chlorsulfonsäure

EL: χλωροσουλφονικό οξύ· χλωροθειικό οξύ

EN: chlorosulphonic acid

FR: acide chlorosulfurique; chlorhydrique sulfurique; acide chlorosulfonique

IT: cloridrina solforica; acido clorosolfonico

NL: chloorsulfonzuur; chloorzwavelzuur

PT: ácido clorossulfónico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 14

C; R 35

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

C



R : 14-35-37

S : (1/2-)26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7789-21-1

EEC No 232-149-4

No 016-018-00-7



ES: ácido fluorosulfónico

DA: fluorsulfonsyre

DE: Fluorsulfonsäure

EL: φθοροσουλφονικό οξύ · φθοροθειικό οξύ

EN: fluorosulphonic acid

FR: acide fluorosulfurique; acide fluosulfonique

IT: acido fluorosolfonico

NL: fluorzwavelzuur

PT: ácido fluorossulfónico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn; R 20

C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	R : 20-35 S : (1/2-)26-45

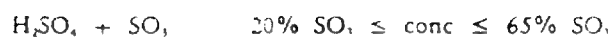
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No —

No 016-019-00-2

NOTA B

ES: oleum ... %  $\text{SO}_3$ ; ácido sulfúrico fumante ... %  $\text{SO}_3$ DA: oleum ... %  $\text{SO}_3$ ; rygende svovlsyreDE: Oleum ... %  $\text{SO}_3$ EL: όλεουμ ... %  $\text{SO}_3$ EN: oleum ... %  $\text{SO}_3$ FR: oléum ... %  $\text{SO}_3$ IT: oleum ... %  $\text{SO}_3$ NL: oleum ... %  $\text{SO}_3$ PT: oleum em solução ... %  $\text{SO}_3$ 

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

R: 14

C; R 35

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R: 14-35-37

S: (1/2-126-30-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçõ


Cas No 7664-93-9

EEC No 231-639-5

No 016-020-00-8

NOTA B

H<sub>2</sub>SO<sub>4</sub> - %

ES: ácido sulfúrico al - %

DA: svovlsyre - %

DE: Schwefelsäure - %

EL: θειικό οξύ - %

EN: sulphuric acid - %

FR: acide sulfurique - %

IT: acido solforico - %

NL: zwavelzuur - %

PT: ácido sulfúrico em solução - %

Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 35 S : (1/2-)26-30-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração

C ≥ 15%	C; R35
5% ≤ C < 15%	Xi; R36/38



Cas No 74-93-1

EEC No 200-822-1

No 016-021-00-3

CH<sub>3</sub>SH

ES: metanolol; metilmercaptano

DA: methanthiol; methylmercaptan

DE: Methanthiol; Methylmercaptan

EL: μεθανοθειόλη· μεθυλομερκαπτάνη

EN: methanethiol; methyl mercaptan

FR: methanethiol; méthylmercaptan

IT: metilmercaptano; metantiolo

NL: methaanthiol; methylmercaptaan

PT: metanolol; metilmercaptano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F+; R 12

Xn; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F+	Xn	
		R : 12-20
		S : (2-)16-25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 75-08-1

EEC No 200-837-3

No 016-022-00-9

C<sub>2</sub>H<sub>5</sub>SH

ES: etanotiol; etilmercaptano  
 DA: ethanthiol; ethylmercaptan  
 DE: Ethanthiol, Ethylmercaptan  
 EL: αιθανοθειόλη· αιθυλομερκαπτάνη  
 EN: ethanethiol; ethyl mercaptan  
 FR: éthanethiol; éthylmercaptan  
 IT: etilmercaptano; etantiole  
 NL: ethaanthiol; ethylmercaptaan  
 PT: etanotiol; etilmercaptano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

F; R 11

Xn; R 20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		R : 11-20 S : (2-)16-25

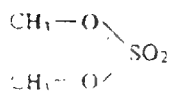
*Limites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 77-78-1

EEC No 201-058-1

No 016-023-00-4

NOTA E



ES: sulfato de dimetilo

DA: dimethylsulfat

DE: Dimethylsulfat

EL: θειικός διμεθυλστέρας

EN: dimethyl sulphate

FR: sulfate de diméthyle

IT: dimetilsolfato

NL: dimethylsulfaat

PT: sulfato de dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

T+; R 26

T; R 25

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 45-25-26-34

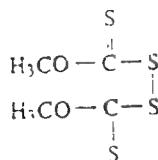
S : 53-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 1468-37-7

EEC No 215-993-8

No 016-024-00-X



- ES: dimexano; disulfuro de bis(metoxi-tiocarbonilo)  
 DA: dimexano; bis(methoxy-thiocarbonyl)-disulfid  
 DE: Dimexano; Bis(methoxy-thiocarbonyl)-disulfid  
 EL: dimexano; δις(μεθοξυθειοκαρβονυλο)δισουλφίδιο  
 EN: dimexano; O,O-dimethyldithiobis(thioformate)  
 FR: dimexano; dithiobis(thioformiate) de O,O-diméthyle  
 IT: dimexano; disolfuro di bis(metossi-tiocarbonile)  
 NL: dimexaan; dimethyldixanthogeen  
 PT: dimexano; dissulfureto de bis(metoxitiocarbonilo)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

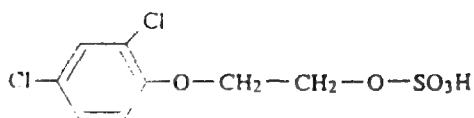
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No 149-26-8

EEC No 205-259-5

No 016-025-00-5



- ES: disul; sulfato ácido de 2-(2,4-diclorofenoxi)etilo  
 DA: disul; 2-(2,4-dichlorphenoxy)-ethylhydrogensulfat  
 DE: Disul; 2-(2,4-Dichlor-phenoxy)-ethyl-hydrogensulfat  
 EL: disul; όξινος-θειικός 2-(2,4-διχλωροφαινοξύ)-αιθυλεστέρας  
 EN: disul; 2-(2,4-dichlorophenoxy)ethyl hydrogensulphate; 2,4-DES  
 FR: disul; hydrogénosulfate de 2-(2,4-dichlorophénoxy)éthyle  
 IT: disul; solfato acido di 2-(2,4-diclorofenossi) etile  
 NL: disul; 2-(2,4-dichloorfenoxy)ethylsulfat  
 PT: dissul; hidrogenossulfato de 2-(2,4-diclorofenoxi)etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

Xi; R 38-41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

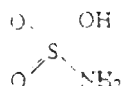
<p>Xn</p> 	<p>R : 22-38-41</p> <p>S : (2-)26</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 5329-14-6

EEC No 226-218-8

No 016-026-00-0



ES: ácido sulfámico; ácido aminosulfónico

DA: sulfaminsyre

DE: Amidosulfonsäure; Sulfaminsäure

EL: σουλφαμιδικό οξύ

EN: sulphamic acid

FR: acide amidosulfurique; acide sulfamique

IT: acido solfamico

NL: sulfaminezuur; aminosulfonzuur

PT: ácido sulfâmico; ácido aminossulfônico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/38

S : (2-)26-28

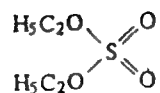
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 64-67-5

EEC No 200-589-6

No 016-027-00-6

NOTA E



ES: sulfato de dietilo

DA: diethylsulfat

DE: Diethylsulfat

EL: θειικός διαιθυλεστέρας

EN: diethyl sulphate

FR: sulfate de diéthyle

IT: dietilsolfato

NL: diëthylsulfaat

PT: sulfato de dietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Muta. Cat. 2; R 46

Xn; R 20/21/22

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

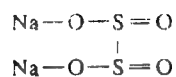


Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo


Cas No 7775-14-6

EEC No 231-890-0

No 016-028-00-1



ES: ditionito de sodio; hidrosulfito de sodio

DA: natriumdithionit

DE: Natriumdithionit

EL: διθειονώδες νάτριο· υδροθειώδες νάτριο

EN: sodium dithionite; sodium hydrosulphite

FR: dithionite de sodium; hydrosulfite de sodium

IT: sodio idrosolfito

NL: natriumdithioniet

PT: ditionito de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

R 7

R 31

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 7-22-31

S : (2-)7/8-26-28-43

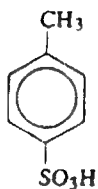
Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No —

EEC No —

No 016-029-00-7

ES: ácido *p*-toluensulfónico, conteniendo más del 5 % de H<sub>2</sub>SO<sub>4</sub>.DA: *p*-toluensulfonsyre, indeholdende mere end 5 % H<sub>2</sub>SO<sub>4</sub>.DE: *p*-Toluolsulfonsäure, mit mehr als 5 % H<sub>2</sub>SO<sub>4</sub>.EL: *p*-τολουολοσουλφονικό οξύ, που περιέχει πάνω από 5 % H<sub>2</sub>SO<sub>4</sub>.EN: *p*-toluenesulphonic acid, containing more than 5 % H<sub>2</sub>SO<sub>4</sub>.FR: acide *p*-toluènesulfonique, contenant plus de 5 % de H<sub>2</sub>SO<sub>4</sub>.IT: ácido *p*-toluensolfonico, contenente più del 5 % H<sub>2</sub>SO<sub>4</sub>.NL: *p*-tolueen sulfonzuur, met meer dan 5 % H<sub>2</sub>SO<sub>4</sub>.PT: ácido *p*-toluenossulfónico, contendo mais de 5 % H<sub>2</sub>SO<sub>4</sub>.

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C

R : 34

S : (1/2-)26-37/39-45

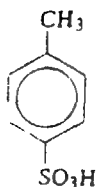
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	C; R 34
10 % ≤ C < 25 %	Xi; R 36/38

Cas No 104-15-4

EEC No 203-180-0


No 016-030-00-2

ES: ácido p-toluenosulfónico (con un contenido máximo de 5 % de H<sub>2</sub>SO<sub>4</sub>)DA: p-toluensulfonsyre (indeholdende højst 5 % H<sub>2</sub>SO<sub>4</sub>)DE: p-Toluolsulfonsäure (mit höchstens 5 % H<sub>2</sub>SO<sub>4</sub>)EL: π-τολουολοσουλφονικό οξύ (που περιέχει μέχρι και 5 % H<sub>2</sub>SO<sub>4</sub>)EN: p-toluenesulphonic acid (containing a maximum of 5 % H<sub>2</sub>SO<sub>4</sub>)FR: acide p-toluènesulfonique (contenant un maximum de 5 % H<sub>2</sub>SO<sub>4</sub>)IT: acido p-toluenosolfonico (contenente non più del 5 % H<sub>2</sub>SO<sub>4</sub>)NL: p-tolueensulfonzuur (met maximum 5 % H<sub>2</sub>SO<sub>4</sub>)PT: ácido p-toluenossulfónico (contendo no máximo 5 % H<sub>2</sub>SO<sub>4</sub>)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi 	R : 36/37/38  S : (2-)26-37
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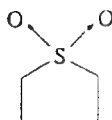
 Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

C ≥ 20%	Xi; R 36/37/38

Cas No 126-33-0

EEC No 204-783-1

No 016-031-00-8



- ES: 1,1-dióxido de tetraidrotiofeno; sulfolan  
 DA: thiolansulfon; tetrahydrothiophensulfon  
 DE: Tetrahydrothiophen-1,1-dioxid; Sulfolan  
 EL: sulpholane · 1,1-διοξείδιο του τετραύδροθειοφαίνιου  
 EN: tetrahydrothiophene-1,1-dioxide; sulpholane  
 FR: 1,1-dioxyde de tétrahydrothiophène; sulfolane  
 IT: tetraidrotiofene 1,1-diossido  
 NL: 1,1-dioxydetetrahydrothiofeen; sulfolan  
 PT: 1,1-dióxido de tetraidrotiofeno; sulfolana

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2-)25

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo*

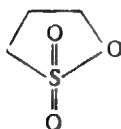
C ≥ 25 %	Xn; R 22

Cas No 1120-71-4

EEC No 214-317-9

No 016-032-00-3

NOTA E



ES: 1,3-propanosultona

DA: 1,3-propansulton

DE: 1,3-Propansulton

EL: 1,3-προπανοσουλτόνη

EN: 1,3-propanesultone

FR: 1,3-propanesultone

IT: 1,3-propansultone

NL: 1,3-propaansulton

PT: 1,3-propanossultona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

Xn; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R: 45-21/22

S: 53-45

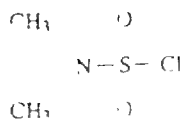
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 13360-57-1

EEC No 236-412-4

No 016-033-00-9

NOTA E




ES: cloruro de dimetilsulfamoilo  
 DA: dimethylsulfamoylchlorid  
 DE: Dimethylsulfamoylchlorid  
 EL: διμεθυλοσουλφαμουλο-χλωρίδιο  
 EN: dimethylsulfamoylchloride  
 FR: chlorure de diméthylsulfamoyle  
 IT: cloruro di dimetilsolfammoile  
 NL: dimethylsulfamoylchloride  
 PT: cloreto de dimetilssulfamoilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	T+; R 26	Xn; R 21/22	C, R 34
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

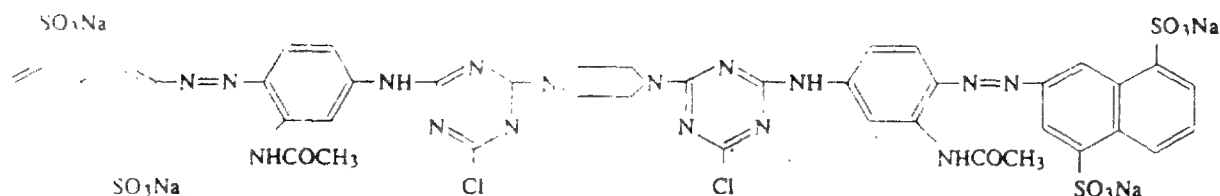
T+	
	R: 45-21/22-26-34 S: 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 81898-60-4

EEC No 400-010-9

No 016-034-00-4



- ES : 3,3'-(piperazina-1,4-diilbis((6-cloro-1,3,5-triazina-4,2-diil)imino(2-acetamido)-4,1-fenilenazo))bis(naftaleno-1,5-disulfonato) de tetrasodio
- DA : tetranatrium-3,3'-(piperazin-1,4-diylbis((6-chlor-1,3,5-triazin-4,2-diyl)imino(2-acetamido)-4,1-phenylenazo))-bis(naphthalen-1,5-disulfonat)
- DE : Tetranatrium-3,3'-(piperazin-1,4-diylbis((6-chlor-1,3,5-triazin-4,2-diyl)imino(2-acetamido)-4,1-phenylenazo))-bis(naphthalin-1,5-disulfonat)
- EL : 3,3'-(πιπεραζινο-1,4-διυλοδις((6-χλωρο-1,3,5-τριαζινο-4,2-δυλο)ιμινο(2-ακεταμιδο)-4,1-φαινυλεναζω))-δις(ναφθαλενο-1,5-δισουλφονικό) τετρανάτριο
- EN : tetrasodium 3,3'-(piperazine-1,4-diylbis((6-chloro-1,3,5-triazine-4,2-diyl)imino(2-acetamido)-4,1-phenyleneazo))-bis(naphthalene-1,5-disulphonate)
- FR : 3,3'-(pipérazine-1,4-diylbis((6-chloro-1,3,5-triazine-4,2-diyl)imino(2-acétamido)-4,1-phénylénazo))bis(naphtalène-1,5-disulfonate) de tétrasodium
- IT : 3,3'-(piperazin-1,4-diilbis((6-cloro-1,3,5-triazin-4,2-diil)imino(2-acetammido)-4,1-fenilenazo))bis(naftale-1,5-disulfonato) di tetrasodio
- NL : tetranatrium-3,3'-(piperazine-1,4-diylbis((6-chloor-1,3,5-triazine-4,2-diyl)imino(2-acetamido)-4,1-fenyleenazo))-bis(naftaleen-1,5-disulfonaat)
- PT : 3,3'-(piperazina-1,4-diilbis((6-cloro-1,3,5-triazina-4,2-diil)imino(2-acetamido)-4,1-fenilenazo))bis(naftaleno-1,5-dissulfonato) de tetrasódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

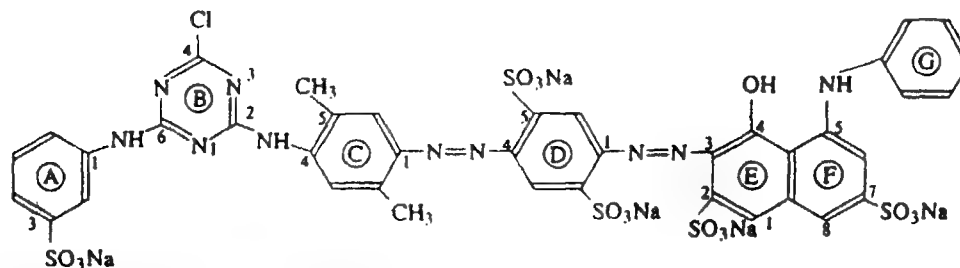
X <sub>1</sub>	
	R : 43
	S : (2-)22-24-37

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 400-120-7

No 016-035-00-X



ES : 5-anilino-3-(4-(4-(6-cloro-4-(3-sulfonatoanilino)-1,3,5-triazin-2-ilamino)-2,5-dimetilfenilazo)-2,5-disulfonatofenilazo)-4-hidroxinaftaleno-2,7-disulfonato de pentasodio

DA : pentanatrium-5-anilino-3-(4-(4-(6-chlor-4-(3-sulfonatoanilino)-1,3,5-triazin-2-ylamino)-2,5-dimethylphenylazo)-2,5-disulfonatophenylazo)-4-hydroxynaphthalen-2,7-disulfonat

DE : Pentanatrium-5-anilino-3-(4-(4-(6-chlor-4-(3-sulfonatoanilino)-1,3,5-triazin-2-ylamino)-2,5-dimethylphenylazo)-2,5-disulfonatophenylazo)-4-hydroxynaphthalen-2,7-disulfonat

EL : 5-ανιλίνο-3-(4-(4-(6-χλωρο-4-(3-σουλφονατοανιλίνο)-1,3,5-τριαζιν-2-υλαμινό)-2,5-διμεθυλοφαινυλαζω)-2,5-δισουλφονατοφαινυλαζω)-4-υδροξυναφθαλενο-2,7-δισουλφονικό πεντανάτριο

EN : pentasodium 5-anilino-3-(4-(4-(6-chloro-4-(3-sulphonatoanilino)-1,3,5-triazin-2-ylamino)-2,5-dimethylphenylazo)-2,5-disulphonatophenylazo)-4-hydroxynaphthalene-2,7-disulphonate

FR : 5-anilino-3-(4-(4-(6-chloro-4-(3-sulfonatoanilino)-1,3,5-triazine-2-ylamino)-2,5-diméthylphénylazo)-2,5-disulfonatophénylazo)-4-hydroxynaphthalène-2,7-disulfonate de pentasodium

IT : 5-anilino-3-(4-(4-(6-cloro-4-(3-solfonatoanilino)-1,3,5-triazin-2-ilammino)-2,5-dimetilfenilazo)-2,5-disolfonatofenilazo)-4-idrossinaftalen-2,7-disolfonato di pentasodio

NL : pentanatrium-5-anilino-3-(4-(4-(6-chloor-4-(3-sulfonatoanilino)-1,3,5-triazine-2-ylamino)-2,5-dimethylfenylazo)-2,5-disulfonatofenylazo)-4-hydroxynaftaleen-2,7-disulfonaat

PT : 5-anilino-3-(4-(4-(6-cloro-4-(3-sulfonatoanilino)-1,3,5-triazina-2-ilamino)-2,5-dimetilfenilazo)-2,5-dissulfonatofenilazo)-4-hidroxinaftaleno-2,7-dissulfonato de pentassódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi ; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

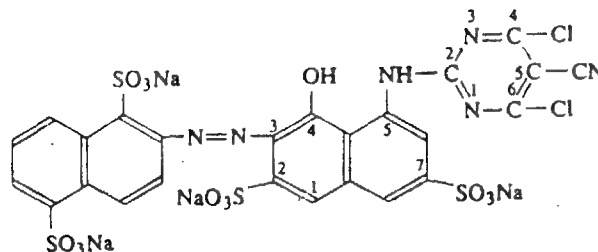
Xi	
	R : 36
	S : (2)-22-26

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Gas No —

EEC No 400-130-1

No 016-036-00-5



ES: 5'-(5-ciano-4,6-dicloropirimidin-2-ilamino)-4'-hidroxi-2,3'-azodinaftaleno-1,2',5,7'-disulfonato de tetrasodio

DA: tetranatrium-5'-(4,6-dichlor-5-cyanpyrimidin-2-ylamino)-4'-hydroxy-2,3'-azodinaphthalen-1,2',5,7'-disulfonat

DE: Tetranatrium-5'-(4,6-dichlor-5-cyanpyrimidin-2-ylamino)-4'-hydroxy-2,3'-azodinaphthalin-1,2',5,7'-disulfonat

EL: 5'-(4,6-διχλωρο-5-κυανοπυριμιδιν-2-υλαμινο)-4'-υδροξυ-2,3'-αζωδιναφθαλενο-1,2',5,7'-δισουλφονικό τετρανάτριο

EN: tetrasodium 5'-(4,6-dichloro-5-cyanopyrimidin-2-ylamino)-4'-hydroxy-2,3'-azodinaphthalene-1,2',5,7'-disulphonate

FR: 5'-(4,6-dichloro-5-cyanopyrimidine-2-ylamino)-4'-hydroxy-2,3'-azodinaphthalène-1,2',5,7'-disulfonate de tetrasodium

IT: 5'-(5-ciano-4,6-dicloropirimidin-2-ilammino)-4'-idrossi-2,3'-azodinaftalen-1,2',5,7'-disolfonato di tetrasodio

NL: tetranatrium-5'-(4,6-dichloor-5-cyaanpyrimidine-2-ylamino)-4'-hydroxy-2,3'-azodinaftaleen-1,2',5,7'-disulfonaat

PT: 5'-(5-ciano-4,6-dicloropirimidina-2-ilamino)-4'-hidroxi-2,3'-azodinaftaleno-1,2',5,7'-dissulfonato de tetrassódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

R 42

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 42-51/53 S : (2-)22-61

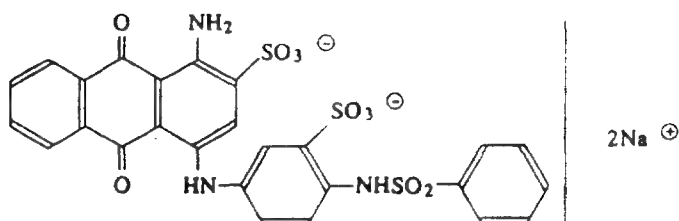
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 85153-93-1

EEC No 400-350-8

No 016-037-00-0



- ES : 1-amino-4-(4-benzenosulfonamido-3-sulfonatoanilino)antraquinona-2-sulfonato de disodio  
 DA : dinatrium-1-amino-4-(4-benzensulfonamido-3-sulfonatoanilino)anthraquinon-2-sulfonat  
 DE : Dinatrium-1-amino-4-(4-Benzolsulfonamido-3-sulfonatoanilino)anthrachinon-2-sulfonat  
 EL : 1-αμινό-4-(4-δενζολοσουλφοναμίδιο-3-σουλφονατοανιλίνο)ανθρακινονο-2-σουλφονικό δινάτριο  
 EN : disodium 1-amino-4-(4-benzenesulphonamido-3-sulphonatoanilino)anthraquinone-2-sulphonate  
 FR : 1-amino-4-(4-benzènesulfonamido-3-sulfonatoanilino)anthraquinone-2-sulfonate de disodium  
 IT : 1-ammino-4-(4-benzensolfonammido-3-solfonatoanilino)antrachinone-2-solfonato di disodio  
 NL : dinatrium-1-amino-4-(4-benzeensulfonamido-3-sulfonatoanilino)antrachinon-2-sulfonaat  
 PT : 1-amino-4-(4-benzenossulfonamido-3-sulfonatoanilino)antraquinona-2-sulfonato de dissódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xi ; R 41	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

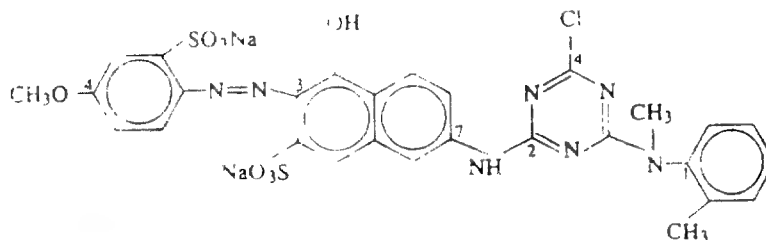
Xi	
	R : 41-52/53 S : (2-)26-39-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas-No 86393-35-3

EEC No 400-380-1

No 016-038-00-6



- ES: 6-((4-cloro-6-(N-metil)-2-toluidino)-1,3,5-triazin-2-ilamino)-1-hidroxi-2-(4-metoxi-2-sulfonatofenilazo)naftaleno-3-sulfonato de disodio
- DA: dinatrium-6-((4-chlor-6-(N-methyl)-2-toluidino)-1,3,5-triazin-2-ylamino)-1-hydroxy-2-(4-methoxy-2-sulfonatophenylazo)naphthalen-3-sulfonat
- DE: Dinatrium-6-((4-chlor-6-(N-methyl)-2-toluidino)-1,3,5-triazin-2-ylamino)-1-hydroxy-2-(4-methoxy-2-sulfonatophenylazo)naphthalin-3-sulfonat
- EL: 2-(4-μεθοxy-2-σουλφονατοφαινυλαζω)-1-υδροxy-6-((4-χλωρο-6-(N-μεθυλο)-2-τολουιδινο)-1,3,5-τριαζιν-2-υλαμινο)ναφθαλενο-3-σουλφονικό δινάτριο
- EN: disodium 6-((4-chloro-6-(N-methyl)-2-toluidino)-1,3,5-triazin-2-ylamino)-1-hydroxy-2-(4-methoxy-2-sulphonatophenylazo)naphthalene-3-sulphonate
- FR: 6-((4-chloro-6-(N-méthyl)-2-toluidino)-1,3,5-triazine-2-ylamino)-1-hydroxy-2-(4-méthoxy-2-sulfonatophénylazo)naphthalène-3-sulfonate de disodium
- IT: 6-((4-cloro-6-(N-metil)-2-toluidino)-1,3,5-triazin-2-ilammino)-1-idrossi-2-(4-metossi-2-solfonatofenilazo)naftaleno-3-solfonato di disodio
- NL: dinatrium-6-((4-chloor-6-(N-methyl)-2-toluidino)-1,3,5-triazine-2-ylamino)-1-hydroxy-2-(4-methoxy-2-sulfonatofenylazo)naftaleen-3-sulfonaat
- PT: 6-((4-cloro-6-(N-metil)-2-toluidino)-1,3,5-triazina-2-ilamino)-1-hidroxi-2-(4-metoxi-2-sulfonatofenilazo)naftaleno-3-sulfonato de dissódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

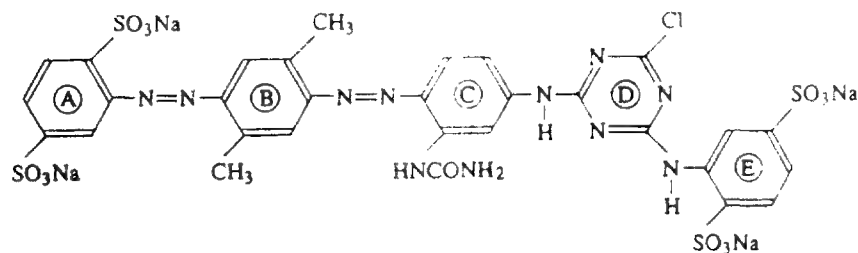
<p>Xi</p>	<p>R : 43</p> <p>S : (2-)22-24-37</p>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No 400-430-2

No 016-039-00-1



- ES : 2-(6-cloro-4-(4-(2,5-dimetil-4-(2,5-disulfonatofenilazo)fenilazo)-3-ureidoanilino)-1,3,5-triazin-2-ilamino)benzeno-1,4-disulfonato de tetrasodio
- DA : tetranatrium-2-(6-chlor-4-(4-(2,5-dimethyl-4-(2,5-disulfonatophenylazo)phenylazo)-3-ureidoanilino)-1,3,5-triazin-2-ylamino)benzen-1,4-disulfonat
- DE : Tetranatrium-2-(6-chlor-4-(4-(2,5-dimethyl-4-(2,5-disulfonatophenylazo)phenylazo)-3-ureidoanilino)-1,3,5-triazin-2-ylamino)benzol-1,4-disulfonat
- EL : 2-(4-(4-(2,5-διμεθυλο-4-(2,5-δισουλφονατοφαινυλαζω)φαινυλαζω)-3-ουρεΐδοανιλίνο)-6-χλωρο-1,3,5-τριαζιν-2-υλαμινό)βενζολο-1,4-δισουλφονικό τετρανάτριο
- EN : tetrasodium 2-(6-chloro-4-(4-(2,5-dimethyl-4-(2,5-disulphonatophenylazo)phenylazo)-3-ureidoanilino)-1,3,5-triazin-2-ylamino)benzene-1,4-disulphonate
- FR : 2-(6-chloro-4-(4-(2,5-diméthyl-4-(2,5-disulfonatophénylazo)phénylazo)-3-uréidoanilino)-1,3,5-triazine-2-ylamino)benzène-1,4-disulfonate de tétrasodium
- IT : 2-(6-cloro-4-(4-(2,5-dimetil-4-(2,5-disolfonatofenilazo)fenilazo)-3-ureidoanilino)-1,3,5-triazin-2-ilammino)benzen-1,4-disolfonato di tetrasodio
- NL : tetranatrium-2-(6-chloor-4-(4-(2,5-dimethyl-4-(2,5-disulfonatofenylazo)fenylazo)-3-ureidoanilino)-1,3,5-triazine-2-ylamino)benzeen-1,4-disulfonaat
- PT : 2-(6-cloro-4-(4-(2,5-dimetil-4-(2,5-dissulfonatofenilazo),fenilazo)-3-ureidoanilino)-1,3,5-triazina-2-ilamino)benzeno-1,4-dissulfonato de tetrassodio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 43
	S : (2-)22-24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

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EEC No 400-570-4

No 016-040-00-7

*Mezcla de, Blanding af, Gemisch aus, Μεγάμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de:*

- ES : 6-(2,4-dihidroksifenilazo)-3-(4-(4-(2,4-dihidroksifenilazo)anilino)-3-sulfonatofenilazo)-4-hidroksinaftaleno-2-sulfonato de disodio
- DA : dinatrium-6-(2,4-dihydroxyphenylazo)-3-(4-(4-(2,4-dihydroxyphenylazo)anilino)-3-sulfonatophenylazo)-4-hydroxynaphthalen-2-sulfonat
- DE : Dinatrium-6-(2,4-dihydroxyphenylazo)-3-(4-(4-(2,4-dihydroxyphenylazo)anilino)-3-sulfonatophenylazo)-4-hydroxynaphthalin-2-sulfonat
- EL : 6-(2,4-διυδροξυφαινυλαζω)-3-(4-(4-(2,4-διυδροξυφαινυλαζω)ανιλίνο)-3-σουλφονατοφαινυλαζω)-4-υδροξυναφθαλενο-2-σουλφονικό δινάτριο
- EN : disodium 6-(2,4-dihydroxyphenylazo)-3-(4-(4-(2,4-dihydroxyphenylazo)anilino)-3-sulphonatophenylazo)-4-hydroxynaphthalene-2-sulphonate
- FR : 6-(2,4-dihydroxyphénylazo)-3-(4-(4-(2,4-dihydroxyphénylazo)anilino)-3-sulfonatophénylazo)-4-hydroxynaphthalène-2-sulfonate de disodium
- IT : 6-(2,4-diidrossifenilazo)-3-(4-(4-(2,4-diidrossifenilazo)anilino)-3-solfonatofenilazo)-4-idrossinaftalen-2-solfonato di disodio
- NL : dinatrium-6-(2,4-dihydroxyfenylazo)-3-(4-(4-(2,4-dihydroxyfenylazo)anilino)-3-sulfonatofenylazo)-4-hydroxynaftaleen-2-sulfonaat
- PT : 6-(2,4-dihidroksifenilazo)-3-(4-(4-(2,4-dihidroksifenilazo)anilino)-3-sulfonatofenilazo)-4-hidroksinaftaleno-2-sulfonato de dissódio

*γ, og, und, και, and, et, e, en, e :*

- ES : 6-(2,4-diaminofenilazo)-3-(4-(4-(2,4-diaminofenilazo)anilino)-3-sulfonatofenilazo)-4-hidroksinaftaleno-2-sulfonato de disodio
- DA : dinatrium-6-(2,4-diaminophenylazo)-3-(4-(4-(2,4-diaminophenylazo)anilino)-3-sulfonatophenylazo)-4-hydroxynaphthalen-2-sulfonat
- DE : Dinatrium-6-(2,4-diaminophenylazo)-3-(4-(4-(2,4-diaminophenylazo)anilino)-3-sulfonatophenylazo)-4-hydroxynaphthalin-2-sulfonat
- EL : 6-(2,4-διαμινοφαινυλαζω)-3-(4-(4-(2,4-διαμινοφαινυλαζω)ανιλίνο)-3-σουλφονατοφαινυλαζω)-4-υδροξυναφθαλενο-2-σουλφονικό δινάτριο
- EN : disodium 6-(2,4-diaminophenylazo)-3-(4-(4-(2,4-diaminophenylazo)anilino)-3-sulphonatophenylazo)-4-hydroxynaphthalene-2-sulphonate
- FR : 6-(2,4-diaminophénylazo)-3-(4-(4-(2,4-diaminophénylazo)anilino)-3-sulfonatophénylazo)-4-hydroxynaphthalène-2-sulfonate de disodium
- IT : 6-(2,4-diamminofenilazo)-3-(4-(4-(2,4-diamminofenilazo)anilino)-3-solfonatofenilazo)-4-idrossinaftalen-2-solfonato di disodio
- NL : dinatrium-6-(2,4-diaminofenylazo)-3-(4-(4-(2,4-diaminofenylazo)anilino)-3-sulfonatofenylazo)-4-hydroxynaftaleen-2-sulfonaat
- PT : 6-(2,4-diaminofenilazo)-3-(4-(4-(2,4-diaminofenilazo)anilino)-3-sulfonatofenilazo)-4-hidroksinaftaleno-2-sulfonato de dissódio

Cas No

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EEC No 400-570-4

No 016-040-00-7

y, og, und, και, and, et, e, en, e:

- ES: 6-(2,4-dihidroxiifenilazo)-3-(4-(4-(7-(2,4-dihidroxiifenilazo)-1-idroxi-3-sulfonato-2-naftilazo)anilino)-3-sulfonatofenilazo)-4-idrossinaftaleno-2-sulfonato de trisodio
- DA: trinnatrium-6-(2,4-dihydroxyphenylazo)-3-(4-(4-(7-(2,4-dihydroxyphenylazo)-1-hydroxy-3-sulfonato-2-naphthylazo)-anilino)-3-sulfonatophenylazo)-4-hydroxynaphthalen-2-sulfonat
- DE: Trinnatrium-6-(2,4-dihydroxyphenylazo)-3-(4-(4-(7-(2,4-dihydroxyphenylazo)-1-hydroxy-3-sulfonato-2-naphthylazo)-anilino)-3-sulfonatophenylazo)-4-hydroxynaphthalin-2-sulfonat
- EL: 6-(2,4-διυδροξυφαινυλαζω)-3-(4-(4-(7-(2,4-διυδροξυφαινυλαζω)-3-σουλφονατο-1-υδροξυ-2-ναφθυλαζω)-ανιλινο)-3-σουλφονατοφαινυλαζω)-4-υδροξυναφθαλενο-2-σουλφονικό τρινάτριο
- EN: trisodium 6-(2,4-dihydroxyphenylazo)-3-(4-(4-(7-(2,4-dihydroxyphenylazo)-1-hydroxy-3-sulphonato-2-naphthylazo)-anilino)-3-sulphonatophenylazo)-4-hydroxynaphthalene-2-sulphonate
- FR: 6-(2,4-dihydroxyphénylazo)-3-(4-(4-(7-(2,4-dihydroxyphénylazo)-1-hydroxy-3-sulfonato-2-naphthylazo)anilino)-3-sulfonatophénylazo)-4-hydroxynaphtalène-2-sulfonate de trisodium
- IT: 6-(2,4-diidrossifenilazo)-3-(4-(4-(7-(2,4-diidrossifenilazo)-1-idrossi-3-solfonato-2-naftilazo)anilino)-3-solfonatofenilazo)-4-idrossinaftalen-2-solfonato di trisodio
- NL: trinnatrium-6-(2,4-dihydroxyfenylazo)-3-(4-(4-(7-(2,4-dihydroxyfenylazo)-1-hydroxy-3-sulfonato-2-naftylazo)anilino)-3-sulfonatofenylazo)-4-hydroxynaftaleen-2-sulfonaat
- PT: 6-(2,4-dihidroxi'-nilazo)-3-(4-(4-(7-(2,4-dihidroxiifenilazo)-1-idroxi-3-sulfonato-2-naftilazo)anilino)-3-sulfonatofenilazo)-4-idrossinaftaleno-2-sulfonato de trissódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

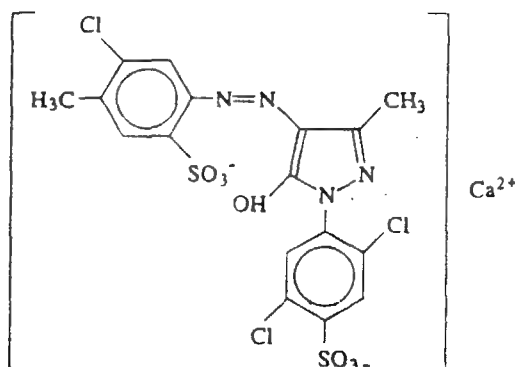
Xi	
	R : 36
	S : (2-)26

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 400-710-4

No 016-041-00-2



- ES: 2,5-dicloro-4-(4-((5-cloro-4-metil-2-sulfonatofenil)azo)-5-idrossi-3-metilpirazol-1-il)bencensulfonato de calcio
- DA: calcium-2,5-dichlor-4-(4-((5-chlor-4-methyl-2-sulfonatophenyl)azo)-5-hydroxy-3-methylpyrazol-1-yl)benzensulfonat
- DE: Calcium-2,5-dichlor-4-(4-((5-chlor-4-methyl-2-sulfonatophenyl)azo)-5-hydroxy-3-methylpyrazol-1-yl)benzolsulfonat
- EL: 4-(3-μεθυλ-4-((4-μεθυλο-2-σουλφονατο-5-χλωροφαινυλ)αζω)-5-υδροξυπυραζολ-1-υλο)-2,5-διχλωροδεζολοσσουλφονικό ασβεστιο
- EN: calcium 2,5-dichloro-4-(4-((5-chloro-4-methyl-2-sulphonatophenyl)azo)-5-hydroxy-3-methylpyrazol-1-yl)benzenesulphonate
- FR: 2,5-dichloro-4-(4-((5-chloro-4-méthyl-2-sulfonatophényl)azo)-5-hydroxy-3-méthylpyrazole-1-yl)benzènesulfonate de calcium
- IT: 2,5-dicloro-4-(4-((5-cloro-4-metil-2-solfonatofenil)azo)-5-idrossi-3-metilpirazol-1-il)benzensolfonato di calcio
- NL: calcium-2,5-dichloor-4-(4-((5-chloor-4-methyl-2-sulfonatofenyl)azo)-5-hydroxy-3-methylpyrazool-1-yl)benzeensulfonaat
- PT: 2,5-dicloro-4-(4-((5-cloro-4-metil-2-sulfonatofenil)azo)-5-idrossi-3-metilpirazole-1-il)benzenossulfonato de cálcio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

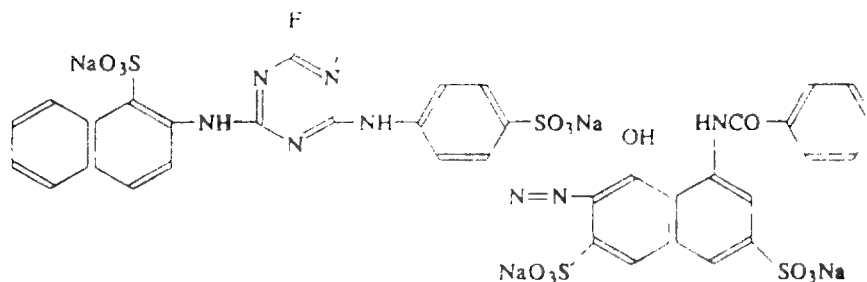
Xn	
	R : 20
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 85665-97-0

EEC No 400-790-0

No 016-042-00-8



- ES : 5-benzamido-3-(5-(4-fluoro-6-(1-sulfonato-2-naftilamino)-1,3,5-triazin-2-ilamino)-2-sulfonatofenilazo)-4-idrossinaftaleno-2,7-disulfonato de tetrasodio
- DA : tetranatrium-5-benzamido-3-(5-(4-fluor-6-(1-sulfonato-2-naphthylamino)-1,3,5-triazin-2-ylamino)-2-sulfonatophenylazo)-4-hydroxynaphthalen-2,7-disulfonat
- DE : Tetranatrium-5-benzamido-3-(5-(4-fluor-6-(1-sulfonato-2-naphthylamino)-1,3,5-triazin-2-ylamino)-2-sulfonatophenylazo)-4-hydroxynaphthalin-2,7-disulfonat
- EL : 5-δενζαμιδο-3-(5-(6-(1-σουλφονατο-2-ναφθυλαμινο)-4-φλορο-1,3,5-τριαζιν-2-υλαμινο)-2-σουλφονατοφαινυλαζω)-4-υδροξυναφθαλενο-2,7-δισουλφονικό τετρανάτριο
- EN : tetrasodium 5-benzamido-3-(5-(4-fluoro-6-(1-sulphonato-2-naphthylamino)-1,3,5-triazin-2-ylamino)-2-sulphonatophenylazo)-4-hydroxynaphthalene-2,7-disulphonate
- FR : 5-benzamido-3-(5-(4-fluoro-6-(1-sulfonato-2-naphthylamino)-1,3,5-triazine-2-ylamino)-2-sulfonatophénylazo)-4-hydroxynaphthalène-2,7-disulfonate de tétrasodium
- IT : 5-benzammido-3-(5-(4-fluoro-6-(1-solfonato-2-naftilammino)-1,3,5-triazin-2-ilammino)-2-solfonatofenilazo)-4-idrossinaftalen-2,7-disolfonato di tetrasodio
- NL : tetranatrium-5-benzamido-3-(5-(4-fluor-6-(1-sulfonato-2-naftylamino)-1,3,5-triazine-2-ylamino)-2-sulfonatofenylazo)-4-hydroxynaftaleen-2,7-disulfonaat
- PT : 5-benzamido-3-(5-(4-fluoro-6-(1-sulfonato-2-naftilamino)-1,3,5-triazina-2-ilamino)-2-sulfonatofenilazo)-4-idrossinaftaleno-2,7-dissulfonato de tetrassódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi ; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36/38-43
	S : (2-)22-24/25-37

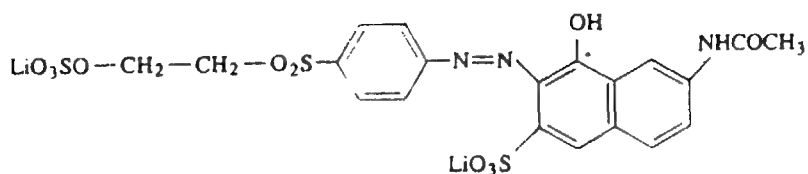
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cis. No

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EEC No 401-010-1

No 016-043-00-3



ES : 6-acetamido-4-hidroxi-3-(4-((2-sulfonatooxi)etilsulfonyl)fenilazo)naftaleno-2-sulfonato de dilitio

DA : dilithium-6-acetamido-4-hydroxy-3-(4-((2-sulfonatooxy)ethylsulfonyl)phenylazo)naphthalen-2-sulfonat

DE : Dilithium-6-acetamido-4-hydroxy-3-(4-((2-sulfonatooxy)ethylsulfonyl)phenylazo)naphthalin-2-sulfonat

EL : 6-ακεταμιδο-3-(4-((2-σουλφονατοοξύ)αιθυλοσουλφονυλο)φαινυλαζω)-4-υδροξυναφθαλενο-2-σουλφονικό δίλιθιο

EN : dilithium 6-acetamido-4-hydroxy-3-(4-((2-sulphonatooxy)ethylsulphonyl)phenylazo)naphthalene-2-sulphonate

FR : 6-acétamido-4-hydroxy-3-(4-((2-sulfonatooxy)éthylsulfonyl)phénylazo)naphthalène-2-sulfonate de dilithium

IT : 6-acetammido-4-idrossi-3-(4-((2-solfonatoossi)etilsolfonil)fenilazo)naftalen-2-solfonato di dilitio

NL : dilithium-6-aceetamido-4-hydroxy-3-(4-((2-sulfonatooxy)ethylsulfonyl)fenylazo)naftaleen-2-sulfonaat

PT : 6-acetamido-4-hidroxi-3-(4-((2-sulfonatooxi)etilsulfonyl)fenilazo)naftaleno-2-sulfonato de dilitio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43

S : (2-)24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

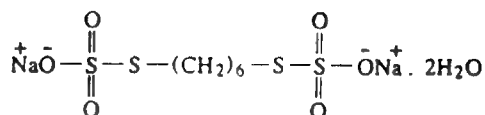



Cas No

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EEC No 401-320-7

No 016-044-00-9



- ES: S,S'-hexano-1,6-diildi(tiosulfato) de disodio, dihidrato  
 DA: dinatrium-S,S'-hexan-1,6-diyldi(thiosulfat)dihydrat  
 DE: Dinatrium-S,S'-hexan-1,6-diyldi(thiosulfat)dihydrat  
 EL: S,S'-εξανο-1,6-διυλοδι(θειοθειικό) δινάτριο διυδρικό  
 EN: disodium S,S'-hexane-1,6-diylldi(thiosulphate) dihydrate  
 FR: S,S'-hexane-1,6-diyldi(thiosulfate) de disodium, dihydrate  
 IT: S,S'-esan-1,6-diildi(tiosolfato) di disodio, diidrato  
 NL: dinatrium-S,S'-hexaan-1,6-diyldi(thiosulfaat)dihydraat  
 PT: S,S'-hexano-1,6-diildi(tiosulfato) de disódio, dihidrato

*Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 43

R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 43-52/53

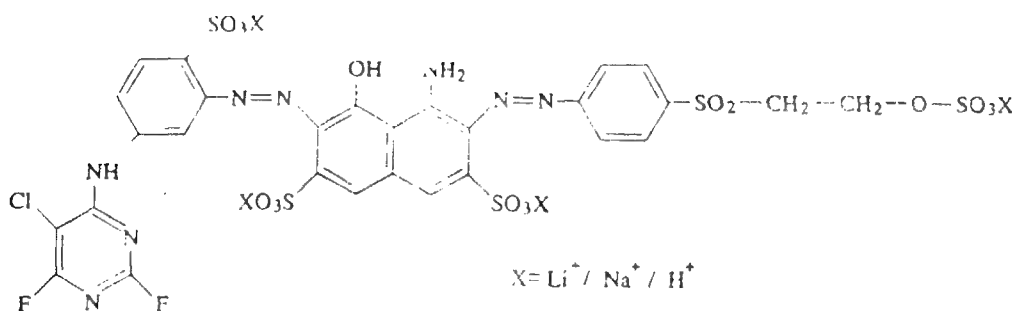
S : (2-)22-24-37-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 108624-00-6

EEC No 401-560-2

No 016-045-00-4



ES : 4-amino-6-(5-(5-cloro-2,6-difluoropirimidin-4-ilamino)-2-sulfonatofenilazo)-5-idrossi-3-(4-(2-(sulfonatoossi)-etilsulfonil)fenilazo)naftaleno-2,7-disulfonato de litio y de sodio y de hidrogeno

DA : lithiumnatriumhydrogen-4-amino-6-(5-(5-chlor-2,6-difluorpyrimidin-4-ylamino)-2-sulfonatophenylazo)-5-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)naphthalen-2,7-disulfonat

DE : Lithiumnatriumhydrogen-4-amino-6-(5-(5-chlor-2,6 difluorpyrimidin-4-ylamino)-2-sulfonatophenylazo)-5-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl) phenylazo)naphthalin-2,7-disulfonat

EL : 4-αμινό-6-(5-(2,6-διφθορο-5-χλωροπυριμιδιν-4-υλαμινό)-2-αζουλφονατοφαινυλαζω)-3-(4-(2-(σουλφονατοοξύ)-αιθυλοσουλφονυλο)φαινυλαζω)-5-υδροξύναφθαλενο-2,7-δισουλφονικό λιθιο νάτριο υδρογόνο

EN : lithium sodium hydrogen 4-amino-6-(5-(5-chloro-2,6-difluoropyrimidin-4-ylamino)-2-sulphonatophenylazo)-5-hydroxy-3-(4-(2-(sulphonatooxy)ethylsulphonyl)phenylazo)naphthalene-2,7-disulphonate

FR : 4-amino-6-(5-(5-chloro-2,6-difluoropyrimidine-4-ylamino)-2-sulfonatophénylazo)-5-hydroxy 3-(4-(2-(sulfonatooxy)-ethylsulfonyl)phénylazo)naphthalène-2,7-disulfonate de lithium, de sodium et d'hydrogène

IT : 4-ammino-6-(5-(5-cloro-2,6-difluoropirimidin-4-ilammino)-2-solfonatofenilazo)-5-idrossi-3-(4-(2-(solfonatoossi)-etilsolfonil)fenilazo)naftalen 2,7-disolfonato di litio e sodio e idrogeno

NL : lithiumnatriumhydrogen-4-amino-6-(5-(5-chloor-2,6 difluorpyrimidine-4-ylamino) 2-sulfonatofenylazo)-5-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)fenylazo)naftaleen-2,7-disulfonaat

PT : 4-amino-6-(5-(5-cloro-2,6-difluoropirimidina-4-ilamino)-2-sulfonatofenilazo)-5-idrossi-3-(4-(2-(sulfonatoossi)-etilsulfonil)fenilazo)naftaleno-2,7-dissulfonato de litio e sódio e hidrogenio

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43

S : (2)-22-24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7681-38-1

EEC No 231-665-7

No 016-046-00-X



ES: hidrogenosulfato de sodio

DA: natriumhydrogensulfat

DE: Natriumhydrogensulfat

EL: υδρογονοθειικό νάτριο

EN: sodium hydrogensulphate

FR: hydrogénosulfate de sodium

IT: idrogenosolfato di sodio; sodio bisolfato

NL: natriumhydrogeensulfaat

PT: hidrogénossulfato de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

C; R 34

Xi; R 37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R: 34-37

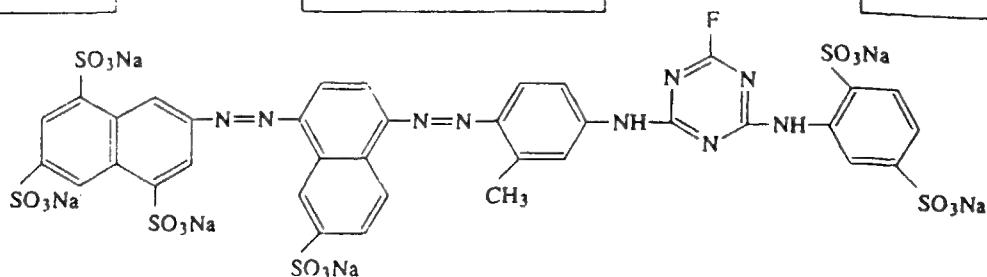
S: (1/2-)26-36/37/39-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 85665-96-9

EEC No 401-650-1

No 016-047-00-5



- ES : 7-(4-(4-(4-(2,5-disulfonatoanilino)-6-fluoro-1,3,5-triazin-2-ilamino)-2-metilfenilazo)-7-sulfonatonafilazo)naftaleno-1,3,5-trisulfonato de hexasodio
- DA : hexanatrium-7-(4-(4-(4-(2,5-disulfonatoanilino)-6-fluor-1,3,5-triazin-2-ylamino)-2-methylphenylazo)-7-sulfonatonaphthylazo)naphthalen-1,3,5- trisulfonat
- DE : Hexanatrium-7-(4-(4-(4-(2,5-disulfonatoanilino)-6-fluor-1,3,5-triazin-2-ylamino)-2-methylphenylazo)-7-sulfonatonaphthylazo)naphthalin-1,3,5- trisulfonat
- EL : 7-(4-(4-(4-(2,5-δισουλφονατοανιλίνο)-6-φθορο-1,3,5-τριαζιν-2-υλαμινό)-2-μεθυλοφαινυλαζω)-7-σουλφονατοναφθυλαζω)ναφθαλενο-1,3,5- τρισουλφονικό εξανάτριο
- EN : hexasodium 7-(4-(4-(4-(2,5-disulphonatoanilino)-6-fluoro-1,3,5-triazin-2-ylamino)-2-methylphenylazo)-7-sulphonatonaphthylazo)naphthalene-1,3,5- trisulphonate
- FR : 7-(4-(4-(4-(2,5-disulfonatoanilino)-6-fluoro-1,3,5-triazine-2-ylamino)-2-méthylphénylazo)-7-sulfonatonaphthylazo)-naphthalène-1,3,5- trisulfonate d'hexasodium
- IT : 7-(4-(4-(4-(2,5-disolfonatoanilino)-6-fluoro-1,3,5-triazin-2-ilammino)-2-metilfenilazo)-7-solfonatonafilazo)naftalen-1,3,5-trisolfonato di esassodio
- NL : hexanatrium-7-(4-(4-(4-(2,5-disulfonatoanilino)-6-fluor-1,3,5-triazine-2-ylamino)-2-methylfenylazo)-7-sulfonatonafthylazo)naftaleen-1,3,5- trisulfonaat
- PT : 7-(4-(4-(4-(2,5-dissulfonatoanilino)-6-fluoro-1,3,5-triazina-2-ilamino)-2-metilfenilazo)-7-sulfonatonafilazo)naftaleno-1,3,5-trissulfonato de hexassódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43

S : (2-)22-24-37

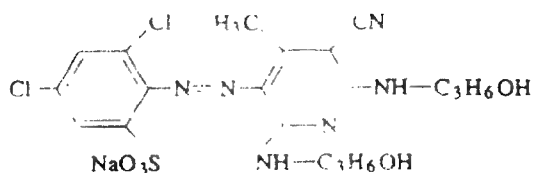
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No

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EEC No 401-870-8

No 016-048-00-0



- ES : 3,5-dicloro-2-(5-ciano-2,6-bis(3-idroxiopropilamino)-4-metilpiridin-3-ilazo)bencensulfonato de sodio  
 DA : natrium-3,5-dichlor-2-(5-cyan-2,6-bis(3-hydroxypropylamino)-4-methylpyridin-3-ylazo)benzensulfonat  
 DE : Natrium-3,5-dichlor-2-(5-cyan-2,6-bis(3-hydroxypropylamino)-4-methylpyridin-3-ylazo)benzolsulfonat  
 EL : 2-(5-κυανο-4-μεθυλο-2,6-δισ(3-υδροξυπροπυλαμινο)πυριδιν-3-υλαζω)-3,5-διχλωροβενζοοσουλφονικό νάτριο  
 EN : sodium 3,5-dichloro-2-(5-cyano-2,6-bis(3-hydroxypropylamino)-4-methylpyridin-3-ylazo)benzenesulphonate  
 FR : 3,5-dichloro-2-(5-cyano-2,6-bis(3-hydroxypropylamino)-4-méthylpyridine-3-ylazo)benzènesulfonate de sodium  
 IT : 3,5-dicloro-2-(5-ciano-2,6-bis(3-idrossipropilammino)-4-metilpiridin-3-ilazo)benzensolfonato di sodio  
 NL : natrium-3,5-dichloor-2-(5-cyaan-2,6-bis(3-hydroxypropylamino)-4-methylpyridine-3-ylazo)benzeensulfonaat  
 PT : 3,5-dicloro-2-(5-ciano-2,6-bis(3-idroxiopropilamino)-4-metilpiridina-3-ilazo)benzenossulfonato de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 41

R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 41-52/53

S : (2-)26-61

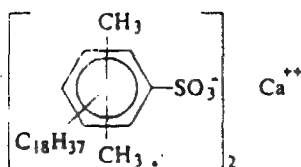
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No

—

EEC No 402-040-8

No 016-049-00-6



ES: octadecilxilensulfonato de calcio

DA: calciumoctadecylxylensulfonat

DE: Calciumoctadecylxylolsulfonat

EL: δεκαοκτυλοξυλολοσουλφωνικό ασβέστιο

EN: calcium octadecylxylenesulphonate

FR: octadécylxylènesulfonate de calcium

IT: ottadecilxilensolfonato di calcio

NL: calciumoctadecylxyleensulfonaat


PT: octadecilxilenossulfonato de cálcio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

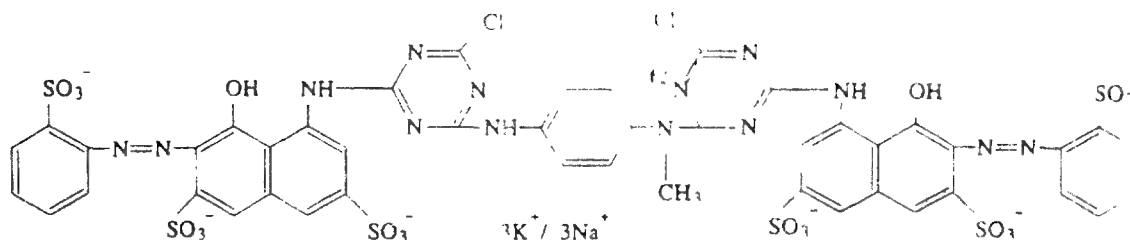
C	N	
		R : 34-51/53
		S : (1/2-)26-28-36/37/39-45-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 402-150-6

No 016-050-00-1



- ES : 5-(4-cloro-6-(N-(4-(4-cloro-6-(5-hidroxi-2,7-disulfonato-6-(2-sulfonatofenilazo)-4-naftilamino)-1,3,5-triazin-2-ilamino)fenil-N-metil) amino)-1,3,5-triazin-2-ilamino)-4-hidroxi-3-(2-sulfonatofenilazo)naftaleno-2,7-disulfonato di potasio y sodio
- DA : kaliumnatrium-5-(4-chlor-6-(N-(4-(4-chlor-6-(5-hydroxy-2,7-disulfonato-6-(2-sulfonatophenylazo)-4-naphthylamino)-1,3,5-triazin-2-ylamino)phenyl- N-methyl)amino)-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(2-sulfonatophenylazo)naphthalen-2,7-disulfonat
- DE : Kaliumnatrium-5-(4-chlor-6-(N-(4-(4-chlor-6-(5-hydroxy-2,7-disulfonato-6-(2-sulfonatophenylazo)-4-naphthylamino)-1,3,5-triazin-2-ylamino)phenyl- N-methyl)amino)-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(2-sulfonatophenylazo)naphthalen-2,7-disulfonat
- EL : 5-(6-(N-(4-(6-(2,7-δισουλφονατο-6-(2-σουλφονατοφαινυλαζω)-5-υδροξυ-4-ναφθυλαμιν)-4-χλωρο-1,3,5-τριαζιν-2-υλαμιν)-φαινυλο-N-μεθυλ)αμιν)-4-χλωρο-1,3,5-τριαζιν-2-υλαμιν)-3-(2-σουλφονατοφαινυλαζω)-4-υδροξυναφθαλενο-2,7-δισουλφονικό κάλιο νάτριο
- EN : potassium sodium 5-(4-chloro-6-(N-(4-(4-chloro-6-(5-hydroxy-2,7-disulphonato-6-(2-sulphonatophenylazo)-4-naphthylamino)-1,3,5-triazin-2-ylamino) phenyl- N-methyl)amino)-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(2-sulphonatophenylazo)naphthalene-2,7-disulphonat
- FR : 5-(4-chloro-6-(N-(4-(4-chloro-6-(5-hydroxy-2,7-disulfonato-6-(2-sulfonatophénylazo)-4-naphthylamino)-1,3,5-triazine-2-ylamino)phényl-N-méthyl)amino)-1,3,5-triazine-2-ylamino)-4-hydroxy-3-(2-sulfonatophénylazo)naphthalène-2,7-disulfonate de potassium/sodium
- IT : 5-(4-cloro-6-(N-(4-(4-cloro-6-(5-idrossi-2,7-disolfonato-6-(2-solfonatofenilazo)-4-naftilammino)-1,3,5-triazir-2-ilammino)fenil-N-metil) ammino)-1,3,5-triazin-2-ilammino)-4-idrossi-3-(2-solfonatofenilazo)naftalen-2,7-disulfonato di potassio e sodio
- NL : kaliumnatrium-5-(4-chloor-6-(N-(4-(4-chloor-6-(5-hydroxy-2,7-disulfonato-6-(2-sulfonatofenylazo)-4-naftylamino)-1,3,5-triazine-2-ylamino)fenyl- N-methyl)amino)-1,3,5-triazine-2-ylamino)-4-hydroxy-3-(2-sulfonatofenylazo)-naftaleen-2,7-disulfonaat
- PT : 5-(4-cloro-6-(N-(4-(4-cloro-6-(5-hidroxi-2,7-dissulfonato-6-(2-sulfonatofenilazo)-4-naftilamino)-1,3,5-triazina-2-ilamino)fenil-N-metil) amino)-1,3,5-triazina-2-ilamino)-4-hidroxi-3-(2-sulfonatofenilazo)naftaleno-2,7-dissulfonato de potassio e sodio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

Xi ; R 36

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36-43

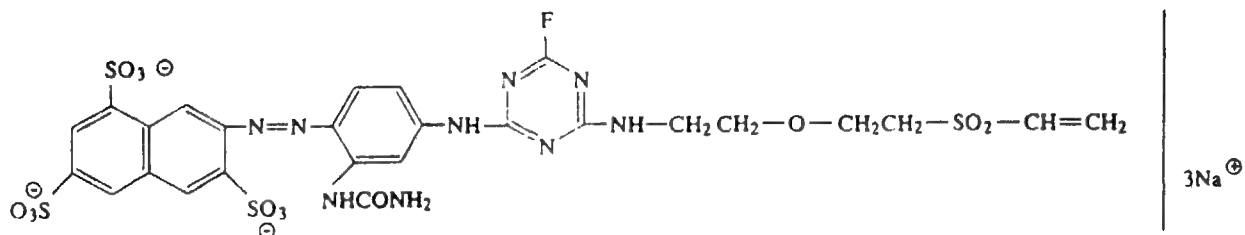
S : (2-)22-24-26-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 106359-91-5

EEC No 402-170-5

No 016-051-00-7



- ES : 7-(4-(6-fluoro-4-(2-(2-vinilsulfoniletoxi)etilamino)-1,3,5-triazin-2-ilamino)-2-ureidofenilazo)naftaleno-1,3,6-trisulfonato de trisodio
- DA : trinatrium-7-(4-(6-fluor-4-(2-(2-vinylsulfonylethoxy)ethylamino)-1,3,5-triazin-2-ylamino)-2-ureidophenylazo)-naphthalen-1,3,6- trisulfonat
- DE : Trinatrium-7-(4-(6-fluor-4-(2-(2-vinylsulfonylethoxy)ethylamino)-1,3,5-triazin-2-ylamino)-2-ureidophenylazo)-naphthalin-1,3,6- trisulfonat
- EL : 7-(4-(4-(2-(2-δινυλοσουλφονυλαιθοξυ)αιθυλαμινο)-6-φλορο-1,3,5-τριαζιν-2-υλαμινο)-2-ουρείδοφαινυλαζω)-ναφθαλενο-1,3,6-τρισουλφονικό τρινάτριο
- EN : trisodium 7-(4-(6-fluoro-4-(2-(2-vinylsulphonylethoxy)ethylamino)-1,3,5-triazin-2-ylamino)-2-ureidophenylazo)-naphthalene-1,3,6- trisulphonate
- FR : 7-(4-(6-fluoro-4-(2-(2-vinylsulfonylethoxy)éthylamino)-1,3,5-triazine-2-ylamino)-2-uréidophénylazo)naphthalène-1,3,6-trisulfonate de trisodium
- IT : 7-(4-(6-fluoro-4-(2-(2-vinilsolfoniletoxi)etilammino)-1,3,5-triazin-2-ilammino)-2-ureidofenilazo)naftaleno-1,3,6-trisolfonato di trisodio
- NL : trinatrium-7-(4-(6-fluor-4-(2-(2-vinylsulfonylethoxy)ethylamino)-1,3,5-triazine-2-ylamino)-2-ureidofenylazo)-naftaleen-1,3,6- trisulfonaat
- PT : 7-(4-(6-fluoro-4-(2-(2-vinilsulfoniletoxi)etilamino)-1,3,5-triazina-2-ilamino)-2-ureídofenilazo)naftaleno-1,3,6-trissulfonato de trissódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>Xi</p>	<p>R : 43</p> <p>S : (2-)22-24-37</p>
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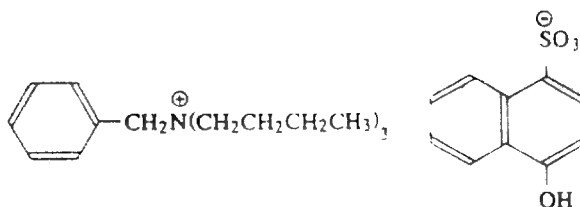
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 102561-46-6

EEC No 402-240-5

No 016-052-00-2



ES: 4-hidroxi-naftaleno-1-sulfonato de benciltributilamonio

DA: benzyltributylammonium-4-hydroxynaphthalen-1-sulfonat

DE: Benzyltributylammonium-4-hydroxynaphthalin-1-sulfonat

EL: 4-υδροξυναφθαλενο-1-σουλφωνικό δεινζυλοτριβουτυλαμμώνιο

EN: benzyltributylammonium 4-hydroxynaphthalene-1-sulphonate

FR: 4-hydroxynaphthalène-1-sulfonate de benzyltributylammonium

IT: 4-idrossinaftalen-1-solfonato di benziltributilammonio

NL: benzyltributylammonium-4-hydroxynaftaleen-1-sulfonaat

PT: 4-hidroxi-naftaleno-1-sulfonato de benziltributilamónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

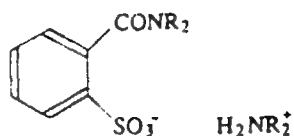
Xn	N	
		R : 20-51/53
		S : (2-)22-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 402-460-1

No 016-053-00-8

R = C<sub>16</sub>H<sub>33</sub> / C<sub>18</sub>H<sub>37</sub>

- ES: 2-((C16 o C18-n-alkil)(C16 o C18-n-alkil)carbamoil)bencensulfonato de (C16 o C18-n-alkil)(C16 o C18-n-alkil)amonio
- DA: (C16 eller C18-n-alkyl)(C16 eller C18-n-alkyl)ammonium-2-((C16 eller C18-n-alkyl)(C16 eller C18-n-alkyl)-carbamoil)benzensulfonat
- DE: (C16 oder C18-n-Alkyl)(C16 oder C18-n-alkyl)ammonium-2-((C16 oder C18-n-alkyl)(C16 oder C18-n-alkyl)-carbamoil)benzolsulfonat
- EL: 2-((C16 ή C18-n-αλκυλο)(C16 ή C18-n-αλκυλο)καρβαμουλο)δενζολοσσουλφονικό(C16 ή C18-n-αλκυλο)(C16 ή C18-n-αλκυλο)αμμώνιο
- EN: (C16 or C18-n-alkyl)(C16 or C18-n-alkyl)ammonium 2-((C16 or C18-n-alkyl)(C16 or C18-n-alkyl)carbamoyl)-benzenesulphonate
- FR: 2-((C16 ou C18-n-alkyl)(C16 ou C18-n-alkyl)carbamoil)benzènesulfonate de (C16 ou C18-n-alkyl)(C16 ou C18-n-alkyl)ammonium
- IT: 2-(C16 o C18-n-alkil)(C16 o C18-n-alkil)carbamoil)benzensolfonato di (C16 o C18-n-alkil)(C16 o C18-n-alkil)ammonio
- NL: (C16 of C18-n-alkyl)(C16 of C18-n-alkyl)ammonium-2-((C16 of C18-n-alkyl)(C16 of C18-n-alkyl)carbamoil)-benzeensulfonaat
- PT: 2-((C16 ou C18-n-alkil)(C16 ou C18-n-alkil)carbamoil)benzenossulfonato de (C16 ou C18-n-alkil)(C16 ou C18-n-alkil)amónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 38

R 43

R 53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 38-43-53

S : (2-)24-37-61

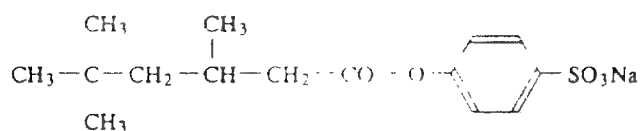
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

—

EEC No 400-030-8

No 016-054-00-3



ES: 4-(2,4,4-trimetilpentilcarboniloxi)benzenosulfonato de sodio

DA: natrium-4-(2,4,4-trimethylpentylcarbonyloxy)benzensulfonat

DE: Natrium-4-(2,4,4-trimethylpentylcarbonyloxy)benzolsulfonat

EL: 4-(2,4,4-τριμεθυλοπεντυλοκαρβονυλοξυ)δενζολοσουλφονικό νάτριο

EN: sodium 4-(2,4,4-trimethylpentylcarbonyloxy)benzenesulfonate

FR: 4-(2,4,4-triméthylpentylcarbonyloxy)benzènesulfonate de sodium

IT: 4-(2,4,4-trimetilpentilcarbonilossi)benzensolfonato di sodio

NL: natrium-4-(2,4,4-trimethylpentylcarbonyloxy)benzeensulfonaat

PT: 4-(2,4,4-trimetilpentilcarboniloxi)benzenossulfonato de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

T; R 23-48/23

Xn; R 22

Xi; R 36/37

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R: 22-23-36/37-43-48/23

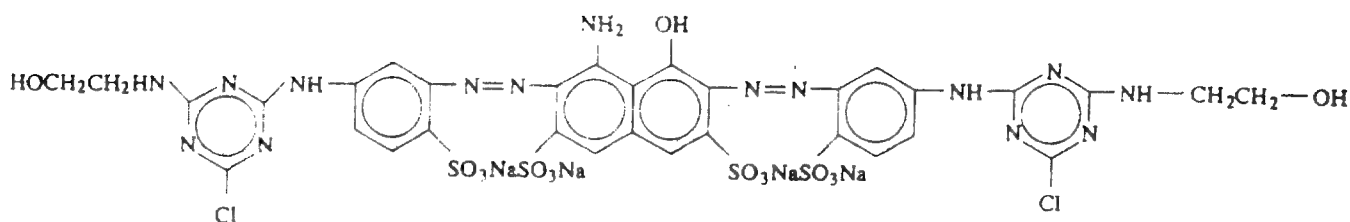
S: (1/2)-22-24-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 400-510-7

No 016-055-00-9



ES: 4-amino-3,6-bis(5-(6-cloro-4-(2-hidroxiethylamino)-1,3,5-triazin-2-ilamino)-2-sulfonatofenilazo)-5-hidroxi-naftaleno-2,7-sulfonato de tetrasodio (conteniendo > 35 % de cloruro y de acetato de sodio)

DA: tetranatrium-4-amino-3,6-bis(5-(6-chlor-4-(2-hydroxyethylamino)-1,3,5-triazin-2-ylamino)-2-sulfonatophenylazo)-5-hydroxynaphthalen-2,7-sulfonat (der indeholder > 35 % natriumchlorid og natriumacetat)

DE: Tetranatrium-4-amino-3,6-bis(5-(6-chlor-4-(2-hydroxyethylamino)-1,3,5-triazin-2-ylamino)-2-sulfonatophenylazo)-5-hydroxynaphthalin-2,7-sulfonat (mit > 35 % Natriumchlorid und Natriumacetat)

EL: 4-αμινό-3,6-δισ(5-(4-(2-υδροξυαιθυλαμινό)-6-χλωρο-1,3,5-τριαζιν-2-υλαμινό)-2-σουλφονατοφαινυλαζω)-5-υδροξυναφθαλενο-2,7-σουλφονικό τετρανάτριο (περιέχον > 35% χλωρίδιο του νατρίου και οξικό νάτριο)

EN: tetrasodium 4-amino-3,6-bis(5-(6-chloro-4-(2-hydroxyethylamino)-1,3,5-triazin-2-ylamino)-2-sulfonatophenylazo)-5-hydroxynaphthalene-2,7-sulfonate (containing > 35 % sodium chloride and sodium acetate)

FR: 4-amino-3,6-bis(5-(6-chloro-4-(2-hydroxyéthylamino)-1,3,5-triazine-2-ylamino)-2-sulfonatophénylazo)-5-hydroxynaphthalène-2,7-sulfonate de tétrasodium (contenant > 35 % de chlorure et d'acétate de sodium)

IT: 4-ammino-3,6-bis(5-(6-cloro-4-(2-idrossietilammino)-1,3,5-triazin-2-ilammino)-2-solfonatofenilazo)-5-idrossinaftalen-2,7-solfonato di tetrasodio (contenente > 35 % di cloruro e acetato di sodio)

NL: tetranatrium-4-amino-3,6-bis(5-(6-chloor-4-(2-hydroxyethylamino)-1,3,5-triazine-2-ylamino)-2-sulfonatofenylazo)-5-hydroxynaphtaleen-2,7-sulfonaat (bevattende > 35 % natriumchloride en natriumacetaat)

PT: 4-amino-3,6-bis(5-(6-cloro-4-(2-hidroxiethylamino)-1,3,5-triazina-2-ilamino)-2-sulfonatofenilazo)-5-hidroxi-naftaleno-2,7-sulfonato de tetrassódio (contém > 35 % de cloreto e acetato de sódio)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 41

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 41-43

S : (2-)22-24-26-37/39

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7646-93-7

EEC No 231-594-1

No 016-056-00-4


H.O.S.K

ES: hidrogenosulfato de potasio  
 DA: kaliumhydrogensulfat  
 DE: Kaliumhydrogensulfat  
 EL: υδρογονοθειικό κάλιο  
 EN: potassium hydrogensulphate  
 FR: hydrogénosulfate de potassium  
 IT: idrogenosolfato di potassio; potassio bisolfato  
 NL: kaliumhydrogeensulfaat  
 PT: hidrogénossulfato de potássio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

C; R 34	Xi; R 37
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

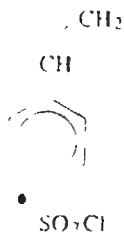
C	
	<p>R: 34-37</p> <p>S: (1/2-)26-36/37/39-45</p>

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 2633-67-2

EEC No 404-770-2

No 016-057-00-X




ES: cloruro de estireno-4-sulfonilo  
 DA: styren-4-sulfonylchlorid  
 DE: Styrol-4-sulfonylchlorid  
 EL: χλωρίδιο του στυρενο-4-σουλφονυλίου  
 EN: styrene-4-sulfonyl chloride  
 FR: chlorure de styrène-4-sulfonyle  
 IT: cloruro di stiren-4-solfonile  
 NL: styreen-4-sulfonylchloride  
 PT: cloreto de estireno-4-sulfonilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi ; R 38-41	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 38-41-43
	S : (2-)24-26-37/39

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


EEC No 404-820-3


No 016-058-00-5

- ES : tioloniolo, productos de reacción con 1,3,4-tiadiazol-2,5-ditiol, terc-nonantíol y C12-14-terc-alquilamina  
 FR : thionyle, produits de réaction avec 1,3,4-thiadiazol-2,5-dithiol, tert-nonanthiol et C12-14-tert-alkylamin  
 DE : Thionylchlorid, Reaktionsprodukte mit 1,3,4-Thiadiazol-2,5-dithiol, tert-Nonanthiol und C12-14-tert-Alkylamin  
 EL : χλωρίδιο του θειονυλίου, προϊόντα αντίδρασης με 1,3,4-θειαδιαζολ-2,5-διθειόλη, τερτ-εννεανοθειόλη και C12-14-τερτ-αλκυλαμίνη  
 EN : thionyl chloride, reaction products with 1,3,4-thiadiazol-2,5-dithiol, tert-nonanethiol and C12-14-tert-alkylamine  
 FR : thionure de thionyle, produits de réaction avec 1,3,4-thiadiazole-2,5-dithiol, tert-nonanethiol et C12-14-tert-alkylamine  
 IT : cloruro di tionile, prodotti di reazione con 1,3,4-tiadiazol-2,5-ditiolo, terz-nonantiolo e C12-14-terz-alchilamina  
 NL : thionylchloride, reaktieprodukten met 1,3,4-thiadiazool-2,5-dithiol, tert-nonaanthiol en C12-14-tert-alkylamine  
 PT : cloruro de tionilo, produtos de reacção com 1,3,4-tiadiazolo-2,5-ditiol, terc-nonanotiol e C12-14-terc-alquilamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi ; R 38	R 43	R 52-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

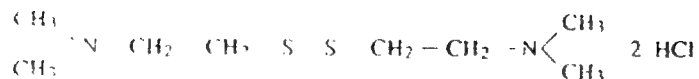
Xi	
	R : 38-43-52/53
	S : (2-)36/37-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 17339-60-5

EEC No 405-300-9

No 016-059-00-0



ES N,N,N',N'-tetrametilditiobis(etilen)diamina, diclorhidrato

DA N,N,N',N'-tetramethyldithiobis(ethylen)diamindihydrochlorid

DE N,N,N',N'-Tetramethyldithiobis(ethylen)diamindihydrochlorid

EL N,N,N',N'-τετραμεθυλοδιθειοδισ(αιθυλενο)διαμίνη διυδροχλωρική

EN N,N,N',N'-tetramethyldithiobis(ethylene)diamine dihydrochloride

FR N,N,N',N'-tétraméthyldithiobis(éthylène)diamine, dichlorhydrate

IT N,N,N',N'-tetrametilditiobis(etilen)diammina, dicloridrato

NL N,N,N',N'-tetramethyldithiobis(ethyleen)diaminedihydrochloride

PT N,N,N',N'-tetrametilditiobis(etileno)diamina, dicloridrato

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36

R 43

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 22-36-43-51/53 S : (2-)26-36/37-61

Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 7782-50-5

EEC No 231-959-5

No 017-001-00-7





ES: cloro  
 DA: chlor  
 DE: Chlor  
 EL: χλώριο  
 EN: chlorine  
 FR: chlore  
 IT: cloro  
 NL: chloor  
 PT: cloro  
 FI: kloori  
 SV: klor

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T, R 23	Xi; R 36/37/38	N; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

T	N	
		
		R: 23-36/37/38-50
		S: (1/2)-9-45-61

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrationsgrenzen,  
 Limites de concentração, Pitoisuusrajat, Koncentrationsgränser*


Cas No. 7647-01-0

EEC No 231-595-7

No 017-002-00-2

HCl

ES: cloruro de hidrógeno

DA: hydrogenchlorid

DE: Hydrogenchlorid; Chlorwasserstoff

EL: χλωρίδιο του υδρογόνου

EN: hydrogen chloride

FR: chlorure d'hydrogène

IT: cloruro di idrogeno; acido cloridrico

NL: hydrogeenchloride

PT: cloreto de hidrogénio



FI: kloorivety, vedetön

SV: vateklorid; vattenfri

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23 C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

T	C	
		
		R: 23-35
		S: (1/2)-9-26-36/37/39-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*

C ≥ 5 %	T; C; R 23-35
1 % ≤ C < 5 %	C; R 20-35
0,5 % ≤ C < 1 %	C; R 20-34
0,2 % ≤ C < 0,5 %	C; R 34
0,02 % ≤ C < 0,2 %	Xi; R 36/37/38

NOTA 5

Cas No —

EEC No 231-595-7

No 017-002-01-X

NOTA B

HCl ... %

ES: ácido clorhídrico ... % ; cloruro de hidrógeno... %

DA: saltsyre ... %

DE: Salzsäure ... %

EL: υδροχλωρικό οξύ ... %

EN: hydrochloric acid ... %

FR: chlorure d'hydrogène ... % ; acide chlorhydrique ... %

IT: acido cloridrico ... %

NL: zoutzuur ... %

PT: ácido clorídrico ... %

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C ; R 34

Xi ; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 34-37

S : (1/2-)26-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	C ; R 34-37
10 % ≤ C < 25 %	Xi ; R 36/37/38

Cas No 13477-00-4

EEC No 236-760-7

No 017-003-00-8



ES: clorato de bario

DA: bariumchlorat

DE: Bariumchlorat

EL: χλωρικό βάριο

EN: barium chlorate

FR: chlorate de baryum

IT: clorato di bario; bario clorato

NL: bariumchloraat



PT: clorato de bário

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

O; R 9

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	Xn	
		
		R : 9-20/22
		S : (2-)13-27

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 3811-04-9

EEC No 223-289-7

No 017-004-00-3

KClO<sub>3</sub>

ES: clorato de potasio

DA: kaliumchlorat

DE: Kaliumchlórat

EL: χλωρικό κάλιο

EN: potassium chlorate

FR: chlorate de potassium

IT: clorato di potassio; potassio clorato

NL: kaliumchloraat

PT: clorato de potássio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

O; R 9

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	Xn	
		R : 9-20/22
		S : (2-)13-16-27

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7775-09-9

EEC No 231-887-4

No 017-005-00-9

 $\text{NaClO}_3$ 

ES: clorato de sodio

DA: natnumchlorat

DE: Natriumchlorat

EL: χλωρικό νάτριο

EN: sodium chlorate

FR: chlorate de sodium

IT: clorato di sodio; sodio clorato

NL: natnumchloraat



PT: clorato de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

O; R 9

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

O	Xn	
		R : 9-22
		S : (2-)13-17-46

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Clas No 7601-90-3

EEC No 231-512-4

No 017-006-00-4

NOTA B

HClO<sub>4</sub> %

ES: ácido perclórico ... %  
 DA: perchlorsyre ... %  
 DE: Perchlorsäure ... %  
 EL: υπερχλωρικό οξύ ... %  
 EN: perchloric acid ... %  
 FR: acide perchlorique ... %  
 IT: acido perclorico ... %  
 NL: perchloorzuur ... %  
 PT: ácido perclórico ... %

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação


R 5	O; R 8	C; R 35
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		
		R : 5-8-35
		S : (1/2-)23-26-36-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

C ≥ 50 %	C; R 35
10 % ≤ C < 50 %	C; R 34
1 % ≤ C < 10 %	Xi; R 36/38

O  
 C ≥ 50 %  ; R 5-8

Cas No 13465-95-7

EEC No 236-710-4

No 017-007-00-X

 $\text{Ba}(\text{ClO}_4)_2$ 

ES: perclorato de bario

DA: bariumperchlorat

DE: Bariumperchlorat

EL: υπερχλωρικό θάριο

EN: barium perchlorate

FR: perchlorate de baryum

IT: perclorato di bario; bario perclorato

NL: bariumperchloraat

PT: perclorato de bário

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

O; R 9

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	Xn	
		R : 9-20/22 S : (2-)27

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã




Cas No 7778-74-7

EEC No 231-912-9

No 017-008-00-5

KCIO<sub>4</sub>

ES: perclorato de potasio

DA: kaliumperchlorat

DE: Kaliumperchlorat

EL: υπερχλωρικό κάλιο

EN: potassium perchlorate

FR: perchlorate de potassium

IT: perclorato di potassio; potassio perclorato

NL: kaliumperchloraat

PT: perclorato de potássio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

O; R 9

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

O	Xn	
		
		R : 9-22
		S : (2-)13-22-27

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 7790-98-9

EEC No 232-235-1

No 017-009-00-0

NOTA G




ES: perclorato de amonio  
 DA: ammoniumperchlorat  
 DE: Ammoniumperchlorat  
 EL: υπερχλωρικό αμμώνιο  
 EN: ammonium perchlorate  
 FR: perchlorate d'ammonium  
 IT: ammonio perclorato  
 NL: ammoniumperchloraat  
 PT: perclorato de amónio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

O; R 9

R 44

*Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

O	
	R : 9-44
	S : (2-)14-16-27-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7601-89-0

EEC No 231-511-9

No 017-010-00-6

NaClO<sub>4</sub>

ES: perclorato de sodio

DA: natriumperchlorat

DE: Natriumperchlorat

EL: υπερχλωρικό νάτριο

EN: sodium perchlorate

FR: perchlorate de sodium

IT: perclorato di sodio; sodio perclorato

NL: natriumperchloraat

PT: perclorato de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

O; R 9

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	Xn	
		R : 9-22
		S : (2-)13-22-27

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 7681-52-9

EEC No 231-668-3

No 017-011-00-1

NOTA B

NaOCl ... % Cl

activo  
aktiv  
aktiv  
ενεργό  
active  
actif  
attivo  
actief  
activo

ES: hipoclorito de sodio, solución ... % cloro activo

DA: natriumhypochloritopløsning ... % aktiv chlor

DE: Natriumhypochloritlösung ... % Cl aktiv

EL: υποχλωριώδες νάτριο, διάλυμα ... % ενεργό χλώριο

EN: sodium hypochlorite, solution ... % Cl active

FR: hypochlorite de sodium, solution ... % Cl actif

IT: ipoclorito di sodio, soluzione ... % Cl attivo; sodio ipoclorito, soluzione ... % Cl attivo

NL: natriumhypochloriet, oplossing ... % Cl actief

PT: hipoclorito de sódio, solução ... % Cl activo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

R 31

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 31-34  S : (1/2-)28-45-50

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C > 10 % ( )	C; R 31-34
5 % ≤ C ≤ 10 % ( )	Xi; R 31-36/38

( ) % Cl activo - % Cl aktiv - % Cl aktiv - % ενεργό χλώριο - % Cl active  
 - % Cl actif - % Cl attivo - % Cl actief - % Cl activo

Cas No 7778-54-3

EEC No 231-908-7

No 017-012-00-7

Ca (OCl) <sub>2</sub>	% Cl	activo aktiv aktiv ενεργό active actif attivo actief activo	> 39 %
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ES: hipoclorito de calcio, solución ... % cloro activo

DA: calciumhypochlorit ... % aktiv chlor

DE: Calciumhypochlorit ... % Cl aktiv

EL: υποχλωριώδες ασβέστιο, ... % ενεργό χλώριο

EN: calcium hypochlorite ... % Cl active

FR: hypochlorite de calcium ... % Cl actif

IT: calcio ipoclorito ... % Cl attivo

NL: calciumhypochloriet ... % Cl actief

PT: hipoclorito de cálcio ... % Cl activo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

O; R 8	R 31	C; R 34
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		
		R : 8-31-34
		S : (1/2)-126-43-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 10043-52-4

EEC No 233-140-8

No 017-013-00-2


CaCl<sub>2</sub>

ES: cloruro de calcio  
 DA: calciumchlorid  
 DE: Calciumchlorid  
 EL: χλωριούχο ασβέστιο  
 EN: calcium chloride  
 FR: chlorure de calcium  
 IT: calcio cloruro  
 NL: calciumchloride  
 PT: cloreto de cálcio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xi; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 36
	S : (2-)22-24

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 12125-02-9

EEC No 235-186-4

No 017-014-00-8

NH<sub>4</sub>Cl

ES: cloruro de amonio

DA: ammoniumchlorid

DE: Ammoniumchlorid

EL: χλωριούχο αμμώνιο

EN: ammonium chloride

FR: chlorure d'ammonium

IT: ammonio cloruro

NL: ammoniumchloride


PT: cloreto de amónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22-36
	S : (2-)22

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7440-09-7

EEC No 231-119-8

No 019-001-00-2

K

ES : potasio  
 DA : kalium  
 DE : Kalium  
 EL : κάλιο  
 EN : potassium  
 FR : potassium  
 IT : potassio  
 NL : kalium  
 PT : potassio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

R 14	F; R 15	C; R 34
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	C	
		
		R : 14/15-34
		S : (1/2)-5-8-45

ES S 5 no debe ser utilizada si se emplea otro embalaje de seguridad.  
 DA S 5 skal ikke påføres, såfremt anden sikker emballage er anvendt.  
 DE Angabe des S 5 ist nicht erforderlich, falls in anderer Weise sicher verpackt.  
 EL Το S 5 δεν είναι απαραίτητο όταν χρησιμοποιείται μια άλλη συσκευασία ασφαλείας.  
 EN S 5 is not required when an alternative safe packaging is used.  
 FR S 5 ne doit pas être utilisé si un autre emballage de sécurité est employé.  
 IT S 5 non è richiesta qualora venga utilizzato altro imballaggio di sicurezza.  
 NL S 5 behoeft niet te worden vermeld indien een andere veilige verpakking gebruikt is.  
 PT S 5 não deve ser utilizada se se empregar uma outra embalagem de segurança.

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 1310-58-3

EEC No 215-181-3

No 019-002-00-8

KOH

ES: hidróxido de potasio; potasa cáustica

DA: kaliumhydroxid; ætskali

DE: Kaliumhydroxid; Atzkali

EL: υδροξείδιο του καλίου· καυστική ποτάσσα

EN: potassium hydroxide; caustic potash

FR: hydroxyde de potassium; potasse caustique

IT: idrossido di potassio; potassa caustica

NL: kaliumhydroxide

PT: hidróxido de potássio; potassa cáustica

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 35 S : (1/2-)26-37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 5 %	C; R 35
2 % ≤ C < 5 %	C; R 34
0,5 % ≤ C < 2 %	Xi; R 36/38

Cas No 7440-70-2

EEC No 231-179-5

No 020-001-00-X


Ca

ES : calcio  
 DA : calcium  
 DE : Calcium  
 EL : ασβέστιο  
 EN : calcium  
 FR : calcium  
 IT : calcio  
 NL : calcium  
 PT : cálcio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

F; R 15

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

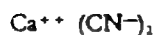
F	
	R : 15
	S : (2-)8-24/25-43

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 592-01-8

EEC No 209-740-0

No 020-002-00-5



ES: cianuro de calcio

DA: calciumcyanid

DE: Calciumcyanid

EL: κυανίδιο του ασβεστίου · κυανιούχο ασβέστιο

EN: calcium cyanide

FR: cyanure de calcium

IT: cianuro di calcio

NL: calciumcyanide

PT: cianeto de cálcio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

T+ ; R 28

R 32

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+



R : 28-32

S : (1/2-)7/8-23-36/37-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 7550-45-0

EEC No 231-441-9

No 022-001-00-5

TiCl<sub>4</sub>

ES: tetracloruro de titanio

DA: titantetrachlorid; titan (IV) chlorid

DE: Titantetrachlorid

EL: τετραχλωριούχο τιτάνιο

EN: titanium tetrachloride

FR: tetrachlorure de titane

IT: tetracloruro di titanio; titanio tetracloruro

NL: titantetrachloride

PT: tetracloreto de titânio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 14

C; R 34

Xi; R 36/37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 14-34-36/37

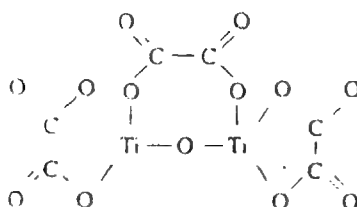
S : (1/2-)7/8-26-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 403-260-7

No 022-002-00-0



ES: oxalato de titanio(4+)

DA: titan(4+)oxalat

DE: Titan(4+)oxalat

EL: οξάλικο τιτανικόξ(4+)

EN: titanium(4+) oxalate

FR: oxalate de titane(4+)

IT: ossalato di titanio(4+)

NL: titaan(4+)oxalaat

PT: oxalato de titânio(4+)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xi; R 41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 41

S : (2-)26-39

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 1314-62-1

EEC No 215-239-8

No 023-001-00-8



ES: pentóxido de divanadio

DA: vanadiumpentaoxid; vanadium (V) oxid

DE: Vanadiumpentoxid

EL: πεντοξείδιο του θαναδίου

EN: vanadium pentoxide

FR: pentoxyde de divanadium; anhydride vanadique

IT: pentossido di vanadio; anidride vanadica

NL: vanadiumpentoxide

PT: pentóxido de divanádio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20
	S : (2-)22

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1333-82-0

EEC No 215-607-8

No 024-001-00-0

NOTA E





CrO<sub>3</sub>

ES: trioxido de cromo  
 DA: chromtrioxid  
 DE: Chromtrioxid  
 EL: τριοξειδιο του χρώμιου  
 EN: chromium trioxide  
 FR: trioxyde de chrome  
 IT: triossido di cromo  
 NL: chroomtrioxide  
 PT: trióxido de crómio  
 FI: kromitrioksid  
 SV: kromtrioxid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

O; R 8	Carc. Cat. 1; R 49	T, R 25	C; R 35	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

O	T	C	N	
				R: 49-8-25-35-43-50/53 S: 53-45-60-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrationgrenzen,  
 Limites de concentraçào, Pitoisuusrajat, Konzentrationigranser*


Gas No 7778-50-9

EEC No 231-906-6

No 024-002-00-6

NOTA E

K, Cr, O.



ES: dicromato de potasio  
 DA: kaliumdichromat  
 DE: Kaliumdichromat  
 EL: διχρωμικό κάλιο  
 EN: potassium dichromate  
 FR: dichromate de potassium  
 IT: dicromato di potassio  
 NL: kaliumdichromaat  
 PT: dicromato de potássio  
 FI: kaliumdikromaatti  
 SV: kaliumdikromat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 49	Muta. Cat. 2; R 46	T+; R 26	T; R 25	Xn; R 21
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Xi; R 37/38-41	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

T+	N	
		
		R: 49-46-21-25-26-37/38-41-43-50/53
		S: 53-45-60-61

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*

C ≥ 7 %	T+; R 49-46-21-25-26-37/38-41-43
0,5 % ≤ C < 7 %	T; R 49-46-43
0,1 % ≤ C < 0,5 %	T; R 49-46

NOTA 3

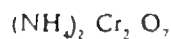


Cas No 7789-09-5

EEC No 232-143-1

No 024-003-00-1

NOTA E






ES: dicromato de amonio  
DA: ammoniumdichromat  
DE: Ammoniumdichromat  
EL: διχρωμικό αμμώνιο  
EN: ammonium dichromate  
FR: dichromate d'ammonium  
IT: dicromato di ammonio  
NL: ammoniumdichromaat  
PT: dicromato de amónio  
FI: ammoniumdikromaatti  
SV: ammoniumdikromat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

E	R 1	O; R 8	Carc. Cat. 2; R 49	Muta. Cat. 2; R 46	T+; R 26	T; R 25				
<table><tr><td>Xn; R 21</td><td>Xi; R 37/38-41</td><td>R 43</td><td>N; R 50-53</td></tr></table>							Xn; R 21	Xi; R 37/38-41	R 43	N; R 50-53
Xn; R 21	Xi; R 37/38-41	R 43	N; R 50-53							

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etikettatura, Kenmerken, Rotulagem, Merkmännat, Märkning*

E	T+	N	R: 49-46-1-8-21-25-26-37/38-41-43-50/53
			S: 53-45-60-61

*Limites de concentración, Konzentrationsgrenze, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoconcentrații, Konzentrationsgränser*

$C \geq 7 \%$	T+; R 49-46-21-25-26-37/38-41-43
$0,5 \% \leq C < 7 \%$	T; R 49-46-43
$0,1 \% \leq C < 0,5 \%$	T; R 49-46

NOTA 3

Cas. No 10588-01-9

EEC No 234-190-3

No 024-004-00-7

NOTA E



ES: dicromato de sodio

DA: natriumdichromat

DE: Natriumdichromat

EL: διχρωμικό νάτριο

EN: sodium dichromate

FR: dichromate de sodium

IT: dicromato di sodio

NL: natriumdichromaat

PT: dicromato de sódio

FI: natriumdikromaatti




SV: natriumdikromat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

O; R 8	Carc. Cat. 2; R 49	Muta. Cat. R 46	T+; R 26	T; R 25	Xn; R 21
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Xi; R 37/38-41	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem, Merkinntät, Märkning*

O	T+	N	
			
			R: 49-46-8-21-25-26-37/38-41-43-50/53
			S: 53-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*

C ≥ 7 %	T+; R 49-46-21-25-26-37/38-41-43
0,5 % ≤ C < 7 %	T; R 49-46-43
0,1 % ≤ C < 0,5 %	T; R 49-46

NOTA 3

Cas No 7789-12-0

EEC No 234-190-3

No 024-004-01-4

NOTA 1





ES: dicromato de sodio, dihidrato  
 DA: natriumdichromat, dihydrat  
 DE: Natriumdichromat, dihydrat  
 EL: διχρωμικό νάτριο, διένυδρο  
 EN: sodium dichromate, dihydrate  
 FR: dichromate de sodium, dihydrate  
 IT: dicromato di sodio, diidrato  
 NL: natriumdichromaat, dihydraat  
 PT: dicromato de sódio, dihidrato  
 FI: natriumdikromaatti, dihydraatti  
 SV: natriumdikromat, dihydrat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 49	Muta. Cat. 2; R 46	T+; R 26	T; R 25	Xn; R 21
Xi; R 37/38-41				
R 43				
N; R 50-53				

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

T+	N	
		
R: 49-46-21-25-26-37/38-41-43-50-53		
S: 53-45-60-61		

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Ορία συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen,  
 Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*

C ≥ 7 %	T+; R 49-46-21-25-26-37/38-41-43
0,5 % ≤ C < 7 %	T; R 49-46-43
0,1 % ≤ C < 0,5 %	T; R 49-46

NOTA 3

Cas No 14977-61-8

FEC No 239-056-b

No 024-005-00-2

NOTA E

Cr O<sub>2</sub> Cl<sub>2</sub>

ES: dicloruro de cromilo

DA: chromyldichlorid

DE: Chromyldichlorid; Chromoxychlorid

EL: διχλωρίδιο του χρωμύλου

EN: chromyl dichloride; chromic oxychloride

FR: dichlorure de chromyle

IT: dicloruro di cromile

NL: chromyldichloride

PT: dicloreto de cromilo





FI: kromioksikloridi

SV: kromyldiklorid; kromdioxidklorid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification.*  
*Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

O; R 8	Carc. Cat. 2; R 49	Muta. Cat. 2; R 46	C; R 35	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling.*  
*Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnit, Markning*

O	T	C	N	
				R: 49-46-8-35-43-50/53 S: 53-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,*  
*Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,*  
*Limites de concentração, Pitoisuusraajat, Konzentrationsgrænser*

C ≥ 10 %	T; C; R 49-46-35-43
5 % ≤ C < 10 %	T; R 49-46-34-43
0,5 % ≤ C < 5 %	T; R 49-46-36/37/38-43
0,1 % ≤ C < 0,5 %	T; R 49-46

NOTA 3

Cas No 7789-00-6

EEC No 332 340-5

No 024-006-00-8

TOTAL

K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>

ES: cromato de potasio

DA: kaliumchromat

DE: Kaliumchromat

EL: χρωμικο καλλιο

EN: potassium chromate

FR: chromate de potassium

IT: cromato di potassio

NL: kaliumchromaat

PT: cromato de potassio



FI: kaliumkromaatti

SV: kaliumkromat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 49	Muta. Cat. 2; R 46	Xi; R 36/37/38	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T	N	
		R: 49-46-36/37/38-43-50/53
		S: 53-45-60-61

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen  
Limites de concentração, Piiriususrajat, Koncentrationsgränser*

C ≥ 20 %	T; R 49-46-36/37/38-43
0,5 % ≤ C < 20 %	T; R 49-46-43
0,1 % ≤ C < 0,5 %	T; R 49-46

TOTAL

Cas No

EEC No —

No 024-007-00-3

NOTA A

NOTA E

ES: cromatos de cinc, incluido el cromato de cinc y de potasio

DA: zinkchromater, herunder zinkkaliumchromat

DE: Zinkchromate, einschließlich Zinkkaliumchromat

EL: χρωμικά ψευδαργύρου, περιλαμβανομένου του χρωμικού του ψευδαργύρου και καλίου

EN: zinc chromates including zinc potassium chromate

FR: chromates de zinc y compris le chromate de zinc et potassium

IT: cromato di zinco, compreso il cromato di zinco e potassio

NL: zinkchromaat met inbegrip van zinkkaliumchromaat

PT: cromatos de zinco, incluindo o cromato de zinco e potássio

FI: sinkkikromaattit mukaan luettuna sinkkaliumkromaatti

SV: zinkkromater inklusive zinkkaliumkromat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 1; R 45

Xn; R 22

R 43

N, R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnit, Markning*

T



N



R: 45-22-43-50/53

S: 53-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisumsrajai, Koncentrationsgrænser*


Cas No 13765-19-0

EEC No 237-366-8

No 024-008-00-9

NOTA E





ES: cromato de calcio  
 DA: calciumchromat  
 DE: Calciumchromat  
 EL: χρωμικο ασδέστιο  
 EN: calcium chromate  
 FR: chromate de calcium  
 IT: cromato di calcio  
 NL: calciumchromaat  
 PT: cromato de cálcio  
 FI: kalsiumkromaatti  
 SV: kalciumkromat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45	Xn; R 22	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnot, Markning*

T	N	
		R: 45-22-50/53
		S: 53-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçao, Pitoisuusraajat, Koncentrationsgrænser*


Cas No 7789-06-2

EEC No 232-142-6

No 024-009-00-4

NOTA E





ES: cromato de estroncio  
 DA: strontiumchromat  
 DE: Strontiumchromat  
 EL: χρωμικο στροντιο  
 EN: strontium chromate  
 FR: chromate de strontium  
 IT: cromato di stronzio  
 NL: strontiumchromaat  
 PT: cromato de estrôncio  
 FI: strontiumkromaatti  
 SV: strontiumkromat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45	Xn; R 22	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

T	N	
		R: 45-22-50/53
		S: 53-45-60-61

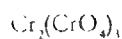
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*




Cas No 24613-89-6

EEC No 246-356-2

No 024-010-00-X







- ES: tris(cromato) de dicromo  
 DA: dichromtris(chromat)  
 DE: Dichromtris(chromat); Chrom(III)-chromat  
 EL: τρις(χρωμικό) του διχρωμίου  
 EN: dichromium tris(chromate); chromium III chromate; chromic chromate  
 FR: tris(chromate) de dichrome  
 IT: tris(cromato) di dicromo  
 NL: dichroomtris(chromaat)  
 PT: tris(cromato) de dicrómio  
 FI: kromi(III)kromaatti  
 SV: krom(III)kromat

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

O; R 8	Carc. Cat. 2; R 45	C; R 35	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

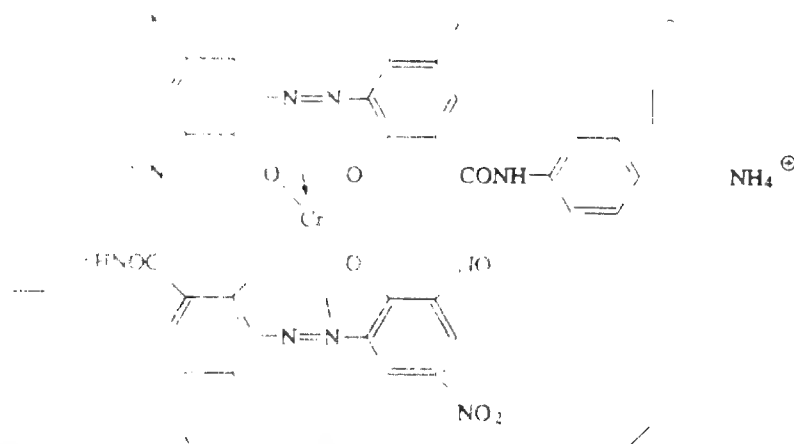
O	T	C	N	
				R: 45-8-35-43-50/53 S: 53-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerthe, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitovisuusraajat, Konzentrationgrænser*


Cas No

EEC No 400-110-2

No 024-011-00-5



- ES bis(1-(3,5-dinitro-2-oxidofenilazo)-3-(N-fenilcarbamoil)-2-naftolato)cromato(1-) de amonio  
 DA ammoniumbis(1-(3,5-dinitro-2-oxidophenylazo)-3-(N-phenylcarbamoil)-2-naphtholato)chromat(1-)  
 DE Ammoniumbis(1-(3,5-dinitro-2-oxidophenylazo)-3-(N-phenylcarbamoil)-2-naphtholato)chromat(1-)  
 elz(1-(3,5-dinitro-2-oxido-fenilazw)-3-(N-fenilkarbamoi)-2-naftolato)chromat(1-) ammonio  
 EN ammonium bis(1-(3,5-dinitro-2-oxidophenylazo)-3-(N-phenylcarbamoil)-2-naphtholato)chromate(1-)  
 FR bis(1-(3,5-dinitro-2-oxido-fenylazo)-3-(N-fenylcarbamoil)-2-naphtholato)chromate(1-) d'ammonium  
 IT bis(1-(3,5-dinitro-2-ossidofenilazo)-3-(N-fenilcarbamoil)-2-naftolato)cromato(1-) di ammonio  
 NL ammoniumbis(1-(3,5-dinitro-2-oxido-fenylazo)-3-(N-fenylcarbamoil)-2-naftolato)chromaat(1-)  
 PT bis(1-(3,5-dinitro-2-oxidofenilazo)-3-(N-fenilcarbamoil)-2-naftolato)cromato(1-) de amonio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

F; R 11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

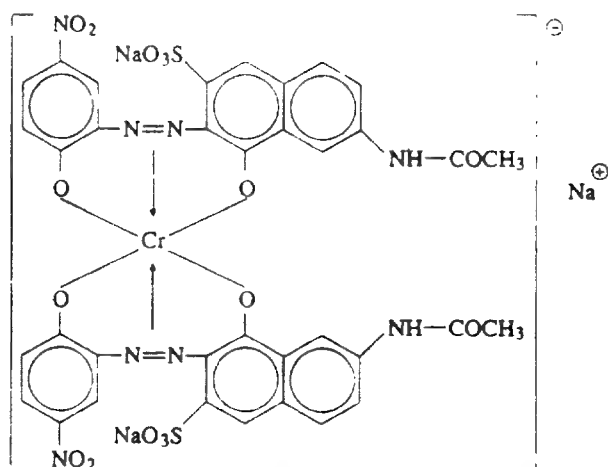
	<p>R : 11</p> <p>S : (2+3)</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No 400-810-8

No 024-012-00-0



- ES: bis(7-acetamido-2-(4-nitro-2-óxido-fenilazo)-3-sulfonato-1-naftolato)cromato(1-) de trisodio  
 DA: trinatriumbis(7-acetamido-2-(4-nitro-2-oxidophenylazo)-3-sulfonato-1-naphtholato)chromat(1-)  
 DE: Trinatriumbis(7-acetamido-2-(4-nitro-2-oxidophenylazo)-3-sulfonato-1-naphtholato)chromat(1-)  
 EL: δις(7-ακεταμιδο-2-(4-νιτρο-2-οξειδοφαινυλαζω)-3-σουλφονατο-1-ναφθολατο)χρωμικό(1-) τρινάτριο  
 EN: trisodium bis(7-acetamido-2-(4-nitro-2-oxidophenylazo)-3-sulphonato-1-naphtholato)chromate(1-)  
 FR: bis(7-acétamido-2-(4-nitro-2-oxydophénylazo)-3-sulfonato-1-naphtholato)chromate(1-) de trisodium  
 IT: bis(7-acetammido-2-(4-nitro-2-ossidofenilazo)-3-solfonato-1-naftolato)cromato(1-) di trisodio  
 NL: trinatriumbis(7-acetamido-2-(4-nitro-2-oxidofenylazo)-3-sulfonato-1-naftolato)chromaat(1-)  
 PT: bis(7-acetamido-2-(4-nitro-2-óxido-fenilazo)-3-sulfonato-1-naftolato)cromato(1-) de trissódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Muta. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

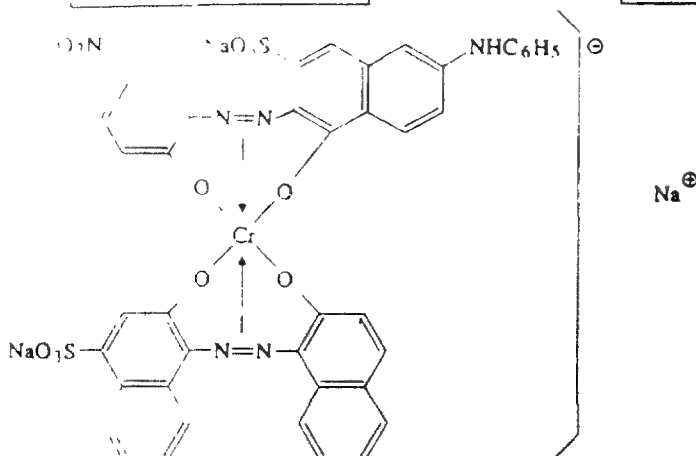
Xn	
	R : 40
	S : (2-)22-36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No 402-500-8

No 024-013-00-6



ES : (6-anilino-2-(5-nitro-2-oxidofenilazo)-3-sulfonato-1-naftolato)(4-sulfonato-1,1'-azodi-2,2'-naftolato)cromato(1-) de trisodio

DA : trinnatrium-(6-anilino-2-(5-nitro-2-oxidophenylazo)-3-sulfonato-1-naphtholato)(4-sulfonato-1,1'-azodi-2,2'-naphtholato)chromat(1-)

DE : Trinnatrium-(6-anilino-2-(5-nitro-2-oxidophenylazo)-3-sulfonato-1-naphtholato)(4-sulfonato-1,1'-azodi-2,2'-naphtholato)chromat(1-)

EL : (6-ανιλίνο-2-(5-νίτρο-2-οξειδοφαινυλαζω)-3-σουλφονατο-1-ναφθολατο)(4-σουλφονατο-1,1'-αζωδι-2,2'-ναφθολατο)χρωμικό(1-) τρινάτριο

EN : trisodium (6-anilino-2-(5-nitro-2-oxidophenylazo)-3-sulphonato-1-naphtholato)(4-sulphonato-1,1'-azodi-2,2'-naphtholato)chromate(1-)

FR : (6-anilino-2-(5-nitro-2-oxydophénylazo)-3-sulfonato-1-naphtholato)(4-sulfonato-1,1'-azodi-2,2'-naphtholato)chromate(1-) de trisodium

IT : (6-anilino-2-(5-nitro-2-ossidofenilazo)-3-solfonato-1-naftolato)(4-solfonato-1,1'-azodi-2,2'-naftolato)cromato(1-) di trisodio

NL : trinnatrium-(6-anilino-2-(5-nitro-2-oxidofenylazo)-3-sulfonato-1-naftolato)(4-sulfonato-1,1'-azodi-2,2'-naftolato)-chromaat(1-)

PT : (6-anilino-2-(5-nitro-2-oxidofenilazo)-3-sulfonato-1-naftolato)(4-sulfonato-1,1'-azodi-2,2'-naftolato)cromato(1-) de trissódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xi ; R 41

N ; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Ετικεταγ, Etichettatura, Kenmerken, Rotulagem

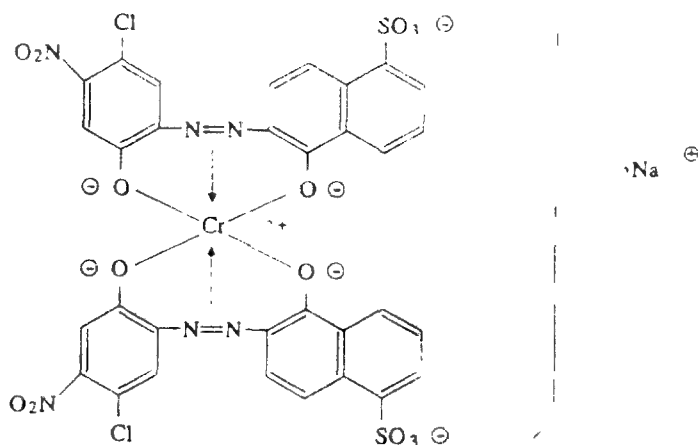
Xi	N	
		R : 41-51/53
		S : (2-)26-39-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 93952-24-0

EEC No 402-870-0

No 024-014-00-1



ES: bis(2-(5-cloro-4-nitro-2-óxidofenilazo)-5-sulfonato-1-naftolato)cromato(1-) de trisodio

DA: trinatriumbis(2-(5-chlor-4-nitro-2-oxidophenylazo)-5-sulfonato-1-naphtholato)chromat(1-)

DE: Trinatriumbis(2-(5-chlor-4-nitro-2-oxidophenylazo)-5-sulfonato-1-naphtholato)chromat(1-)

EL: δις(2-(4-νιτρο-2-οξειδο-5-χλωροφαινυλαζω)-5-σουλφονατο-1-ναφθολατο)χρωμικό(1-) τρινάτριο

EN: trisodium bis(2-(5-chloro-4-nitro-2-oxidophenylazo)-5-sulphonato-1-naphtholato)chromate(1-)

FR: bis(2-(5-chloro-4-nitro-2-oxydophénylazo)-5-sulfonato-1-naphtholato)chromate(1-) de trisodium

IT: bis(2-(5-cloro-4-nitro-2-ossidofenilazo)-5-solfonato-1-naftoloato)cromato(1-) di trisodio

NL: trinatriumbis(2-(5-chloor-4-nitro-2-oxidofenylazo)-5-sulfonato-1-naftolato)chromaat(1-)

PT: bis(2-(5-cloro-4-nitro-2-óxidofenilazo)-5-sulfonato-1-naftolato)cromato(1-) de trissódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 41

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R: 41-52/53

S: (2-)26-39-61

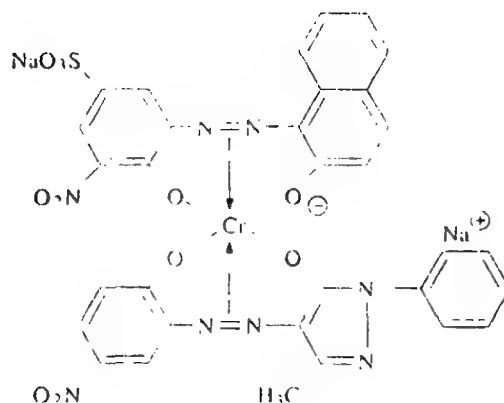
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

—

EEC No 404-930-1

No 024-015-00-7



- ES : (3-metil-4-(5-nitro-2-ossidofenilazo)-1-fenilpirazololato)(1-(3-nitro-2-óxido-5-sulfonatofenilazo)-2-naftolato)cromato:  
(1-) de disodio
- DA : dinatrium(3-methyl-4-(5-nitro-2-oxidophenylazo)-1-phenylpyrazololato)(1-(3-nitro-2-oxido-5-sulfonatophenylazo)-  
2-naphtholato)chromat(1-)
- DE : Dinatrium(3-methyl-4-(5-nitro-2-oxidophenylazo)-1-phenylpyrazololato)(1-(3-nitro-2-oxido-5-sulfonatophenylazo)-  
2-naphtholato)chromat(1-)
- EL : (3-μεθυλο-4-(5-νιτρο-2-οξειδοφαινυλαζω)-1-φαινυλοπυραζολολατο)(1-(3-νιτρο-2-οξειδο-  
5-σουλφονατοφαινυλαζω)-2-ναφθολατο)χρωμικό(1-) δινάτριο
- EN : disodium (3-methyl-4-(5-nitro-2-oxidophenylazo)-1-phenylpyrazololato)(1-(3-nitro-2-oxido-5-sulfonatophenylazo)-  
2-naphtholato)chromate(1-)
- FR : (3-méthyl-4-(5-nitro-2-oxido-phénylazo)-1-phénylpyrazololato)(1-(3-nitro-2-oxido-5-sulfonatophénylazo)-  
2-naphtholato)chromate(1-) de disodium
- IT : (3-metil-4-(5-nitro-2-ossidofenilazo)-1-fenilpirazololato)(1-(3-nitro-2-ossidofenilazo)-2-naftolato)cromato:  
(1-) di disodio
- NL : dinatrium(3-methyl-4-(5-nitro-2-oxidophenylazo)-1-fenylpyrazololato)(1-(3-nitro-2-oxido-5-sulfonatophenylazo)-  
2-naftolato)chromaat(1-)
- PT : (3-metil-4-(5-nitro-2-oxidofenilazo)-1-fenilpirazololato)(1-(3-nitro-2-oxido-5-sulfonatofenilazo)-2-naftolato)cromato:  
(1-) de dissodio

Cas No

CER No 404-930-1

No 024-015-00-7

αριθμός, Κλάση κινδύνου, Gefährdungs-Einstufung, Classification, Classificazione, Indeling, Classificação

Xn; R 20	Xi; R 41	N; R 51-53
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αριθμός, Ενδεικτική, Kennzeichnung, Επισήμανση, Labeling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem

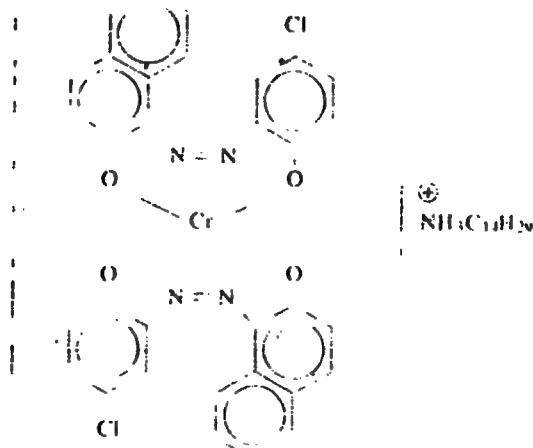
Xn	N	
		R : 20-41-51/53 S : (2-)26-39-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 88377-66-6

EEC No 405-110-6

No 024-016-00-2



- ES: bis(1-(5-cloro-2-oxidofenilazo)-2-naftolato)cromato(1-) de tetradecilamonio  
 DA: tetradecylammoniumbis(1-(5-chlor-2-oxidophenylazo)-2-naphtholato)chromat(1-)  
 DE: Tetradecylammoniumbis(1-(5-chlor-2-oxidophenylazo)-2-naphtholato)chromat(1-)  
 EL: δις(1-(2-οξειδο-5-χλωροφαινυλαζω)-2-ναφθολατο)χρωμικό(1-) δεκατετραμμόνιο  
 EN: tetradecylammonium bis(1-(5-chloro-2-oxidophenylazo)-2-naphtholato)chromate(1-)  
 FR: bis(1-(5-chloro-2-oxydophénylazo)-2-naphtholato)chromate(1-) de tétradécylammonium  
 IT: bis(1-(5-cloro-2-ossidofenilazo)-2-naftolato)cromato(1-) di tetradecilammonio  
 NL: tetradecylammoniumbis(1-(5-chloor-2-oxidofenylazo)-2-naftolato)chromaat(1-)  
 PT: bis(1-(5-cloro-2-oxidofenilazo)-2-naftolato)cromato(1-) de tetradecilamonio

*Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classificatium, Classificatien, Classificazione, Indeling, Classificação*

Xn ; R 48/22 R 53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketado, Etiketado, Kennzeichen, Rotulagem*

Xn	
	R : 48/22-53
	S : (2-22-36-51)

*Limits de concentration, Konzentrationsgrenzen, Konzentrationsgrenzen, Ορίες συγκέντρωσης, Concentraties Limieten, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No

EEC No

No 024-017-00-8

NOTA A



NOTA E

- ES: Compuestos de cromo(VI), excepto el cromato de bario y de los especialmente citados en este anexo
- DA: Krom(VI)forbindelser, med undtagelse af bariumkromat samt sådanne nævnt andetsteds i dette bilag
- DE: Chrom(VI)verbindungen, mit Ausnahme von Bariumchromat und Verbindungen die in diesem Anhang gesondert aufgeführt sind
- EL: ενώσεις χρωμίου (VI), εκτός του χρωμικού βαρίου και των ενώσεων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος
- EN: Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex
- FR: Composés de chrome(VI), à l'exception du chromate de baryum et de ceux nommément désignés dans cette annexe
- IT: Composti di cromo(VI), esclusi bario cromato e quelli espressamente indicati in questo allegato
- NL: Chroom(VI)verbindingen, met uitzondering van bariumchromaat alsmede van in deze bijlage met name genoemde zouten
- PT: Compostos de crómio(VI), com excepção do cromato de bário e dos expressamente referidos no presente anexo
- FI: kromi(VI)-yhdisteet paitsi bariumkromaatti sekä muualla tässä liitteessä mainitut yhdisteet
- SV: krom(VI)föreningar med undantag för bariumkromat och föreningar som är upptagna på annat ställe i bilagan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 49	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem, Merkinäät, Märkning*

T	N	
		
		R: 49-43-50/53
		S: 53-45-60-61

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*


Cas No 1313-13-9

EEC No 215-202-6

No 025-001-00-3



ES: dióxido de manganeso

DA: mangandioxid; mangan(IV)oxid

DE: Mangandioxid; Braunstein

EL: διοξειδίο του μαγγανίου

EN: manganese dioxide

FR: dioxyde de manganèse; bioxyde de manganèse

IT: biossido di manganese, manganese biossido

NL: mangaandioxide; bruinsteen

PT: dióxido de manganés

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20/22

S : (2-)25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7722-64-7

EEC No 231-760-3

No 025-002-00-9

KMnO<sub>4</sub>



ES: permanganato de potasio  
 DA: kaliumpermanganat  
 DE: Kaliumpermanganat  
 EL: υπερμαγγανικό κάλιο  
 EN: potassium permanganate  
 FR: permanganate de potassium  
 IT: permanganato di potassio; potassio permanganato  
 NL: kaliumpermanganaat  
 PT: permanganato de potássio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

O; R 8

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

O	Xn	
		R : 8-22
		S : (2)

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 7785-87-7

EEC No 232-089-9

No 025-003-00-4



ES: sulfato de manganeso  
 DA: mangansulfat  
 DE: Mangansulfat  
 EL: υδρογόνο θεικό μαγγάνιο  
 EN: manganese sulphate  
 FR: sulfate de manganèse  
 IT: solfato di manganese  
 NL: mangaansulfaat  
 PT: sulfato de manganés

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 48/20/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 48/20/22
	S : (2-)22

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 7440-48-4

EEC No 231-158-0

No 027-001-00-9

Co

ES: cobalto

DA: cobalt

DE: Cobalt

EL: κοβάλτιο

EN: cobalt

FR: cobalt

IT: cobalto

NL: kobalt

PT: cobalto

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indexing, Classificação

R 42/43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem

Xn



R : 42/43

S : (2-)22-24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1307-96-6

EEC No 215-154-6

No 027-002-00-4

CoO

ES: óxido de cobalto

DA: cobaltoxid

DE: Cobaltoxid

EL: οξείδιο του κοβαλτίου

EN: cobalt oxide

FR: oxyde de cobalt; oxyde de cobalt (II)

IT: ossido di cobalto

NL: kobaltoxide

PT: óxido de cobalto

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn; R 22

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22-43

S : (2-)24-37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 1317-42-6

EEC No 215-273-3

No 027-003-00-X

CoS

ES: sulfuro de cobalto

DA: kobaltsulfid

DE: Kobaltsulfid

EL: σουλφίδιο του κοβαλτίου · θειούχο κοβάλτιο

EN: cobalt sulphide

FR: sulfure de cobalt; sulfure de cobalt (II)

IT: solfuro di cobalto

NL: kobaltsulfide

PT: sulfureto de cobalto

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 43

S : (2-)24-37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 13463-39-3

EEC No 236-669-2

No 028-001-00-1

NOTA E



ES: níquel tetracarbonilo; níquel carbonilo

DA: tetracarbonylnikkel; nikkelcarbonyl

DE: Nickeltetracarbonyl

EL: τετρακαρβονυλικό νικέλιο

EN: nickel tetracarbonyl

FR: tétracarbonylnickel; nickel carbonyle

IT: nichel carbonile

NL: nikkeltetracarbonyl

PT: tetracarbonilo de níquel

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*


F; R 11

Carc. Cat. 3; R 40

Repr. Cat. 2; R 61

T+; R 26

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	T+	
		
		R: 61-11-26-40
		S: 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 7440-02-0

EEC No 231-111-4

No 028-002-00-7

Ni

ES : níquel

DA : nikkel

DE : Nickel

EL : νικέλιο

EN : nickel

FR : nickel

IT : nichel

NL : nikkel

PT : níquel

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Carc. Cat. 3 ; R 40

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 40-43

S : (2-)22-36

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No 1313-99-1

EEC No 215-215-7

No 028-003-00-2

NiO

ES: monóxido de níquel

DA: nikkelfmonoxid

DE: Nickelmonoxid

EL: μονοξείδιο του νικελίου

EN: nickel monoxide

FR: monoxyde de nickel; oxyde de nickel (II)

IT: monossido di nichel

NL: nikkelfmonoxide

PT: monóxido de níquel

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Carc. Cat. 1; R 49

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 49-43

S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 12035-36-8

EEC No 234-823-3

No 028-004-00-8

NiO<sub>2</sub>

ES: dióxido de níquel

DA: nikkeldioxid

DE: Nickeldioxid

EL: διοξειδίο του νικελίου

EN: nickel dioxide

FR: dioxyde de nickel; oxyde de nickel (IV)

IT: diossido di nichel

NL: nikkeldioxide

PT: dióxido de níquel

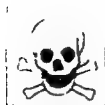
Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Carc. Cat. 1 ; R 49

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 49-43

S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1314-06-3

EEC No 215-217-8

No 028-005-00-3



ES: trióxido de níquel

DA: dinikkeltrioxid

DE: Dinikkeltrioxid

EL: τριοξείδιο του δινικελίου

EN: dinickel trioxide

FR: trioxy 'e de dinickel; oxyde de nickel (III)

IT: triossido di dinichel

NL: dinikkeltrioxide

PT: trióxido de níquel

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 1; R 49

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 49-43

S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 16812-54-7

EEC No 240-841-2

No 028-006-00-9

NiS

ES: sulfuro de níquel

DA: nikkelsulfid

DE: Nickelsulfid

EL: σουλφίδιο του νικελίου · θειούχο νικέλιο

EN: nickel sulphide

FR: sulfure de nickel; sulfure de nickel (II)

IT: solfuro di nichel

NL: nikkelsulfide

PT: sulfureto de níquel

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Carc. Cat. I; R 49

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 49-43

S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No 12035-72-2

EEC No 234-829-6

No 028-007-00-4



ES: disulfuro de trinique:

DA: trinikkeldisulfid

DE: Trinickeldisulfid

EL: δισουλφίδιο του τρινικελίου

EN: nickel subsulphide

FR: disulfure de trinickel; sous-sulfure de nickel

IT: disolfuro di trinichel

NL: trinikkeldisulfide

PT: dissulfureto de triníquel

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 1; R 49

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 49-43

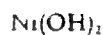
S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 12054-48-7

EEC No 235-008-5

No 028-008-00-X



ES: dihidróxido de níquel

DA: nikkeldihydroxid

DE: Nickeldihydroxid

EL: διυδροξείδιο του νικελίου

EN: nickel dihydroxide

FR: dihydroxyde de nickel; hydroxyde de nickel (II)

IT: diidrossido di nichel

NL: nikkeldihydroxide

PT: dihidróxido de níquel

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Xn; R 20/22

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20/22-40-43

S : (2-)22-36

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7786-81-4

EEC No 232-104-9

No 028-009-00-5

NiSO<sub>4</sub>

ES: sulfato de níquel

DA: nikkelsulfat

DE: Nickelsulfat

EL: θειικό νικέλιο

EN: nickel sulphate

FR: sulfate de nickel; sulfate de nickel (II)

IT: solfato di nichel

NL: nikkelsulfaat

PT: sulfato de níquel

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 3; R.40

Xn; R 22

R 42/43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xn



R: 22-40-42/43

S: (2-)22-36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao




Cas No 3333-67-3

EEC No 222-068-2

No 028-010-00-0

NiCO<sub>3</sub>

ES: carbonato de níquel

DA: nikkelcarbonat

DE: Nickelcarbonat

EL: ανθρακικό νικέλιο

EN: nickel carbonate

FR: carbonate de nickel; carbonate de nickel (II)

IT: carbonato di nichel

NL: nikkelcarbonaat

PT: carbonato de níquel

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Xn; R 22

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R · 22-40-43

S : (2-)22-36/3

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No 7758-89-6

EEC No 231-842-9

No 029-001-00-4

CuCl

ES: cloruro de cobre (I)

DA: kobber (I) chlorid; cuprochlorid

DE: Kupfer (I)-chlorid

EL: χλωριούχος χαλκός (I)

EN: copper (I) chloride; copper chloride

FR: chlorure de cuivre (I) chlorure cuivreux

IT: cloruro di rame (I), cloruro rameoso

NL: koper(I)chloride; cuprochloride

PT: cloreto de cobre (I)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R: 22
	S: (2-)22

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 1317-39-1

EEC No 215-270-7

No 029-002-00-X

 $\text{Cu}_2\text{O}$ 

ES: óxido de cobre (I); óxido cuproso

DA: dikobberoxid; kobber (I) oxid; cuprooxid

DE: Dikupferoxid; Kupfer (I)-oxid

EL: οξειδίο του χαλκού (I)

EN: dicopper oxide; copper (I) oxide

FR: oxyde de cuivre (I); oxyde cuivreux

IT: ossido di rame (I); ossido rameoso

NL: dikoperoxide; koper(I)oxide

PT: óxido de cobre (I); óxido cuproso

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22

S : (2-)22

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1338-02-9

EEC No 215-657-0

No 029-003-00-5

ES: naftenato de cobre  
 DA: kobbernaphthenat  
 DE: Kupfernaphthenat  
 EL: ναφθενικός χαλκός  
 EN: copper naphthenate  
 FR: naphténate de cuivre  
 IT: rame naftenato  
 NL: kopernaftenaat  
 PT: naftenato de cobre

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

R 10

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 10-22

S : (2)

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 7758-98-7

EEC No 231-847-6

No 029-004-00-0

Cu SO<sub>4</sub>

ES: sulfato de cobre

DA: kobbersulfat; cuprisulfat

DE: Kupfersulfat

EL: θειικός χαλκός

EN: copper sulphate

FR: sulfate de cuivre; sulfate de cuivre (II)

IT: solfato di rame

NL: kopersulfaat

PT: sulfato de cobre

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R 22-36/38

S: (2)-22

*Limites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraç3o*


Cas No

EEC No 401-260-1

No 029-005-00-6

- ES: (tris(clorometil)ftalocianinato)cobre(II), productos de reacción con N-metilpiperazina y ácido metoxiacético
- DA: (tris(chlormethyl)phthalocyaninato)kobber(II), reaktionsprodukter med N-methylpiperazin og methoxyeddikesyre
- DE: (Tris(chlormethyl)phthalocyaninato)kupfer(II), Reaktionsprodukte mit N-methylpiperazin und Methoxyessigsäure
- EL: (τρις(χλωρομεθυλο)φθαλοκυανinato)χαλκός(II), προϊόντα αντίδρασης με Ν-μεθυλοπιπεραζίνη και μεθοξοξικό οξύ
- EN: (tris(chloromethyl)phthalocyaninato)copper(II), reaction products with N-methylpiperazine and methoxyacetic acid
- FR: (tris(chlorométhyl)phthalocyaninato)cuiivre(II), produits de réaction avec la N-méthylpipérazine et l'acide methoxyacétique
- IT: (tris(clorometil)ftalocianinato)rame(II), prodotti di reazione con N-metilpiperazina e acido metossiacetico
- NL: (tris(chloormetil)ftalocyaninato)koper(II), reaktieprodukten met N-methylpiperazine en methoxyazijnzuur
- PT: (tris(clorometil)ftalocianinato)cobre(II), produtos de reacção com N-metilpiperazina e ácido metoxiacético

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xi; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

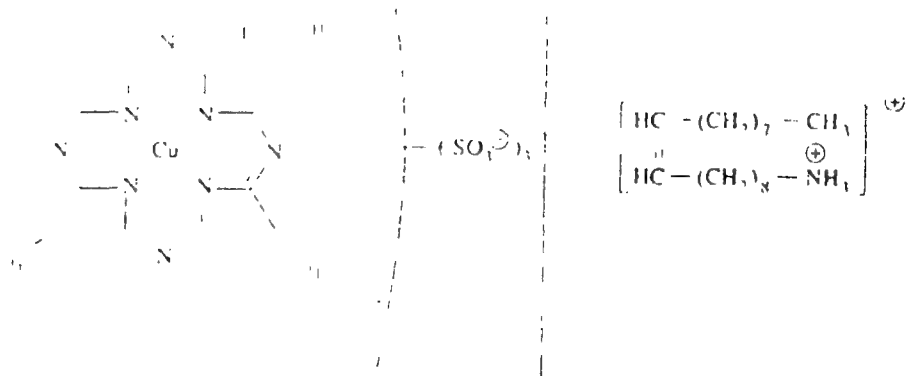
Xi	
	R : 36
	S : (2-)26

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No

EC No 403-210-4

No 022-006-00-1



- ES: (trisulfonatoftalocianinato)cobre(II) de tris(octadec-9-enilamonio)  
 DA: tris(octadec-9-enylammonium)-(trisulfonatophthalocyaninato)kobber(II)  
 DE: Tris(octadec-9-enylammonium)-(trisulfonatophthalocyaninato)kupfer(II)  
 EL: (τρισουλφονατοφθαλοκυανινατο)χαλκός(II) του τρις(δεκαοκτ-9-ενυλαμμονίου)  
 EN: tris(octadec-9-enylammonium)tris(sulfonatophthalocyaninato)copper(II)  
 FR: (trisulfonatophthalocyaninato)cuivre(II) de tris(octadec-9-énylammonium)  
 IT: (trisulfonatoftalocianinato)rame(II) di tris(ottadec-9-enilammonio)  
 NL: tris(octadec-9-enylammonium)-(trisulfonatoftalocyaninato)koper(II)  
 PT: (trissulfonatoftalocianinato)cobre(II) de tris(octadec-9-enilamónio)

Clasificación, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificație

Xi; R 41

N; R 51-53

Etiquetado, Etikettering, KENNZEICHNUNG, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulajeri

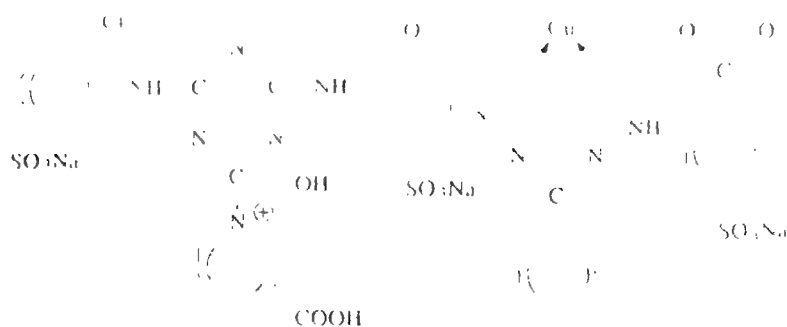
Xi	N	
		R 41-51/53
		S (2) 22-26-39-61

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrație


Cas No 89797-01-3

EEC No 404-670-9

No 029-007-00-7



- ES hidróxido de ((2-((3-(6-(2-cloro-5-sulfonato)anilino)-4-(3-carboxipiridinio)-1,3,5-triazin-2-ilamino)-2-óxido-5-sulfonatofenilazo)fenilmetilazo)-4-sulfonatobenzoato)cobre(3-) de trisodio)
- DA (trinatrium-(2 ((3 (6-(2 chlor-5-sulfonato)anilino)-4 (3-carboxypyridinio)-1,3,5-triazin-2-ylamino)-2-oxido-5-sulfonatophenylazo)phenylmethylazo)-4-sulfonatobenzoato)kobber(3-))hydroxid
- DE (trinatrium (2 ((3 (6 (2 chlor-5-sulfonato)anilino)-4-(3-carboxypyridinio)-1,3,5-triazin-2-ylamino)-2-oxido-5-sulfonatophenylazo)phenylmethylazo)-4-sulfonatobenzoato)kopper(3-))hydroxid
- EL υδροξείδιο του ((2-((3 (6-(2-χλωρο-5 σουλφονατο)ανιλίνο-4-(3-καρβοξυπυριδίνιο)-1,3,5-τριαζιν-2-υλαμινο)-2 οξείδιο-5-σουλφονατοφαινυλ-αζώ)φαινυλομethyl-αζώ)-4-σουλφονατοβενζοατο)χαλκός(3-) του τρινατρίου)
- EN (trisodium (2-((3-(6-(2-chloro-5-sulfonato)anilino)-4-(3-carboxypyridinio)-1,3,5-triazin-2-ylamino)-2-oxido-5-sulfonatophenylazo)phenylmethylazo)-4-sulfonatobenzoato)copper(3-)) hydroxide
- FR hydroxyde de ((2-((3-(6-(2-chloro-5-sulfonato)anilino)-4-(3-carboxypyridinio)-1,3,5-triazine-2-ylamino)-2-oxido-5-sulfonatophénylazo)phénylméthylazo)-4-sulfonatobenzoato)cuivre(3-) de trisodium)
- IT idrossido di ((2-((3-(6-(2-cloro-5-solfonato)anilino)-4-(3-carbossipiridinio)-1,3,5-triazin-2-ilammio)-2-ossido-5-solfonatofenilazo)fenilmetilazo)-4-solfonatobenzoato)rame(3-) de trisodio)
- NL (trinatrium (2-((3-(6-(2-chloor-5-sulfonato)anilino)-4-(3-carboxypyridinio)-1,3,5-triazine-2-ylamino)-2-oxido-5-sulfonatofenylazo)fenylmethylazo)-4-sulfonatobenzoato)koper(3-))hydroxid
- PT hidróxido de ((2-((3 (6-(2-cloro-5-sulfonato)anilino)-4-(3-carboxipiridinio)-1,3,5-triazina-2-ilamino)-2-oxido-5-sulfonatofenilazo)fenilmetilazo)-4-sulfonatobenzoato)cobre(3-) de trissódio)

Classification, Klassifizierung, Einstufung, Ταξινόγηση, Classification, Classificazione, Classificazione, Indeling, Classificação

E; R 2

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

E	X <sub>1</sub>	
		R 2 43
		S 2 (2) 22-24-35-37

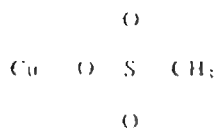
Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορία συγκεντρώσεως, Concentration Limits, limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração




Cas No 54253-62-2

EEC No 405-400-2

No 029-008-00-2





ES metansulfonato de cobre(II)  
 DA kobber(II)methansulfonat  
 DE Kupfer(II)methansulfonat  
 EL μεθανοσουλφονικός χαλκός(II)  
 EN copper(II) methanesulfonate  
 FR methanesulfonate de cuivre(II)  
 IT metansolfonato di rame(II)  
 NL koper(II)methaansulfonaat  
 PT metanossulfonato de cobre(II)

*Classification: Klassifizierung, Einstufung, Ταξινόμηση, Classificazione, Classificação, Indeling, Classificação*

Xn ; R 22	Xi , R 41	N ; R 50-53
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*Etiquetado: Etikettering, Anzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kennzeichen, Rotulagem*

Xn	N	
		R : 22-41-50/53 S : (2-)26-36/37/39-60-61

*Limits de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορία συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentraçào*


Cas No 7440-66-6

LEC No 231-175-3

No 030-001-00-1

Zn

ES: zinc en polvo (piroforico)

DA: zinkpulver - zinkstøv (ustabiliseret)

DE: Zinkpulver - Zinkstaub (nicht stabilisiert)

EL: ψευδάργυρος σκόνη (πυροφόρος)

EN: zinc powder - zinc dust (pyrophoric)

FR: zinc en poudre - poussières de zinc (pyrophoriques)

IT: zinco in polvere (piroforica)

NL: zinkpoeder - zinkstof (pyrofoor)

PT: zinco em pó (não estabilizado)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

F; R 15-17

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	
	R: 15-17 S: (2-)/7/8-43

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No —

No 030-002-00-7

Zn

ES: cinc en polvo (estabilizado)

DA: zinkpulver - zinkstøv (stabiliseret)

DE: Zinkpulver - Zinkstaub (stabilisiert)

EL: ψευδάργυρος σκόνη (σταθεροποιημένος)

EN: zinc powder - zinc dust (stabilized)

FR: zinc en poudre - poussières de zinc (stabilisées)

IT: zinco in polvere (stabilizzata)

NL: zinkpoeder - zinkstof (gestabiliseerd)

PT: zinco em pó (estabilizado)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

F; R 15

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

R : 10-15

S : (2-)7/8-43

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7646-85-7

EEC No 231-592-0

No 030-003-00-2



ES: cloruro de cinc

DA: zinkchlorid

DE: Zinkchlorid

EL: χλωριούχος ψευδάργυρος

EN: zinc chloride

FR: chlorure de zinc

IT: cloruro di zinco; zinco cloruro

NL: zinkchloride

PT: cloreto de zinco

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	R : 34 S : (1/2-)7/8-28-45

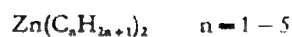
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No —

EEC No —

No 030-004-00-8

NOTA A



ES: derivados de alquilocinc

DA: zinkalkyler

DE: Zinkalkyle

BL: διαλκυλικές ενώσεις ψευδαργύρου

EN: zinc alkyls

FR: dérivés alkylés du zinc

IT: zincoalchili

NL: zinkalkylen

PT: alquilos de zinco



Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

R 14

F; R 17

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

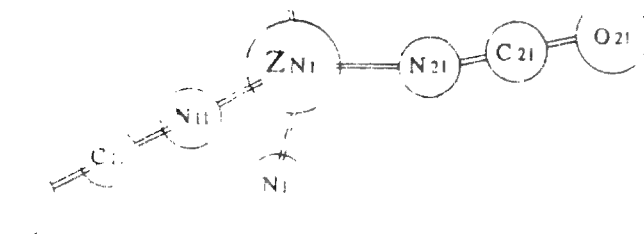
F	C	
		R : 14-17-34
		S : (1/2-)16-43-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

FEC No 401-610-3

No 030-005-00-3



ES : diaminodiisocianatozinco  
 DA : diaminodiisocyanatozink  
 DE : Diaminodiisocyanatozink  
 EL : διαμινοδιισκυανατοψευδάργυρος  
 EN : diaminediisocyanatozinc  
 FR : diaminediisocyanatozinc  
 IT : diaminodiisocianatozinco  
 NL : diaminediisocyanatozink  
 PT : diaminodiisocianatozinco

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificaçào

Xn ; R 22	Xi ; R 41	R 42/43	N ; R 50
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Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 22-41-42/43-50
		S : (2-)22-26-36/37/39-41-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7733-02-0

EEC No 231-793-3

No 030-006-00-9



ES: sulfato de cinc

DA: zinksulfat

DE: Zinksulfat

EL: υδρογονοθειικός ψευδάργυρος

EN: zinc sulphate

FR: sulfate de zinc

IT: solfato di zinco

NL: zinksulfaat

PT: sulfato de zinco

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 36/38

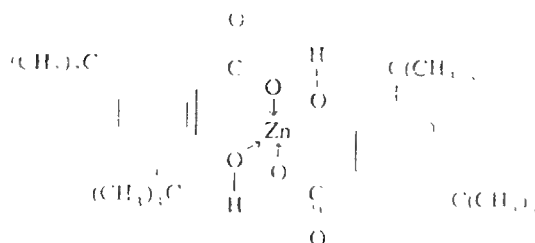
S : (2-)22-25

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 42405-40-3

EEC No 403-160-0

No 030-007-00-4



ES: bis(3,5-di-tert-butylsalicilato-O1,O2)zinc

DA: bis(3,5-di-tert-butylsalicylato-O1,O2)zink

DE: Bis(3,5-di-tert-butylsalicylato-O1,O2)zink

EL: δις(3,5-δι-τερτ-βουτύλσάλικυλ ατο Ο1,Ο2)Ψευδάργυρος

EN: bis(3,5-di-tert-butylsalicylato-O1,O2)zinc

FR: bis(3,5-di-tert-butylsalicylato-O1,O2)zinc

IT: bis(3,5-di-tert-butylsalicilato-O1,O2)zinco

NL: bis(3,5-di-tert-butylsalicylato-O1,O2)zink

PT: bis(3,5-di-tert-butylsalicilato-O1,O2)zinco

Classification, Klassifizierung, Einstufung, Ταξινόγηση, Classification, Classificazione, Classificazione, Indeling, Classificação

F; R 11

Xn; R 22

N; R 50-53

Etiquetado, Etikettierung, Kennzeichnung, Επισήμανση, Labelling, Etiquetado, Etichettatura, Kennzeichen, Rotulagem

F	Xn	N	
			R: 11-22 50/53
			S: (2) 7-22-60 61

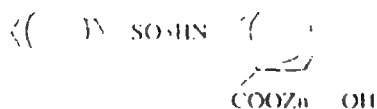
Concentrazione, Konzentration, Konzentration, Συγκέντρωση, Concentration, Concentrazione, Concentração, Concentração




Cas No 113036-91-2

EEC No 403-750-0

No 030-008-00-X



ES: hidrox(2-(bencensulfonamido)benzoato)cinc(II)

DA: hydroxo(2-(benzensulfonamido)benzoato)zink(II)

DE: Hydroxo(2-(benzolsulfonamido)benzoato)zink(II)

EL: υδροξο(2-(βενζόλοσουλφοναμιδο)βενζοατο)Ψευδάργυρος(II)

EN: hydroxo(2-(benzenesulfonamido)benzoato)zinc(II)

FR: hydroxo(2-(benzenesulfonamido)benzoato)zinc(II)

IT: idrosso(2-(benzensolfonammido)benzoato)zinco(II)

NL: hydroxo(2-(benzeensulfonamido)benzoato)zink(II)

PT: hidrox(2-(benzenossulfonamido)benzoato)zinco(II)

Classificação, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificaçāo

Xn; R 20

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 20-51/53 S : (2-)22-57-61

limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration Limits, Limites de concentration, Limite di concentrazione, Concentraziegrenzen, Limites de concentraçāo


Cas No 7440-38-2

EEC No 231-148-6

No 033-001-00-X

As

ES: arsenico

DA: arsen

DE: Arsen

EL: αρσενικό

EN: arsenic

FR: arsenic

IT: arsenico

NL: arseen

PT: arsénio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T; R 23/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 23/25
	S : (1/2-)20/21-28-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No

—

EEC No

—

No 033-002-00-5

NOTA A

ES: compuestos de arsénico, exceptos aquellos que expresamente están indicados en este Anexo

DA: arsenforbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE: Arsenverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ενώσεις αρσενικού, εκτός εκείνων που κατονομάζονται σ' άλλο σημείο αυτού του καταλόγου

EN: arsenic compounds, with the exception of those specified elsewhere in this Annex

FR: composés d'arsenic à l'exclusion de ceux nommément désignés dans cette annexe

IT: composti di arsenico, esclusi quelli espressamente indicati in questo allegato

NL: arseenverbindingen met uitzondering van de in deze bijlage met name genoemde zouten

PT: compostos de arsénio, com excepção dos expressamente referidos no presente anexo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 23/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R - 23/25
	S : (1/2-)20/21-28-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

NOTA I

C ≥ 0,2 %	T; R 23/25
0,1 % ≤ C < 0,2 %	Xn; R 20/22

Cas No 1327-53-3

EEC No 215-481-4

No 033-003-00-0

NOTA E



ES: trióxido de diarsénico; trióxido de arsénico

DA: diarsentrioxid; arsentrioxid

DE: Diarsentrioxid; Arsentrioxid

EL: τριοξείδιο του αρσενικού

EN: diarsenic trioxide; arsenic trioxide

FR: trioxyde de diarsenic; trioxyde d'arsenic

IT: diarsenico triossido; arsenico triossido

NL: diarseentrioxide; arseentrioxide

PT: trióxido de diarsénio; trióxido de arsénio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 1 ; R 45

T+ ; R 28

C ; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+



R : 45-28-34

S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 1303-28-2

EEC No 215-116-9

No 033-004-00-6

NOTA E



ES: pentaóxido de diarsénico  
 DA: diarsenpentaoxid; arsenpentoxid  
 DE: Diarsenpentaoxid  
 EL: πεντοξείδιο του διαρσενίου · πεντοξείδιο του αρσενικού  
 EN: arsenic pentoxide; arsenic oxide  
 FR: pentaoxyde de diarsenic; pentoxyde d'arsenic  
 IT: pentaossido di diarsenico  
 NL: diarseenpentaoxide  
 PT: pentóxido de diarsénio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 1; R 45	T; R 23/25
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45-23/25
	S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No —

No 033-005-00-1

NOTA A

NOTA E



ES: ácido arsénico y sus sales

DA: arsensyre og dets salte

DE: Arsensäure und seine Salze

EL: αρσενικικό οξύ και τα άλατα αυτού

EN: arsenic acid and its salts

FR: acide arsenique et ses sels

IT: acido arsenico e i suoi sali

NL: arseenzuur en zijn zouten

PT: ácido arsénico e seus sais

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 1 ; R 45

T ; R 23/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 45-23/25

S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 7784-42-1

EEC No 232-066-3

No 033-006-00-7

AsH<sub>3</sub>

ES: arsina

DA: arsin

DE: Arsin; Arsenwasserstoff

EL: αρσίνη

EN: arsine

FR: arsine

IT: arsina

NL: arsine

PT: arsina

FI: arsiini

SV: arsin; arsenikväte

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F+; R 12

T+; R 26

Xn; R 48/20

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnt, Märkning*

F+



T+



N



R: 12-26-48/20-50/53

S: (1/2)-9-16-28-33-36/37-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisusrajat, Konzentrationsgrænser*


Cas No 7782-49-2

FEC No 231-957-4

No 034-001-00 2

Se

ES: selenio

DA: selen

DE: Selen

EL: σελήνιο

EN: selenium

FR: sélénium

IT: selénio

NL: selenium

PT: selénio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

T; R 23/25

R 33

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 23/25-33

S : (1/2-)20/21-28-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No —

EEC No —

No 034-002-00-8

NOTA A

ES: compuestos de selenio, excepto el sulfoseleniuro de cadmio: rojo de cadmio

DA: selenforbindelser med undtagelse af cadmiumsulfoselenid

DE: Selenverbindungen mit Ausnahme von Cadmiumsulfoselenid

EL: ενώσεις σεληνίου, εκτός από το θειοσεληνιούχο κάδμιο

EN: selenium compounds except cadmium sulphoselenide

FR: composés du sélénium à l'exception du sulfoséléniure de cadmium

IT: composti del selenio tranne il solfoseleniuro di cadmio

NL: seleenverbindingen met uitzondering van cadmium sulfoselenide


PT: compostos de selénio, com excepção do sulfosseleneto de cádmio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/25

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 23/25-33
	S : (1/2-)20/21-28-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7726-95-6

EEC No 231-778-1

No 035-001-00-5

 $\text{Br}_2$ 



ES: bromo  
 DA: brom  
 DE: Brom  
 EL: βρώμιο  
 EN: bromine  
 FR: brome  
 IT: bromo  
 NL: broom  
 PT: bromo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

T+ ; R 26

C ; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	C	
		R : 26-35
		S : (1/2-)7/9-26-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 10035-10-6

EEC No 233-113-0

No 035-002-00-0

HBr

ES: bromuro de hidrógeno

DA: hydrogenbromide

DE: Hydrogenbromide; Bromwasserstoff

EL: βρωμίδιο του υδρογόνου· υδροβρώμιο

EN: hydrogen bromide

FR: bromure d'hydrogène

IT: bromuro di idrogeno


NL: hydrogeenbromide

PT: brometo de hidrogénio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 35 Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>C</p> 	<p>R : 35-37</p> <p>S : (1/2-)7/9-26-45</p>
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Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 035-002-01-8

NOTA B

HBr %

ES: ácido bromhídrico ... % ; bromuro de hidrógeno ... %

DA: hydrogenbromid ... %

DE: Bromwasserstoff ... %

EL: υδροβρωμικό οξύ ... %

EN: hydrobromic acid ... %

FR: bromure d'hydrogène ... % ; acide bromhydrique ... %

IT: ácido bromidrico ... %.

NL: broomwaterstof ... %

PT: brometo de hidrogénio ... % ; ácido bromídrico ... %

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C ; R 34

Xi ; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 34-37

S : (1/2-)7/9-26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 40 %	C ; R 34-37
10 % ≤ C < 40 %	Xi ; R 36/37/38

Cas No 7758-01-2

EEC No 231-829-8

No 035-003-00-6

NOTA E

KBrO<sub>3</sub>

ES: bromato de potasio

DA: kaliumbromat

DE: Kaliumbromat

EL: δρωμικό κάλιο

EN: potassium bromate

FR: bromate de potassium

IT: bromato di potassio; potassio bromato

NL: kaliumbromaat

PT: bromato de potássio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

O; R 9

Carc. Cat. 2; R 45

T; R 25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	O	
		R : 45-9-25
		S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7440-67-7

EEC No 231-176-9

No 040-001-00-3


Zr

ES: circonio en polvo (pirofórico)  
 DA: zirconiumpulver (ustabiliseret)  
 DE: Zirkoniumpulver (nicht stabilisiert)  
 EL: ζirkόνιο σκόνη (πυροφόρος)  
 EN: zirconium powder (pyrophoric)  
 FR: zirconium en poudre (pyrophonique)  
 IT: circonio in polvere (piroforica)  
 NL: zirconiumpoeder (pyrofoor)  
 PT: circonio em pó (não estabilizado)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

F; R 15-17

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>F</p> 	<p>R : 15-17</p> <p>S : (2-)7/8-43</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No

—

EEC No

—

No 040-002-00-9

Zr

ES: circonio en polvo (estabilizado)  
 DA: zirkonimpulver (stabiliseret)  
 DE: Zirkonimpulver (stabilisiert)  
 EL: ζirkόνιο σκόνη (σταθεροποιημένη)  
 EN: zirconium powder (non pyrophoric)  
 FR: zirconium en poudre (stabilisée)  
 IT: circonio in polvere (stabilizzata)  
 NL: zirconiumpoeder (gestabiliseerd)  
 PT: zircónio em pó (estabilizado)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 15

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 15

S : (2-)7/8-43

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas. No 1313-27-5

EEC No 215-204-7

No 042-001-00-9

MoO<sub>3</sub>

ES: trióxido de molibdeno

DA: molybdentnoxid

DE: Molybdaentnoxid

EL: τριοξειδίο του μολυβδαίνιου

EN: molybdenum trioxide

FR: trioxyde de molybdène

IT: triossido di molibdeno

NL: molybdeentrioxide

PT: trióxido de molibdénio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 48/20/22

Xi ; R 36/37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 36/37-48/20/22

S : (2-)22-25

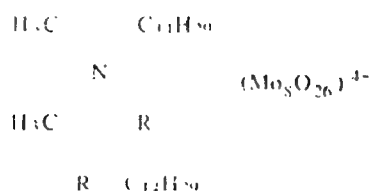
Limites de concentracón, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo




Cas No 117342-25-3

EEC No 404-760-8

No 042-002-00-4



- ES hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolibdato(4-) de tetrakis(dimetilditetradecilamonio)  
 DA tetrakis(dimethylditetradecylammonium)hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolybdat(4-)  
 DE Tetrakis(dimethylditetradecylammonium)hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolybdat(4-)  
 el hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradekaooctamolibdato(4-) tetrakis-  
 (dimetilditetradecilamonio)  
 EN tetrakis(dimethylditetradecylammonium)hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolybdate(4-)  
 FR hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolybdat(4-) de tetrakis(diméthylditétradécylammonium)  
 IT esa-mu-ossotetra-mu3-ossodi-mu5-ossotetradecaossottamolibdato(4-) di tetrachis(dimetilditetradecilammonio)  
 NI tetrakis(dimethylditetradecylammonium)hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolybdaat(4-)  
 PT hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolibdato (4-) de tetraquis(dimetilditetradecilamonio)

Classificação Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificatoria, Classificazião, Indéling, Classificacão

Xi; R 41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem

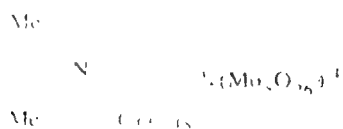
Xi	
	R : 41
	S : (2-)26-39

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 116810 46

EEC No 404-860-1

№ 042.003-00-X



ES	hexa-mu oxotetra-mu3 oxodi-mu5-oxotetradecaooctamolibdato(4-) de tetrakis(trimetilhexadecilamonio)
DA	tetrakis(trimethylhexadecylammonium)hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolymbdat(4-)
DE	Tetrakis(trimethylhexadecylammonium)hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolymbdat(4-)
EL	εξα-μυ-οξοτετρα-μυ3-οξοδι-μυ5-οξοδεκατετροξοοκταμολυβδαινικό(4-) τετρακίς(τριμεθυλδεκαεξυλαμμώνιο)
EN	tetrakis(trimethylhexadecylammonium) hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolymbdate(4-)
FR	hexa-mu-oxotetra-mu3-oxodi-mu5-oxotétradécaooctamolymbdate(4-) de tétrakis(triméthylhexadécylammonium)
IT	esa-mu-ossotetra-mu3-ossodi-mu5-ossotétradecaossoottamolibdato(4-) di tetrachis(trimetilesadecilammonio)
NL	tetrakis(trimethylhexadecylammonium)hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolymbdaat(4-)
PT	hexa-mu-oxotetra-mu3-oxodi-mu5-oxotetradecaooctamolibdato(4-) de tetraquis(trimetilhexadecilamonio)

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

F: R 11

Xi: R 41

N: R 50-53

*Etiquetado, Labettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçõ*


Cas No 7761-88-8

EEC No 231-853-9

No 047-001-00-2

AgNO<sub>3</sub>

ES: nitrato de plata

DA: sølvnitrat

DE: Silbernitrat

EL: νιτρικός άργυρος

EN: silver nitrate

FR: nitrate d'argent

IT: nitrato d'argento; argento nitrato

NL: zilvernitraat

PT: nitrato de prata

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 34

S : (1/2-)26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 048-001-00-5


NOTA A

- ES : compuestos de cadmio, excepto el sulfoseleniuro ( $x\text{CdS.yCdSe}$ ), el sulfuro mixto de cadmio-cinc ( $x\text{CdS.yZnS}$ ), el sulfuro mixto de cadmio y mercurio ( $x\text{CdS.yHgS}$ ) y de los especialmente citados en este anexo
- DA : cadmiumforbindelser, med undtagelse af cadmiumsulfoselenid ( $x\text{CdS.yCdSe}$ ) og blandinger af cadmiumsulfid med zinksulfid ( $x\text{CdS.yZnS}$ ), blandinger af cadmiumsulfid med kviksølv-sulfid ( $x\text{CdS.yHgS}$ ) såvel som cadmiumforbindelser opført andetsteds i dette bilag
- DE : Cadmiumverbindungen, mit Ausnahme von Cadmiumselenosulfid ( $x\text{CdS.yCdSe}$ ) und Mischungen von Cadmium und Zinksulfid ( $x\text{CdS.yZnS}$ ), Mischungen von Cadmium und Quecksilbersulfid ( $x\text{CdS.yHgS}$ ), sowie der in diesem Anhang gesondert aufgeführten Cadmiumverbindungen
- EL : ενώσεις καδμίου εκτός του θειοσεληνιούχου καδμίου ( $x\text{CdS.yCdSe}$ ), των μειγμάτων θειούχου καδμίου με θειούχο ψευδάργυρο ( $x\text{CdS.yZnS}$ ), των μειγμάτων θειούχου καδμίου με θειούχο υδράργυρο ( $x\text{CdS.yHgS}$ ) και των ενώσεων που κατονομάζονται σ' άλλο σημείο του παραρτήματος
- EN : cadmium compounds, with the exception of cadmium sulphoselenide ( $x\text{CdS.yCdSe}$ ), mixture of cadmium sulphide with zinc sulphide ( $x\text{CdS.yZnS}$ ), mixture of cadmium sulphide with mercury sulphide ( $x\text{CdS.yHgS}$ ), and those specified elsewhere in this Annex
- FR : composés de cadmium à l'exclusion du sulfoséléniure ( $x\text{CdS.yCdSe}$ ), du sulfure mixte cadmium-zinc ( $x\text{CdS.yZnS}$ ), du sulfure mixte cadmium-mercure ( $x\text{CdS.yHgS}$ ) et de ceux nommément désignés dans cette annexe
- IT : composti di cadmio, esclusi il solfoseleniuro ( $x\text{CdS.yCdSe}$ ), i solfuri misti di cadmio e zinco ( $x\text{CdS.yZnS}$ ), i solfuri misti di cadmio e mercurio ( $x\text{CdS.yHgS}$ ) e quelli espressamente indicati in questo allegato
- NL : cadmiumverbindingen met uitzondering van cadmiumsulfoselenide ( $x\text{CdS.yCdSe}$ ) en mengsels van cadmiumsulfide met zinksulfide ( $x\text{CdS.yZnS}$ ), mengsels van cadmiumsulfide met kwiksulfide ( $x\text{CdS.yHgS}$ ), alsmede van in deze bijlage met name genoemde Cd-verbindingen
- PT : compostos de cádmio, com excepção do sulfosseleneto ( $x\text{CdS.yCdSe}$ ), do sulfureto misto de cádmio e zinco ( $x\text{CdS.yZnS}$ ), do sulfureto misto de cádmio e mercúrio ( $x\text{CdS.yHgS}$ ) e dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn ; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20/21/22  S : (2-)22

Si se considera oportuno. Såfremt hensigtsmæssigt. Wenn erforderlich. Εάν χρειασθεί.  
 If appropriate. Si approprié. Se appropriato. Indien nodig. Sempre que justificado.

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

NOTA 1

C ≥ 0,1 %	Xn ; R 20/21/22

Cas No 1306-19-0

EEC No 215-146-2

No 048-002-00-0

NOTA E

CdO

ES: óxido de cadmio

DA: cadmiumoxid

DE: Cadmiumoxid

EL: οξείδιο του καδμίου

EN: cadmium oxide

FR: oxyde de cadmium

IT: cadmio ossido

NL: cadmiumoxide

PT: óxido de cádmio

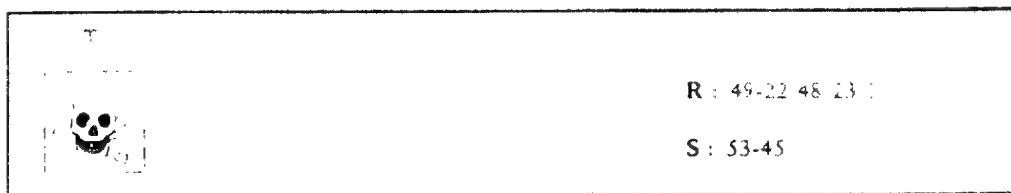
Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 49

T; R 48/23/25

Xn, R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limite de concentração


Cas No 4464-23-7

EEC No 224-729-0

No 048-003-00-6



ES: formiato de cadmio

DA: cadmiumformiat

DE: Cadmiumformiat

EL: κυρμηκικό κάδμιο

EN: cadmiumformate

FR: formiate de cadmium

IT: formiato di cadmio

NL: cadmiumformiaat

PT: formato de cádmio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

T; R 23/25

R 33

Xn; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 23/25-33-40

S : (1/2)-22-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 10 %	T; R 23/25-33-40
1 % ≤ C < 10 %	Xn; R 20/22-33-40
0,1 % ≤ C < 1 %	Xn; R 20/22-33

Cas No 542-83-6

EEC No 208-829-1

No 048-004-00-1

 $\text{Cd}(\text{CN})_2$ 

ES: cianuro de cadmio

DA: cadmiumcyanid

DE: Cadmiumcyanid

EL: κυανιούχο κάδμιο

EN: cadmiumcyanide

FR: cyanure de cadmium

IT: cadmio cianuro

NL: cadmiumcyanide

PT: cianeto de cádmio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

T+ ; R 26/27/28 R 32 R 33 Xn ; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+



R : 26/27/28-32-33-40

S : (1/2-)7-28-29-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 7 \%$	T+ ; R 26/27/28-32-33-40
$1 \% \leq C < 7 \%$	T ; R 23/24/25-32-33-40
$0,1 \% \leq C < 1 \%$	Xn ; R 20/21/22-33

Cas No 17010-21-8

EEC No 241-084-0

No 048-005-00-7

CdSiF<sub>6</sub>

ES: hexafluorosilicato de cadmio  
 DA: cadmiumhexafluorosilicat  
 DE: Cadmiumhexafluorosilikat  
 EL: φθοριοπυριτικό κάδμιο  
 EN: cadmium fluorosilicate  
 FR: hexafluorosilicate de cadmium; fluosilicate de cadmium  
 IT: cadmio esafluosilicato  
 NL: cadmiumhexafluorsilikaat  
 PT: hexafluorossilicato de cádmio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T; R 23/25

R 33

Xn; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*

C ≥ 10 %	T; R 23/25-33-40
1 % ≤ C < 10 %	Xn; R 20/22-33-40
0,1 % ≤ C < 1 %	Xn; R 20/22-33



Cas No 7790-79-6

EEC No 232-222-0

No 048-006-00-2



ES: fluoruro de cadmio

DA: cadmiumfluorid

DE: Cadmiumfluorid

EL: φθοριούχο κάδμιο

EN: cadmium fluoride

FR: fluorure-de cadmium

IT: cadmio fluoruro

NL: cadmiumfluoride

PT: fluoreto de cádmio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

T; R 23/25

R 33

Xn; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 23/25-33-40

S : (1/2-)22-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 10 \%$	T; R 23/25-33-40
$1 \% \leq C < 10 \%$	Xn; R 20/22-33-40
$0,1 \% \leq C < 1 \%$	Xn; R 20/22-33

Cas No 7790-80-9

EEC No 232-223-6

No 048-007-00-8

CdI<sub>2</sub>

ES yoduro de cadmio

DA : cadmiumiodid

DE Cadmiumiodid

EL ιωδιούχο καδμιο

EN : cadmium iodide

FR : iodure de cadmium

IT cadmio ioduro

NL cadmiumiodid

PT : iodeto de cadmio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T ; R 23/25

R 33

Xn ; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

	R : 23/25-33-40
	S : (1/2-)22-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	T ; R 23/25-33-40
1 % ≤ C < 10 %	Xn ; R 20/22-33-40
0,1 % ≤ C < 1 %	Xn ; R 20/22-33

Cas No 10108-64-2

EEC No 233-296-7

No 048-008-00-3

NOTA E

CdCl<sub>2</sub>

ES: cloruro de cadmio

DA: cadmiumchlorid

DE: Cadmiumchlorid

EL: χλωριούχο κάδμιο

EN: cadmium chloride

FR: chlorure de cadmium

IT: cadmio cloruro

NL: cadmiumchloride

PT: cloreto de cádmio

- Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45 T; R 48/23/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 45-48/23/25

S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 10124-36-4

EEC No 233-331-6

No 048-009-00-9

NOTA E

CdSO<sub>4</sub>

ES : sulfato de cadmio  
 DA : cadmiumsulfat  
 DE : Cadmiumsulfat  
 EL : θειικό κάδμιο  
 EN : cadmium sulphate  
 FR : sulfate de cadmium  
 IT : solfato di cadmio  
 NL : cadmiumsulfaat  
 PT : sulfato de cádmio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 49

T ; R 48/23/25

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 49-22-48/23/25

S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1306-23-6

EEC No 215-147-8

No 048-010-00-4

CdS

ES: sulfuro de cadmio

DA: cadmiumsulfid

DE: Cadmiumsulfid

EL: σουλφίδιο του καδμίου · θειούχο κάδμιο

EN: cadmium sulphide

FR: sulfure de cadmium

IT: solfuro di cadmio

NL: cadmiumsulfide

PT: sulfureto de cádmio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

T; R 48/23/25

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 22-40-48/23/25

S : (1/2-)22-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

NOTA 1

C ≥ 10 %	T; R 22-40-48/23/25
1 % ≤ C < 10 %	Xn; R 40-48/20/22
0,1 % ≤ C < 1 %	Xn; R 48/20/22

Cas No 7646-78-8

EEC No 231-588-9

No 050-001-00-5



ES: tetracloruro de estaño

DA: tin(IV)chlorid, tintetrachlorid

DE: Zinntetrachlorid

EL: τετραχλωριούχος κασσίτερος

EN: stannic chloride

FR: tetrachlorure d'étain

IT: tetracloruro di stagno; stagno tetracloruro

NL: tintetrachloride

PT: tetracloroeto de estanho

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

C; R 34

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R: 34-37

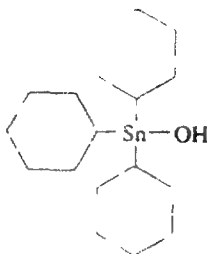
S: (1/2-)7/8-26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 13121-70-5

EEC No 236-049-1

No 050-002-00-0



- ES: cihexatin (ISO); hidróxido de tri(ciclohexil)estaño  
 DA: cyhexatin (ISO); tri(cyclohexyl) tinhydroxid  
 DE: cyhexatin (ISO); Tri(cyclohexyl)zinnhydroxid  
 EL: cyhexatin (ISO); υδροξείδιο του τρικυκλοεξυλοκασσιτέρου  
 EN: cyhexatin (ISO); tri(cyclohexyl)tin hydroxide  
 FR: cyhexatin (ISO); hydroxyde de tri(cyclohexyl)étain  
 IT: ciexatin (ISO); idrossido di tri(cicloesil)stagno  
 NL: cyhexatin (ISO); tri(cyclohexyl)tinhydroxide  
 PT: ciexatine (ISO); hidróxido de tri(cicloexil)estanho

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

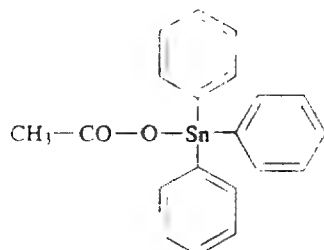
Xn	
	R : 20/21/22
	S : (2-)13

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 900-95-8

EEC No 212-984-0

No 050-003-00-6



ES: acetato de fentin (ISO); acetato de trifenilestaño  
 DA: fentinacetat (ISO); triphenyltinacetat  
 DE: Fentinacetat (ISO); Triphenylzinnacetat  
 EL: fentin acetate (ISO); οξείκος τριφαινυλοκασσίτερος  
 EN: fentin acetate (ISO); triphenyltin acetate  
 FR: fentine-acétate (ISO); acétate de triphénylétain  
 IT: fentin-acetato (ISO); acetato di trifenilstagno  
 NL: fentinacetaat (ISO); triphenyltinacetaat  
 PT: acetato de fentine (ISO); acetato de trifenilestanho

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 26	T; R 24/25	Xi; R 36/38	R 43	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	N	
		R : 24/25-26-36/38-43-50/53
		S : (1/2-)36/37-45-60-61

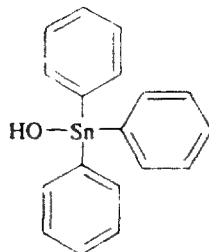
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao




Cas No 76-87-9

EEC No 200-990-6

No 050-004-00-1



- ES: hidróxido de fentin (ISO); hidróxido de trifenilestaño  
 DA: fentinhydroxid (ISO); triphenyltínhydroxid  
 DE: Fentinhydroxid (ISO); Triphenylzinnhydroxid  
 EL: fentin hydroxide (ISO) · υδροξείδιο του τριφαινυλοκασσιτέρου  
 EN: fentin hydroxide (ISO); triphenyltin hydroxide  
 FR: fentine,hydroxyde (ISO); hydroxyde de triphénylétain  
 IT: fentin-idrossido (ISO); idrossido di trifenilstagno  
 NL: fentinhydroxide (ISO); triphenyltínhydroxide  
 PT: hidróxido de fentine (ISO); hidróxido de trifenilestanho

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T+; R 26

T; R 24/25

Xi; R 36/38

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	N	
		R : 24/25-26-36/38-50/53
		S : (1/2-)36/37-45-60-61

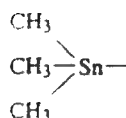
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No —

No 050-005-00-7

NOTA A



ES : compuestos de trimetilestano, excepto aquellos específicamente expresados en este Anexo

DA : trimethyltin-forbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE : Trimethyl-Zinnverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL : ενώσεις τριμεθυλοκασσιτέρου, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN : trimethyltin compounds, with the exception of those specified elsewhere in this Annex

FR : composés de triméthylétain à l'exclusion de ceux nommément désignés dans cette annexe

IT : composti di stagno trimetile esclusi quelli espressamente indicati in questo allegato


NL : trimethyltinverbindingen met uitzondering van de in deze bijlage met name genoemde

PT : compostos de trimetilestano com excepção dos expressamente referidos no presente anexo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

T+ ; R 26/27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	
	
	R : 26/27/28
	S : (1/2-)26-27-28-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

NOTA 1

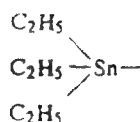
C ≥ 0,5 %	T+ ; R 26/27/28
0,1 % ≤ C < 0,5 %	T ; R 23/24/25
0,05 % ≤ C < 0,1 %	Xn ; R 20/21/22

Cas No —

EEC No —

No 050-006-00-2

NOTA A



ES: compuestos de trietilestaño, excepto aquellos específicamente expresados en este Anexo

DA: triethyltin-forbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE: Triethyl-Zinnverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ενώσεις τριαιθυλοκασσιτέρου, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτηματος

EN: triethyltin compounds, with the exception of those specified elsewhere in this Annex

FR: composés de triéthylétain à l'exclusion de ceux nommément désignés dans cette annexe

IT: composti di stagno trietile esclusi quelli espressamente indicati in questo allegato


NL: triethyltinverbindingen met uitzondering van de in deze bijlage met name genoemde

PT: compostos de trietilestanho com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 26/27/28
	S : (1/2-)26-27-28-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

NOTA 1

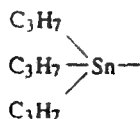
C ≥ 0,5 %	T+ ; R 26/27/28
0,1 % ≤ C < 0,5 %	T ; R 23/24/25
0,05 % ≤ C < 0,1 %	Xn ; R 20/21/22

Cas No —

EEC No —

No 050-007-00-8

NOTA A



ES: compuestos de tripropilestano, excepto aquellos específicamente expresados en este Anexo

DA: tripropyltin-forbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE: Tripropyl-Zinnverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ενώσεις τριπροπυλοκασσιτέρου, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: tripropyltin compounds, with the exception of those specified elsewhere in this Annex

FR: composés de tripropylétain à l'exclusion de ceux nommément désignés dans cette annexe

IT: composti di stagno tripropile esclusi quelli espressamente indicati in questo allegato


NL: tripropyltinverbindingen met uitzondering van de in deze bijlage met name genoemde

PT: compostos de tripropilestano com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

T	
	R : 23/24/25
	S : (1/2-)26-27-28-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

NOTA 1

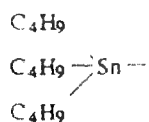
C ≥ 0,5 %	T; R 23/24/25
0,1 % ≤ C < 0,5 %	Xn; R 20/21/22

Cas No —

EEC No —

No 050-008-00-3

NOTA A



ES: compuestos de tributilestano

DA: tributyltin-forbindelser

DE: Tributyl-Zinnverbindungen

EL: ενώσεις τριβουτυλοκασσιτέρου

EN: tributyltin compounds

FR: composés de tributylétain

IT: composti di stagno tributile

NL: tributyltinverbindingen

PT: compostos de tributilestano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T; R 25-48/23/25

Xn; R 21

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 21-25-36/38-48/23/25

S : (1/2)-35-36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

NOTA

C ≥ 1 %	T; R 21-25-36/38-48/23/25
0,25 % ≤ C < 1 %	Xn; R 22-48/20/22

Cas No

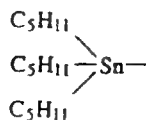
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EEC No

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No 050-009-00-9

NOTA A



ES: compuestos de tripentilestano, excepto aquellos específicamente expresados en este Anexo

DA: tripentyltin-forbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE: Tripentyl-Zinnverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ενώσεις τριπεντυλοκασσιτέρου, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: tripentyltin compounds, with the exception of those specified elsewhere in this Annex

FR: composés de tripentylétain à l'exclusion de ceux nommément désignés dans cette annexe

IT: composti di stagno tripentile esclusi quelli espressamente indicati in questo allegato

NL: tripentyltinverbindingen met uitzondering van de in deze bijlage met name genoemde

PT: compostos de tripentilestanho com excepção dos expressamente referidos no presente anexo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20/21/22 S : (2-)26-28

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

NOTA 1

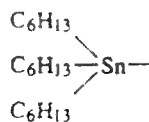
C ≥ 1 %	Xn; R 20/21/22

Cas No —

EEC No —

No 050-010-00-4

NOTA A



ES: compuestos de trihexilestaño, excepto aquellos específicamente expresados en este Anexo

DA: trihexyltin-forbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE: trihexyl-Zinnverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ενώσεις τριεξυλοκασσιτέρου, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: trihexyltin compounds, with the exception of those specified elsewhere in this Annex

FR: composés de trihexylétain à l'exclusion de ceux nommément désignés dans cette annexe

IT: composti di stagno triesile esclusi quelli espressamente indicati in questo allegato

NL: trihexyltinverbindingen met uitzondering van de in deze bijlage met name genoemde

PT: compostos de trixilestanho com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn 	R : 20/21/22 S : (2-)26-28
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

NOTA

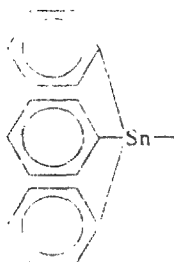
C ≥ 1 %	Xn; R 20/21/22

Cas No —

EEC No —

No 050-011-00-X

NOTA A



- ES compuestos de trifenilestano, excepto aquellos específicamente expresados en este Anexo
- DA triphenyltin-forbindelser, undtagen sådanne nævnt andetsteds i dette bilag
- DE Triphenyl-Zinnverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten
- EL ενώσεις τριφαινυλοκασσιτέρου, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος
- EN triphenyltin compounds, with the exception of those specified elsewhere in this Annex
- FR composés de triphénylétain à l'exclusion de ceux nommément désignés dans cette annexe
- IT composti di stagno trifenile esclusi quelli espressamente indicati in questo allegato
- NL triphenyltinverbindingen met uitzondering van de in deze bijlage met name genoemde
- PT compostos de trifenilestanho com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 23/24/25
	S : (1/2-)26-27-28-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

NOTA I

C ≥ 1 %	T; R 23/24/25
0,25 % ≤ C < 1 %	Xn; R 20/21/22

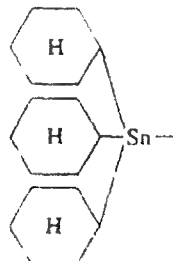


Cas No —

EEC No —

No 050-012-00-5

NOTA A



ES: compuestos de triciclohexilestano, excepto aquellos específicamente expresados en este Anexo

DA: tricyclohexyltin-forbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE: Tricyclohexyl-Zinnverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ενώσεις τρικυκλοεξυλοκασσιτέρου, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: tricyclohexyltin compounds, with the exception of those specified elsewhere in this Annex

FR: composés de tricyclohexylétain à l'exclusion de ceux nommément désignés dans cette annexe

IT: composti di stagno tricicloesile esclusi quelli espressamente indicati in questo allegato

NL: tricyclohexyltinverbindingen met uitzondering van de in deze bijlage met name genoemde

PT: compostos de tricicloexilestano com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20/21/22
	S : (2-)26-28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao

NOTA 1

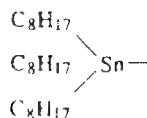
C ≥ 1 %	Xn; R 20/21/22

Cas No —

EEC No —

No 050-013 00-0

NOTA



ES: compuestos de trioctilestano, excepto aquellos específicamente expresados en este Anexo

DA: trioctylin-forbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE: Trioctyl-Zinnverbindungen, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ενώσεις τριοκτυλοκασσιτέρου, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: trioctyltin compounds, with the exception of those specified elsewhere in this Annex

FR: composés de triocylétain à l'exclusion de ceux nommément désignés dans cette annexe

IT: composti di stagno triottile esclusi quelli espressamente indicati in questo allegato


NL: trioctyltinverbindingen met uitzondering van de in deze bijlage met name genoemde

PT: compostos de trioctilestano com excepção dos expressamente referidos no presente anexo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi 	R : 36/37/38  S : (2)
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

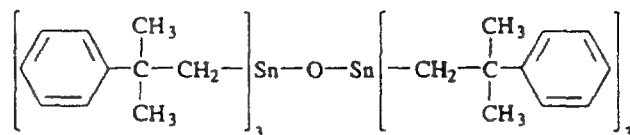
NOTA 1

C ≥ 1 %	Xi; R 36/37/38

Cas No 13356-08-6

EEC No 236-407-7

No 050-017-00-2



ES: óxido de bis(tris(2-fenil-2-metilpropil)estaño); óxido de fenbutatina

DA: bis(tris(2-methyl-2-phenylpropyl)tin)oxid; fenbutatinoxid

DE: Bis(tris(2-methyl-2-phenylpropyl)zinn)oxid; Fenbutatinoxid

EL: οξείδιο του δις(τρικς(2-μεθυλο-2-φαινυλοπροπυλο)κασσιτέρου

EN: bis(tris(2-methyl-2-phenylpropyl)tin)oxide; fenbutatin oxide

FR: oxyde de bis[tri(2-méthyl-2-phénylpropyl)étain]; fenbutatin-oxyde

IT: ossido di bis(tris(2-fenil-2-metilpropil)stagno); ossido di fenbutatina

NL: bis(tris(2-fenyl-2-methylpropyl)tin) oxide; fenbutatinoxide


PT: éter bis[tris(2-metil-2-fenilpropil)estanho]; éter fenbutatina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 21

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

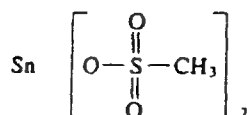
Xn	
	R : 21-36/38 S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 53408-94-9

EEC No 401-640-7

No 050-018-00-8



ES: metansulfonato de estaño(II)

DA: tin(II)methansulfonat

DE: Zinn(II)methansulfonat

EL: μεθανοσουλφονικός κασσίτερος(II)

EN: tin(II) methanesulphonate

FR: méthanesulfonate d'étain(II)

IT: metansolfonato di stagno(II)

NL: tin(II)methaansulfonaat

PT: metanossulfonato de estanho(II)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

C; R 34

Xn; R 22

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 22-34-43

S : (1/2-)22-26-36/37/39-45

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 10025-91-9

EEC No 233-047-2

No 051-001-00-8



ES: tricoloruro de antimonio

DA: antimontrichlorid; antimon(III)chlorid

DE: Antimontrichlorid

EL: τριχλωριούχο αντιμόνιο

EN: antimony trichloride

FR: trichlorure d'antimoine

IT: tricoloruro di antimonio; antimonio tricoloruro

NL: antimoonttrichloride

PT: tricloreto de antimónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

C; R 34

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 34-37  S : (1/2-)26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 7647-18-9

EEC No 231-601-8

No 051-002-00-3



ES: pentacloruro de antimonio  
 DA: antimonpentachlorid, antimon(V)chlorid  
 DE: Antimonpentachlorid  
 EL: πενταχλωριούχο αντιμόνιο  
 EN: antimony pentachloride  
 FR: pentachlorure d'antimoine  
 IT: pentacloruro di antimonio; antimonio pentacloruro  
 NL: antimonpentachloride  
 PT: pentacloreto de antimónio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

C; R 34

Xi; R 37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	<p>R : 34-37</p> <p>S : (1/2-)26-45</p>

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No —

No 051-003-00-9

NOTA A

- ES: compuestos de antimonio, excepto el tetróxido ( $\text{Sb}_2\text{O}_4$ ), el pentóxido ( $\text{Sb}_2\text{O}_5$ ), el trisulfuro ( $\text{Sb}_2\text{S}_3$ ), el pentasulfuro ( $\text{Sb}_2\text{S}_5$ ) y los especialmente expresados en este anexo
- DA: antimonforbindelser, med undtagelse af antimontrisulfid ( $\text{Sb}_2\text{S}_3$ ), antimonpentasulfid ( $\text{Sb}_2\text{S}_5$ ), antimontetraoxid ( $\text{Sb}_2\text{O}_4$ ), antimonpentoxid ( $\text{Sb}_2\text{O}_5$ ) samt sådanne nævnt andetsteds i dette bilag
- DE: Antimonverbindungen, mit Ausnahme von Diantimontetraoxid ( $\text{Sb}_2\text{O}_4$ ), Diantimonpentoxid ( $\text{Sb}_2\text{O}_5$ ), Diantimontrisulfid ( $\text{Sb}_2\text{S}_3$ ), Diantimonpentasulfid ( $\text{Sb}_2\text{S}_5$ ) sowie der Antimonverbindungen, die in diesem Anhang gesondert aufgeführt sind
- EL: ενώσεις αντιμονίου, εκτός του τετροξειδίου του αντιμονίου ( $\text{Sb}_2\text{O}_4$ ), του πεντοξειδίου του αντιμονίου ( $\text{Sb}_2\text{O}_5$ ), του τριθειούχου αντιμονίου ( $\text{Sb}_2\text{S}_3$ ), του πενταθειούχου αντιμονίου ( $\text{Sb}_2\text{S}_5$ ) και των ενώσεων αντιμονίου που κατονομάζονται στο παράρτημα αυτό
- EN: antimony compounds, with the exception of the tetroxide ( $\text{Sb}_2\text{O}_4$ ), pentoxide ( $\text{Sb}_2\text{O}_5$ ), trisulphide ( $\text{Sb}_2\text{S}_3$ ), pentasulphide ( $\text{Sb}_2\text{S}_5$ ) and those specified elsewhere in this Annex
- FR: composés d'antimoine à l'exclusion du tétr oxyde ( $\text{Sb}_2\text{O}_4$ ), du pentoxyde ( $\text{Sb}_2\text{O}_5$ ), du trisulfure ( $\text{Sb}_2\text{S}_3$ ), du pentasulfure ( $\text{Sb}_2\text{S}_5$ ) et de ceux nommément désignés dans cette annexe
- IT: composti di antimonio esclusi tetraossido ( $\text{Sb}_2\text{O}_4$ ), pentaossido ( $\text{Sb}_2\text{O}_5$ ), trisolfuro ( $\text{Sb}_2\text{S}_3$ ), pentasolfuro ( $\text{Sb}_2\text{S}_5$ ) e quelli espressamente indicati in questo allegato
- NL: antimonverbindingen met uitzondering van tetroxide ( $\text{Sb}_2\text{O}_4$ ), pentoxide ( $\text{Sb}_2\text{O}_5$ ), trisulfide ( $\text{Sb}_2\text{S}_3$ ), pentasulfide ( $\text{Sb}_2\text{S}_5$ ) alsmede van in deze bijlage met name genoemde zouten
- PT: compostos de antimónio, com excepção do tetróxido ( $\text{Sb}_2\text{O}_4$ ), do pentóxido ( $\text{Sb}_2\text{O}_5$ ), do trissulfureto ( $\text{Sb}_2\text{S}_3$ ), do pentassulfureto ( $\text{Sb}_2\text{S}_5$ ) e dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xn



R : 20/22

S : (2-)22\*

Si se considera oportuno Sáfremt hensigtsmæssigt. Wenn erforderlich. Εάν χρειασθεί. If appropriate Si approprié. Se appropriato Indien nodig. Sempre que justificado.

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

NOTA I

C ≥ 0,25 %	Xn; R 20/22

Cas No 7783-56-4

EEC No 232-009-2

No 051-004-00-4

SbF<sub>3</sub>

ES: trifluoruro de antimonio  
 DA: antimontrifluorid  
 DE: Antimontrifluorid  
 EL: τριφθοριούχο αντιμόνιο  
 EN: antimony trifluoride  
 FR: trifluorure d'antimoine  
 IT: antimonio trifluoruro  
 NL: antimoontrifluoride  
 PT: trifluoreto de antimónio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T; R 23/24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 23/24/25
	S : (1/2-)7-26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 1309-64-4

EEC No 215-175-0

No 051-005-00-X

Sb<sub>2</sub>O<sub>3</sub>

ES : trióxido de diantimonio

DA : diantimontrioxid , antimontrioxid

DE : Diantimontrioxid ; Antimontrioxid

EL : τριοξειδίο του διαντιμονίου· τριοξειδίο του αντιμονίου

EN : antimony trioxide

FR : trioxyde de diantimoine , trioxyde d'antimoine

IT : triossido di diantimonio

NL : diantimoontrioxide

PT : trióxido de diantimonio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 3 ; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 40

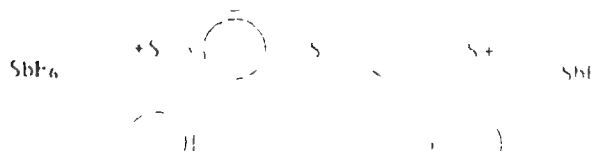
S : (2-)22-36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

IEC No 403 500 0

No 051 006 00 5 1



- ES · hexafluoroantimonato de difenil(4-feniltiofenil)sulfonio  
 DA · diphenyl(4-phenylthiophenyl)sulfoniumhexafluorantimony  
 DE · Diphenyl(4-phenylthiophenyl)sulfoniumhexafluorantimonat  
 EL · εξαφθοροαντιμονικο ουφαινυλο(4 φαινυλοθειοφαινυλο)σουλφονιο  
 EN · diphenyl(4-phenylthiophenyl)sulfonium hexafluoro antimonate  
 FR · hexafluoroantimonate de diphenyl(4-phenylthiophenyl)sulfonium  
 IT · esafluoroantimonato di difenil(4-feniltiofenil)sulfonio  
 NL · difenyl(4-fenylthiofenyl)sulfoniumhexafluorantimonaat  
 PT · hexafluoroantimonato de difenil(4-feniltiofenil)sulfonio

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classificazione, Classificação, Classificazione, Indeling, Classificação

R 43

N, R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Etichetare, Etiketatura, Kenmerken, Rotetigem

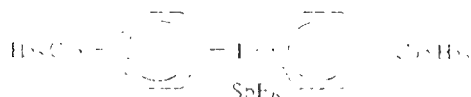
X <sub>i</sub>	N	
		R · 43 50/53
		S · (2) 24-37 60-61

Limites de concentracion, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 71786-70-4

EEC No 404-420-9

No 051-007-00-0



- ES: hexafluoroantimonato de bis(4-dodecylfenil)iodonio  
 DA: bis(4-dodecylphenyl)iodonium hexafluorantimonat  
 DE: Bis(4-dodecylphenyl)iodonium hexafluorantimonat  
 EL: εξαφαθοροαντιμονικό δις(4-δωδεκυλοφαίνυλ)ιωδόνιο  
 EN: bis(4-dodecylphenyl)iodonium hexafluoroantimonate  
 FR: hexafluoroantimonate de bis(4-dodécylphényl)iodonium  
 IT: esafluoroantimonato di bis(4-dodecifenil)iodonio  
 NL: bis(4-dodecylfenyl)iodonium hexafluorantimonaat  
 PT: hexafluoroantimonato de bis(4-dodecifenil)iodonio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
R 43-52/53	
S 2 (2-)/24-37-61	

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7553-56-2

EEC No 231-442-4

No 053-001-00-3

I<sub>2</sub>

ES: yodo

DA: iod

DE: Jod

EL: ιώδιο

EN: iodine

FR: iode

IT: iodio

NL: jood

PT: iodo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn; R 20/21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20/21

S : (2-)23-25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 10034-85-2

FEC No 233 109 9

No 053 002-00-9


## HI

ES ioduro de hidrogeno  
 DA hydrogeniodid  
 DE Hydrogeniodid, Jodwasserstoff  
 EL ιωδιίδιο του υδρογόνου  
 EN hydrogen iodide  
 FR iodure d'hydrogene  
 IT ioduro di idrogeno, acido iodidrico  
 NL hydrogeenjodide  
 PT iodeto de hidrogenio  
 FI jodivety, vedeton  
 SV vatejodid, vattenfri

*Classification Klassifisering Einstufung Ταξινόμηση Classification  
 Classification Classificazione Indeling Classificação Luokitus Klassifisering*

C, R 35

*Etiquetage Etikettering, Kennzeichnung, Επισήμανση, Labelling  
 Etiquetai Etichetatura Kennmerken Rotulagem Merkinnat Markning*

C	
	R 35
	S (1/2) 9 26 36/37/39 45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκεντρώσεως  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração Pitoivusrajat, Konzentrationsgränzer*

C ≥ 10 %	C, R 35
0,2 % ≤ C < 10 %	C, R 34
0,02 % ≤ C < 0,2 %	Xi, R 36/37/38

NOTA 5

Cas No

EEC No

No 053-002-01-6

NOTA B

HI %

ES: ácido yodhídrico ... %; yoduro de hidrógeno ... %

DA: hydrogeniodid ... %

DE: Jodwasserstoff ... %

EL: υδροϊωδικό οξύ ... %

EN: hydriodic acid ... %

FR: iodure d'hydrogène ... %, acide iodhydrique ... %

IT: acido iodidrico ... %

NL: joodwaterstof ... %

PT: acido iodídrico ... %; iodeto de hidrogenio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 34
	S : (1/2-)26-45

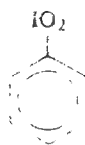
Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 25 %	C; R 34
10 % ≤ C < 25 %	Xi, R 36/38

Cas No 696-33-3

EEC No —

No 053-003-00-4



ES: yodoxibenceno; yodilbenceno

DA: iodylbenzen

DE: Jodylbenzol

EL: ιωδύλο βενζόλιο

EN: iodoxybenzene

FR: iodylbenzène

IT: iodossibenzene

NL: jodylbenzeen

PT: iodoxibenzeno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificaçãõ*

E; R1

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Regulaeren*

<p>E</p> 	<p>R 1</p> <p>S 1 (2-35)</p>
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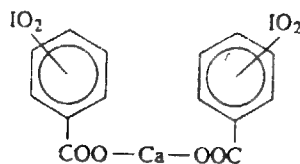
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentrationen, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*


Cas No —

EEC No —

No 053-004-00-X

NOTA C



ES: yodoxibenzoato de calcio; yodilbenzoato de calcio

DA: calciumiodylbenzoat

DE: Calcium-jodylbenzoat

EL: ιωδυλοδενζοϊκό ασβέστιο

EN: calcium iodoxybenzoate

FR: iodylbenzoate de calcium

IT: iodossibenzoato di calcio

NL: calciumjodylbenzoaat

PT: iodoxibenzoato de cálcio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R1

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E



R : 1

S : (2-)35

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 1304-29-6

EEC No 215-128-4

No 056-001-00-1



ES: peróxido de bario; dióxido de bario

DA: bariumperoxid

DE: Bariumperoxid

EL: υπεροξείδιο του βαρίου

EN: barium peroxide

FR: dioxyde de baryum; peroxyde de barvum

IT: perossido di bario; bario perossido

NL: bariumperoxide

PT: peróxido de bário

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

O; R 8

Xn; R 20/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

O	Xn	
		R : 8-20/22 S : (2-)13-27

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No

FEC No

No 056-002-00-7


NOTA A

- ES sales de bario, excepto el sulfato de bario, ácido 1-azo-2-hidroxinaftalenil aril sulfónico y aquellas específicamente expresadas en este anexo
- DA bariumsalte, undtagen bariumsulfat, salte af 1-azo-2-hydroxynaphthalenylarylsulfonsyre, og bariumsalte nævnt andetsteds i dette bilag
- DE Bariumsalze, mit Ausnahme des Bariumsulfats, der Salze von 1-Azo-2-hydroxynaphthalenylarylsulfonsäuren, und der namentlich in diesem Anhang bezeichneten Salze
- EL αλατα βαρίου, εκτός από το θεικό βάριο, άλατα του 1-αζω-2 υδροξυναφθαλινου αρυλιο σουλφονικού οξέος, και αλατα που αναφέρονται σ' άλλο σημείο αυτού του καταλόγου
- EN barium salts, with the exception of barium sulphate, salts of 1-azo-2-hydroxynaphthalenyl aryl sulphonie acid, and of salts specified elsewhere in this Annex
- FR sels de baryum, à l'exclusion du sulfate de baryum, des sels de l'acide 1-azo-2-hydroxynaphthalénylarylsulfonique, et des sels nommément designés dans cette annexe
- IT sali di bario, esclusi il solfato di bario, i sali dell'acido 1-azo-2-idrossinaftalenil aril solfonico, e i sali espressamente indicati in questo allegato
- NI bariumzouten, met uitzondering van bariumsulfaat, zouten van 1-azo-2-hydroxynaphthyl aryl sulfoonzuur en in deze bijlage met name genoemde zouten
- PT sais de bário, com excepção do sulfato de bário, sais de ácido 1-azo-2-hidroxinaftalenil aril sulfónico, e dos sais expressamente referidos no presente anexo
- FI bariumsuolat paitsi bariumsulfaatti, 1-azo-2-hydroksinaftenyyliaryylisulfonihapon suolat ja muualla tassa liitteessa mainitut suolat
- SV bariumsalter utom bariumsulfat, salter av 1-azo-2-hydroxinaftalenylarylsulfonsyra och sådana som är upptagna på annat ställe i bilagan

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn, R 20/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Liuhettatúra, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn	
	R 20/22
	S (2)28

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*

C ≥ 1 %	Xn, R 20/22

NOTA I

Cas No 513-77-9

EEC No 208-167-3

No 056-003-00-2


Ba CO<sub>3</sub>

ES: carbonato de bario  
 DA: bariumcarbonat  
 DE: Bariumcarbonat  
 EL: ανθρακικό βάριο  
 EN: barium carbonate  
 FR: carbonate de baryum  
 IT: carbonato di bario  
 NL: bariumcarbonaat  
 PT: carbonato de bário

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Eticbettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2-)24/25

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 10361-39-4

EEC No 233-788-1

No 056-004-00-8


BaCl<sub>2</sub>

ES: cloruro de bario  
 DA: bariumchlorid; bariumdichlorid  
 DE: Bariumchlorid  
 EL: χλωριούχο βάριο  
 EN: barium chloride  
 FR: chlorure de baryum  
 IT: cloruro di bario; bario cloruro  
 NL: bariumchloride  
 PT: cloreto de bário  
 FI: bariumkloridi  
 SV: bariumklorid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 25	Xn; R 20
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

<p>T</p> 	R: 20-25
	S: (1/2-)45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçã, Pitoisuusraajat, Koncentrationsgränser*


Cas No 20816-12-0

EEC No 244-058-7

No 076-001-00-5

OsO<sub>4</sub>

ES: tetróxido de osmio

DA: osmiumtetraoxid

DE: Osmiumtetraoxid

EL: τετραοξείδιο του οσμίου

EN: osmium tetroxide; osmic acid

FR: tetraoxyde d'osmium; acide osmique

IT: tetrossido di osmio; osmio tetrossido

NL: osmiumtetraoxide

PT: tetróxido de ósmio; ácido ósmico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T+; R 26/27/28

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R: 26/27/28-34

S: (1/2-)7/9-26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7439-97-6

EEC No 231-106-7

No 080-001-00-0

Hg

ES : mercurio  
 DA : kviksølv  
 DE : Quecksilber  
 EL : υδράργυρος  
 EN : mercurv  
 FR : mercure  
 IT : mercurio  
 NL : kwik  
 PT : mercúrio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T ; R 23

R 33

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 23-33

S : (1/2-)7-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No —

No 080-002-00-6


NOTA A

- ES: compuestos inorganicos de mercurio, excepto el sulfuro mercurico (cinabrio) y los especificamente expresados en este Anexo
- DA: uorganiske kviksølvforbindelser, undtagen kviksølv (II) sulfid (cinnober) samt sådanne nævnt andetsteds i dette bilag
- DE: Anorganische Quecksilberverbindungen mit Ausnahme von Quecksilber (II) sulfid (Zinnober) und der namentlich in diesem Anhang bezeichneten
- EL: ανόργανες ενώσεις υδραργύρου εκτός από το θειούχο υδράργυρο και τις ενώσεις που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος
- EN: inorganic compounds of mercury with the exception of mercuric sulphide and those specified elsewhere in this Annex
- FR: composés minéraux du mercure à l'exception du sulfure mercurique (cinabre) et de ceux nommément désignés dans cette annexe
- IT: composti inorganici del mercurio, escluso il solfuro di mercurio (cinabro) e quelli espressamente indicati in questo allegato
- NL: anorganische kwikverbindingen, met uitzondering van kwiksulfide en van de in deze bijlage met name genoemde
- PT: compostos minerais de mercúrio, com excepção do sulfureto mercúrico (cinábrio) e dos expressamente referidos no presente anexo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

T+ ; R 26/27/28	R 33
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T+</p> 	<p>R : 26/27/28-33</p> <p>S : (1/2-)13-28-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

NOTA I

C ≥ 2 %	T+ ; R 26/27/28-33
0,5 % ≤ C < 2 %	T ; R 23/24/25-33
0,1 % ≤ C < 0,5 %	Xn ; R 20/21/22-33

Cas No 10112-91-1

EEC No 233-307-5

No 080-003-00-1



ES: dicloruro de dimercurio; calomelanos  
 DA: dikviksølvdichlorid; calomel; kviksølv (I) chlorid  
 DE: Diquecksilberdichlorid; Kalomel  
 EL: διχλωρισύχος διυδράργυρος· καλομέλας  
 EN: dimercury dichloride; calomel  
 FR: dichlorure de dimercure; calomel; chlorure de mercure (I)  
 IT: dicloruro di dimercurio; calomelano  
 NL: dikwikdichloride; calomel  
 PT: dicloreto de dimercúrio; calomelanos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22-36/37/38

S : (2-)13-24/25-46

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*




Cas No —

EEC No —

No 080-004-00-7

NOTA A

ES: compuestos organicos de mercurio, excepto los específicamente expresados en este Anexo

DA: organiske kvikselvforbindelser undtagen sådanne nævnt andetsteds i dette bilag

DE: Organische Quecksilberverbindungen mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: οργανικές ενώσεις υδραργύρου εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτηματος

EN: organic compounds of mercury with the exception of those specified elsewhere in this Annex

FR: composees organiques du mercure à l'exception de ceux nommément désignés dans cette annexe

IT: composti organici del mercurio, esclusi quelli espressamente indicati in questo allegato

NL: organische kwikverbindingen met uitzondering van de in deze bijlage met name genoemde

PT: compostos orgânicos de mercúrio, com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/27/28

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 26/27/28-33

S : (1/2-)13-28-36-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

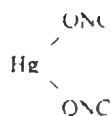
NOTA 1

C. $\geq$ 1 %	T+ ; R 26/27/28-33
0,5 % $\leq$ C < 1 %	T ; R 23/24/25-33
0,05 % $\leq$ C < 0,5 %	Xn ; R 20/21/22-33

Cas No 628-86-4

EEC No 211-057-8

No 080-005-00-2



ES isocianato de mercurio , fulminato de mercurio

DA kviksølv(II)fulminat

DE Quecksilberfulminat , Knallquecksilber

EL φουλμινικός υδραργυρός

EN mercuric fulminate , fulminate of mercury

FR fulminate de mercure (II)

IT fulminato di mercurio



NL kwikfulminaat , knalkwik

PT fulminato de mercúrio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R 3	T. R 23/24/25	R 33
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

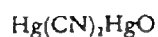
E	T	
		R : 3-23/24/25-33 S : (1/2-)3-35-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1335-31-5

EEC No 215-629-8

No 080-006-00-8



ES: oxicianuro de mercurio

DA: kviksølv(II)-oxidcyanid

DE: Quecksilber(II)-oxidcyanid

EL: οξυκυανιούχος υδράργυρος

EN: mercuric oxycyanide

FR: oxycyanure de mercure (II)

IT: ossicianuro di mercurio; mercurio ossicianuro


NL: kwikoxycyanide

PT: oxicianeto de mercúrio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

E; R 3	T; R 23/24/25	R 33
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

E	T	
		
		R : 3-23/24/25-33
		S : (1/2-)28-35-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No —

No 080-007-00-3

NOTA A



ES: derivados de alquilmmercuro

DA: kviksølvalkyler

DE: Quecksilberalkyle

EL: αλκυλοπαράγωγα του υδραργύρου

EN: mercury alkyls

FR: dérivés alkylés du mercure

IT: mercurio alchili


NL: kwikalkylen

PT: alquilo de mercúrio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação :

T+ ; R 26/27/28 R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 26/27/28-33
	S : (1/2-)13-28-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

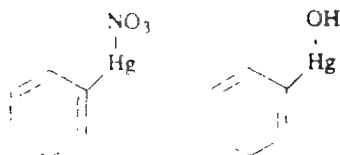
NOTA 1

C ≥ 0,5 %	T+ ; R 26/27/28-33
0,1 % ≤ C < 0,5 %	T ; R 23/24/25-33
0,05 % ≤ C < 0,1 %	Xn ; R 20/21/22-33

Cas No 8003-05-2

EEC No —

No 080-008-00-9



ES: hidróxido de fenilmercurio--nitrato de fenilmercurio

DA: phenylkviksølvhydroxid--phenylkviksølvnitrat

DE: Phenylquecksilberhydroxid--phenylquecksilbernitrat

EL: υδροξείδιο του φαινυλδραργύρου-νιτρικός φαινυλδραργύρος

EN: phenylmercury hydroxide--phenylmercury nitrate; basic phenylmercury nitrate

FR: hydroxyde de phénylmercure-nitrate de phénylmercure; nitrate de phénylmercure basique

IT: idrossido di fenilmercurio--nitrato di fenilmercurio

NL: fenylkwikhydroxyde--fenylkwiknitraat

PT: hidróxido de fenilmercúrio--nitrato de fenilmercúrio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação


T; R 25-48/24/25

C; R 54

Xi; R 37

R 44

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

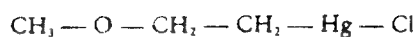
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 25-34-37-44-48/24/25</p> <p>S : (1/2)-23-24/25-37-45</p> </div> </div>
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 Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 123-88-6

EEC No 204-659-7

No 080-009-00-4



ES: cloruro de 2-metoxietilmercurio

DA: 2-methoxyethylkviksølvchlorid; 2-methoxyethylmercurichlorid

DE: 2-Methoxyethylquecksilberchlorid

EL: χλωριούχος 2-μεθοξυαιθυλυδράργυρος

EN: 2-methoxyethylmercury chloride

FR: chlorure de 2-méthoxyéthylmercure

IT: cloruro di 2-metossietilmercurio

NL: 2-methoxyethylkwikchloride

PT: cloreto de 2-metoxietilmercúrio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T; R 25-48/25

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 25-34-48/25

S : (1/2-)36/37/39-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 7487-94-7

EEC No 231-299-8

No 080-010-00-X



ES: dicloruro de mercurio

DA: kviksølv(dichlorid); kviksølv(II)klorid

DE: Quecksilberdichlorid

EL: διχλωριούχος υδράργυρος

EN: mercury dichloride; mercuric chloride

FR: dichlorure de mercure; chlorure de mercure (II)

IT: dicloruro di mercurio

NL: kwikdichloride

PT: dicloreto de mercúrio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T+; R 28

C; R 34

T; R 48/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Eticbettatura, Kenmerken, Rotulagem

T+



R: 28-34-48/24/25

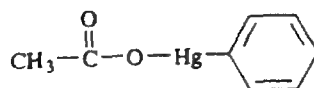
S: (1/2-)36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 62-38-4

EEC No 200-532-5

No 080-011-00-5



ES: acetato de fenilmercurio

DA: phenylkviksølvacetat; phenylmercuriacetat

DE: Phenylquecksilberacetat

EL: οξικός φαινυλιδράργυρος

EN: phenylmercury acetate

FR: acetate de phénylmercure

IT: acetato di fenilmercurio

NL: fenylkwikacetaat

PT: acetato de fenilmercúrio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25-48/24/25

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 7440-28-0

EEC No 231-138-1

No 081-001-00-3


Tl

ES: talio  
 DA: thallium  
 DE: Thallium  
 EL: θάλλιο  
 EN: thallium  
 FR: thallium  
 IT: tallio  
 NL: thallium  
 PT: talio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

T+ ; R 26/28	R 33
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	
	R : 26/28-33
	S : (1/2-)13-28-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No —

No 081-002-00-9

NOTA A

ES: compuestos de talio, excepto los especialmente expresados en este anexo

DA: thalliumforbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE: Thalliumverbindungen mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ενώσεις θαλλίου εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: thallium compounds, with the exception of those specified elsewhere in this Annex

FR: composés du thallium à l'exception de ceux nommément désignés dans cette annexe

IT: composti del tallio, esclusi quelli espressamente indicati in questo allegato

NL: thalliumverbindingen met uitzondering van de in deze bijlage met name genoemde

PT: compostos de tálio, com excepção dos expressamente referidos no presente anexo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 26/28

R 33

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+



R : 26/28-33

S : (1/2-)13-28-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7446-18-6

EEC No 231-201-3

No 081-003-00-4



ES : sulfato de ditalio

DA : dithalliumsulfat ; thallium(I)sulfat

DE : Dithalliumsulfat ; Thalliumsulfat

EL : θειικό διθάλλιο· θειικό θάλλιο (I)

EN : dithallium sulphate ; thallic sulphate

FR : sulfate de dithallium ; sulfate de thallium (I)

IT : solfato di ditallio

NL : dithalliumsulfaat

PT : sulfato de ditálio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

T+ ; R 28

Xi ; R 38

T ; R 48/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+



R : 28-38-48/25

S : (1/2-)13-36/37-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No —

No 082-001-00-6

NOTA A

NOTA E

ES : compuestos de plomo, excepto de los especialmente expresados en este Anexo

DA : blyforbindelser, undtagen sådanne nævnt andetsteds i dette bilag

DE : Bleiverbindungen mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL : ενώσεις μολύβδου εκτός από αυτές που ρητώς κατονομάζονται στο παρόν παράρτημα

EN : lead compounds with the exception of those specified elsewhere in this Annex

FR : composés du plomb à l'exception de ceux nommément désignés dans cette annexe

IT : composti del piombo, esclusi quelli espressamente indicati in questo allegato

NL : loodverbindingen met uitzondering van de in deze bijlage met name genoemde

PT : compostos de chumbo, com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 1 : R 61

Repr. Cat. 3 : R 62

Xn ; R 20/22

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 61-62-20/22-33

S : 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 5\%$	T ; R 61-62-20/22-33
$1\% \leq C < 5\%$	T ; R 61-20/22-33
$0,5\% < C < 1\%$	T ; R 61-33

NOTA 1

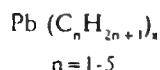
Cas No —

EEC No —

No 082-002-00-1

NOTA A

NOTA E



ES. derivados de alquilplomo

DA. blyalkyler

DE. Bleialkyle

EL. αλκυλικές ενώσεις μολύβδου

EN. lead alkyls

FR. dérivés alkylés du plomb

IT. piomboalchili

NL. loodalkylen

PT. alquilo de chumbo

FI. lyijyalkyylit

SV. blyalkyler

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Repr. Cat. 1, R 61

Repr. Cat. 3, R 62

T+, R 26/27/28

R 33

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnai, Markning*

T+



N



R: 61-62-26/27/28-33-50/53

S: 53-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*

C ≥ 5 %	T+, R 61-62-26/27/28-33
0,5 % ≤ C < 5 %	T+, R 61-26/27/28-33
0,1 % ≤ C < 0,5 %	T, R 61-23/24/25-33
0,05 % ≤ C < 0,1 %	Xn, R 20/21/22-33

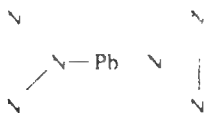
NOTA I

Cas No 13424-46-9

EEC No 236 542 1

No 082 003 00 7

NOTA E



ES	nitruro de plomo , azida de plomo II
DA	blyazid
DE	Bleiazid
EL	αζίδιο μολυβδου
EN	lead azide
FR	azoture de plomb (II) , azide de plomb
IT	azoturo di piombo piombo azoturo
NL	loodazide
PT	azida de chumbo azoteto de chumbo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

E , R 3	Repr Cat 1 , R 61	Repr. Cat 3 , R 62	Xn , R 20/22	R 33
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

E	T	
		R : 61-62-3-20/22-33
		S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


NOTA 1

Cas No 7758-97-6

EEC No 231-846-0

No 082-004-00-2



ES: cromato de plomo

DA: blychromat

DE: Bleichromat

EL: χρωμικός μολυβδος

EN: lead chromate

FR: chromate de plomb

IT: cromato di piombo

NL: loodchromaat

PT: cromato de chumbo

FI: lyijykromaatti

SV: blykromat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classificazione, Classificação, Luokitus, Klassificering*

Repr. Cat. 1; R 61

Repr. Cat. 3; R 62

Carc. Cat. 3; R 40

R 33

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

T



N



R: 61 62-33-40-50/53

S: 53-45-60-61

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusrajat, Koncentrationsgränser*

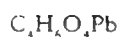

NOTA 1

Cas No 301-04-2

EEC No 206-104-4

No 082-005-00-8

NOTA E



ES : di(acetato) de plomo

DA : blydi(acetati)

DE : Bleidi(acetat)

EL : διοξικός μόλυβδος

EN : lead di(acetate)

FR : di(acétate) de plomb

IT : acetato di piombo, basico

NL : looddi(acetaat)

PT : di(acetato) de chumbo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Repr. Cat. 1 ; R 61

Repr. Cat. 3 ; R 62

Xn ; R 48/22

R 33

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 61-62-33-48/22

S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


NOTA I



Cas No 7446-27-7

EEC No 231-205-5

No 082-006-00-3

NOTA B

Pb,PbO

ES : bis(ortofosfato) de triplomo

DA : tribisbis(orthophosphat)

DE : Tribisbis(orthophosphat)

EL : διςορθοφωσφορικός) τριμόλυδος

EN : trilead bis(orthophosphate)

FR : bis(orthophosphate) de triplomb

IT : bis(ortofosfato) di tripiombo

NL : triloodbis(orthofosfaat)

PT : bis(ortofosfato) de trichumbo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Repr. Cat. 1 ; R 61

Repr. Cat. 3 ; R 62

Xn ; R 48/22

R 33

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 61-62-33-48/22

S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

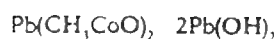

NOTA I

Cas No 1335-32 6

EEC No 215-630-3

No 082-007-00-9

NOTA E



ES	acetato de plomo , basico
DA	blyacetat, basiskt
DE	Bleiacetat, basisch
EL	οξικός μόλυδος, βασικός
EN	lead acetate
FR	acetate de plomb, basique , sous-acetate de plomb
IT	acetato di piombo, basico
NL	loodacetaat, basisch
PT	acetato de chumbo, basico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Repr. Cat 1 , R 61	Repr. Cat. 3 ; R 62	Carc. Cat. 3 , R 40	Xn , R 48/22	R 33
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 61-62-33-40-48/22
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

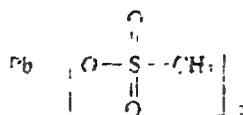

NOTA I

Cas No 17570-76-2

EEC No 401-750-5

No 082-008-00-4

NOTA E



ES: metansulfonato de plomo(II)

DA: bly(II)methansulfonat

DE: Blei(II)methansulfonat

EL: μεθανοσουλφονικός μόλυβδος(II)

EN: lead(II) methanesulphonate

FR: methanesulfonate de plomb(II)

IT: metansolfonato di piombo(II)

NL: lood(II)methaansulfonaat

PT: metanossulfonato de chumbo(II)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Repr. Cat. 1 : R 61	Repr. Cat. 3 ; R 62	Xn ; R 20/22-48/20/22	Xi ; R 38-41	N ; R 58	R 33
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		R : 61-62-20/22-33-38-41-48/20/22-58
		S : 53-45-57-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


NOTA I

Cas No 1344-37-2

EEC No 215-693-7

No 082-009-00-X

- ES amarillo de sulfocromato de plomo.  
[Esta sustancia está identificada en el Colour Index por el Colour Index Constitution Number C.I. 77603.]
- DA blylsulfocromatgult  
[Denne forbindelse identificeres i Colour Index ved Colour Index Constitution Number, C.I. 77603.]
- DE Bleisulfochromatgelb  
[Diese Substanz wird im Colour Index durch Colour Index Constitution Number, C.I. 77603, identifiziert.]
- EL χροσφοχρωμικού υδραυδίου κίτρινο  
[Η ουσία αυτή ταυτίζεται στον Colour Index με τον Colour Index Constitution Number, C.I. 77603.]
- EN C.I. Pigment Yellow 34  
[This substance is identified in the Colour Index by Colour Index Constitution Number, C.I. 77603.]
- FR jaune de sulfochromate de plomb  
[Cette substance est répertoriée dans le Colour Index sous le Colour Index Constitution Number C.I. 77603.]
- IT giallo di piombo soltrocromato.  
[Questa sostanza è identificata nel Colour Index dal Colour Index Constitution Number, C.I. 77603.]
- NL Loodsulfochromaat geel.  
[Deze stof staat beschreven in de Colour Index onder het Colour Index Constitution Number, C.I. 77603.]
- PT amarelo de sulfocromato de chumbo.  
[Esta substância é identificada no Colour Index pelo Colour Index Constitution Number, C.I. 77603.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Repr. Cat. 1 ; R 61	Repr. Cat. 3 ; R 62	Carc. Cat. 3 ; R 40	R 33
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 61-62-33-40
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


NOTA 1

Cas No 12656-85-8

EEC No 235-759-9

No 082-010-00-5

- ES : rojo de cromato molibdato sulfato de plomo ;  
[Esta sustancia esta identificada en el Colour Index por el Colour Index Constitution Number C.I. 77605.]
- DA : blychromatmolybdatsulfatred ;  
[Denne forbindelse identificeres i Colour Index ved Colour Index Constitution Number, C.I. 77605.]
- DE : Bleichromatmolybdatsulfatrot ;  
[Diese Substanz wird im Colour Index durch Colour Index Constitution Number, C.I. 77605, identifiziert.]
- EL : θειικού μολυβδαινικού χρωμικού μολύβδου ερυθρό ;  
[Η ουσία αυτή ταυτοποιείται στο Colour Index με τον Colour Index Constitution Number, C.I. 77605.]
- EN : C.I. Pigment Red 104 ;  
[This substance is identified in the Colour Index by Colour Index Constitution Number, C.I. 77605.]
- FR : rouge de chromate, de molybdate et de sulfate de plomb ;  
[Cette substance est répertoriée dans le Colour Index sous le Colour Index Constitution Number C.I. 77605.]
- IT : piombo cromato molibdato solfato rosso ;  
[Questa sostanza è identificata nel Colour Index dal Colour Index Constitution Number C.I. 77605.]
- NL : loodchromaatmolybdaatsulfaat rood ;  
[Deze stof staat beschreven in de Colour Index onder het Colour Index Constitution Number, C.I. 77605.]
- PT : vermelho de cromato molibdato sulfato de chumbo ;  
[Esta substância é identificada no Colour Index pelo Colour Index Constitution Number, C.I. 77605.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Repr. Cat. 1 ; R 61

Repr. Cat. 3 ; R 62

Carc. Cat. 3 ; R 40

R 33

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 61-62-33-40</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

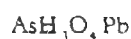

NOTA 1

Cas No 7784-40-9

EEC No 232 064-2

No 082-011 00-0

NOTA E



ES hidrogenoarsenato de plomo  
 DA blyhydrogenarsenat  
 DE Bleihydrogenarsenat  
 EL υδρογονοαρσενικός μολυβδος  
 EN lead hydrogen arsenate  
 FR hydrogenoarsenate de plomb  
 IT idrogenoarsenato di piombo  
 NL loodhydrogeenarsenaat  
 PT hidrogenoarsenato de chumbo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificação, Indeling, Classificação

Carc Cat 1, R 45	Repr Cat. 1, R 61	Repr Cat. 3, R 62	T, R 23/25	R 33
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Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R 45-61-62-23/25-33
	S: 53-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


NOTA I

Cas No 7440-61-1

EEC No 231-170-6

No 092-001-00-8

U

ES: uranio

DA: uran

DE: Uran

EL: ουράνιο

EN: uranium

FR: uranium

IT: uranio

NL: uranium

PT: urânio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

T+ ; R 26/28

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 26/28-33

S : (1/2-)20/21-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 092-002-00-3

NOTA A

ES: compuestos de uranio

DA: uranforbindelser

DE: Uranverbindungen

EL: ενώσεις ουρανίου

EN: uranium compounds

FR: Composés d'uranium

IT: composti dell'uranio

NL: uraniumverbindingen

PT: compostos de urânio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/28 R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 26/28-33
	S : (1/2-)20/21-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 74-82-8

EEC No 200-S12-7

No 601-001-00-4

CH<sub>4</sub>

ES: metano  
 DA: methan  
 DE: Methan  
 EL: μεθάνιο  
 EN: methane  
 FR: méthane  
 IT: metano  
 NL: methaan  
 PT: metano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

F+ ; R12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+	
	R: 12
	S: (2-)9-16-33

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration Limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 74-84-0

EEC No 200-814-8

No 601-002-00-X



ES etano  
 DA ethan  
 DE Ethan  
 EL αιθάνιο  
 EN ethane  
 FR ethane  
 IT etano  
 NL ethaan  
 PT etano

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F+ ; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+	
	R : 12
	S : (2)-9-16-33

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 74-98-6

EEC No 200-827-9

No 601-003-00-5



ES : propano

DA : propan

DE : Propan

EL : προπανιο

EN : propane

FR : propane

IT : propano

NL : propaan

PT : propano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F+ ; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

F+



R : 12

S : (2-)9-16

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*


Cas No 106-97-8 [1]  
75-28-5 [2]

EEC No 203-448-7 [1]  
200-857-2 [2]

No 601-004-00-0

NOTA C

$\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_3$  [1]

$\text{CH}_3\text{CH}(\text{CH}_3)_2$  [2]

ES : butano [1] e isobutano [2]  
DA : butan [1] og isobutan [2]  
DE : Butan [1] und Isobutan [2]  
EL : βουτάνιο [1] και ισοβουτάνιο [2]  
EN : butane [1] and isobutane [2]  
FR : butane [1] et isobutane [2]  
IT : butano [1] e isobutano [2]  
NL : butaan [1] en isobutaan [2]  
PT : butano [1] e isobutano [2]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F+ ; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

F +	
	R : 12
	S : (2-)9-16

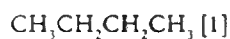
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 106-97-8 [1]  
75-28-5 [2]

EEC No 203-448-7 [1]  
200-857-2 [2]

No 601-004-01-8

NOTA C



- ES: butano [1] e isobutano [2] (contiene  $\geq 0.1$  % butadieno (203-450-8))  
 DA: butan [1] og isobutan [2] (indhold  $\geq 0.1$  % butadin (203-450-8))  
 DE: Butan [1] und Isobutan [2] (enthält  $\geq 0.1$  % Butadien (203-450-8))  
 EL: βουτάνιο [1] και ισοβουτάνιο [2] (περιέχει  $\geq 0.1$  % Βουτάνιο (203-450-8))  
 EN: butane [1] and isobutane [2] (containing  $\geq 0.1$  % butadiene (203-450-8))  
 FR: butane [1] et isobutane [2] (contenant  $\geq 0.1$  % butadiene (203-450-8))  
 IT: butano [1] e isobutano [2] (contenente  $\geq 0.1$  % butadiene (203-450-8))  
 NL: butaan [1] en isobutaan [2] (bevattend  $\geq 0.1$  % butadieen (203-450-8))  
 PT: butano [1] e isobutano [2] (contém  $\geq 0.1$  % butadieno (203-450-8))

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

F+ ; R 12    Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

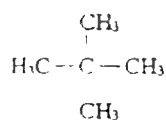
F +	T	
		R : 45-12 S : 53-45

*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 463-82-1

EEC No 207-343-7

No 601-005-00-6




ES: dimetilpropano  
 DA: dimethylpropan; neopentan  
 DE: Dimethylpropan; Neopentan  
 EL: 2,2-διμεθυλοπροπάνιο · νεοπεντάνιο  
 EN: 2,2-dimethylpropane; neopentane  
 FR: diméthylpropane; néopentane  
 IT: dimetilpropano; neopentano  
 NL: dimethylpropaan  
 PT: dimetilpropano; neopentano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F+; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+	
	R: 12
	S: (2-)9-16-33

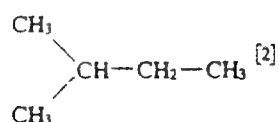
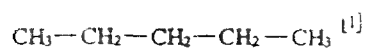
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 109-66-0 [1]  
78-78-4 [2]

EEC No 203-692-4 [1]  
201-142-8 [2]

No 601-006-00-1

NOTA C



ES: pentano [1] e isopentano; metilbutano [2]

DA: pentan [1] og isopentan; methylbutan [2]

DE: Pentan [1] und Isopentan; Methylbutan [2]

EL: πεντάνιο [1] και ισοπεντάνιο· μεθυλοβουτάνιο [2]

EN: pentane [1] and isopentane [2]

FR: pentane [1] et isopentane; méthylbutane [2]

IT: pentano [1] ed isopentano; metilbutano [2]

NL: pentaan [1] en isopentaan; methylbutaan [2]

PT: pe: ano [1] e isopentano; metilbutano [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>F</p> 	<p>R : 11</p> <p>S : (2-)9-16-29-33</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No —

No 601-007-00-7

NOTA C



ES: hexano; mezcla de isómeros (conteniendo menor de un 5 % de n-hexano EEC No 203-777-6)

DA: hexan; blanding af isomere (der indeholder mindre end 5 % n-hexan EEC No 203-777-6)

DE: Hexan; Isomerengemisch (mit weniger als 5 % n-Hexan EEC No 203-777-6)

EL: εξάνιο· μείγμα ισομερών (που περιέχει λιγότερο από 5 % n-εξάνιο EEC No 203-777-6)

EN: hexane; mixture of isomers (containing less than 5 % n-hexane EEC No 203-777-6)

FR: hexane; mélange d'isomères (contenant moins de 5 % de n-hexane EEC No 203-777-6)

IT: esano; miscela di isomeri (contenente meno di 5 % di n-esano EEC No 203-777-6)

NL: hexaan; mengsel van isomeren (bevattende minder dan 5 % n-hexaan EEC No 203-777-6)

PT: hexano; mistura de isómeros (contendo, menos de, 5 % de n-hexano EEC No 203-777-6)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

F; R 11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	
	R : 11
	S : (2-)9-16-23-29-33

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 142-82-5

EEC No 205-563-8

No 601-008-00-2

NOTA C



ES: heptano

DA: heptan

DE: Heptan

EL: επτάνιο

EN: heptane

FR: heptane

IT: eptano

NL: heptaan

PT: heptano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R : 11
	S : (2-)9-16-23-29-33

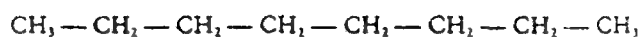
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 111-65-9

EEC No 203-892-1

No 601-009-00-8

NOTA C




ES : octano  
 DA : octan  
 DE : Octan  
 EL : οκτάνιο  
 EN : octane  
 FR : octane  
 IT : ottano  
 NL : octaan  
 PT : octano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

F ; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R : 11
	S : (2-)9-16-29-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 74-85-1

EEC No 200-815-3

No 601-010-00-3



ES: eteno; etileno

DA: ethen; ethylen

DE: Ethen; Ethylen

EL: αιθυλένιο

EN: ethylene

FR: éthylène

IT: etilene


NL: etheen; ethyleen

PT: eteno; etileno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

F+; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+	
	R: 12
	S: (2)-9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 115-07-1

EEC No 204-062-1

No 601-011-00-9



ES: propeno; propileno

DA: propen; propylen

DE: Propen; Propylen

EL: προπυλένιο

EN: propene; propylene

FR: propene; propylène

IT: propilene


NL: propreen; propyleen

PT: propeno; propileno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

F+; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+	
	R: 12
	S: (2-)9-16-33

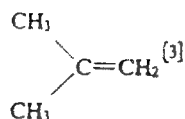
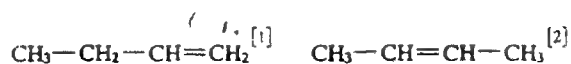
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 106-98-9 [1]  
107-01-7 [2]  
115-11-7 [3]

EEC No 203-449-2 [1]  
203-452-9 [2]  
204-066-3 [3]

No 601-012-00-4

NOTA C



ES: 1, buteno; butileno [1], 2, buteno; butileno [2], 2-metilpropeno; isobutileno [3]

DA: buten; butylen [1] og [2], og 2-methylpropen [3]

DE: Buten; Butylen

EL: βουτένιο · βουτ-1-ένιο [1], βουτ-2-ένιο [2], 2-μέθυλοπροπένιο [3]

EN: butene; butylene

FR: butène; butylène, but-1-ène [1], but-2-ène [2], 2-méthylpropène; isobutylène [3]

IT: butene; butilene

NL: buteen; butyleen

PT: buteno; butilenos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F+; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+		R: 12  S: (2)-9-16-33
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 106-99-0

EEC No 203-450-8

No 601-013-00-X

NOTA D



ES: 1,3-butadieno

DA: 1,3-butadien

DE: 1,3-Butadien

EL: 1,3-βουταδιένιο

EN: 1,3-butadiene; buta-1,3-diene

FR: 1,3-butadiène

IT: 1,3-butadiene

NL: 1,3-butadien

PT: 1,3-butadieno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F+; R 12

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

P+	T	
		R: 45-12
		S: 53-45

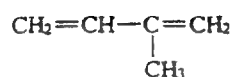
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 78-79-5

EEC No 201-143-3

No 601-014-00-5

NOTA D



ES: 2-metil-1,3-butadieno; isopreno

DA: 2-methyl-1,3-butadien; isopren

DE: 2-Methyl-1,3-butadien; Isopren

EL: 2-μεθυλο-1,3-βουταδιένιο· ισοπρένιο

EN: 2-methylbuta-1,3-diene; isoprene

FR: 2-méthyl-1,3-butadiène; isoprène

IT: 2-metilbutan-1,3-diene; isoprene


NL: 2-methyl-buta-1,3-dien; isopreen

PT: 2-metil-1,3-butadieno; isopreno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

F+; R 12

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

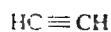
F+	
	R : 12
	S : (2-)9-16-29-33

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 74-86-2

EEC No 200-816-9

No 601-015-00-0



ES: etino; acetileno  
 DA: acetvlen; ethyn  
 DE: acetylen; ethin  
 EL: ακετυαιβιο  
 EN: acetylene; ethyne  
 FR: ethyne; acétylène  
 IT: acetilene; etino  
 NL: acetyleen; ethyn  
 PT: acetileno; etino

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

R 5	R 6	F+; R 12
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+	
	R: 5-6-12 S: (2-)9-16-33

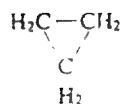
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*




Cas No 75-19-4

EEC No 200-847-8

No 601-016-00-6



ES: ciclopropano  
 DA: cyclopropan  
 DE: Cyclopropan  
 EL: κυκλοπροπάνιο  
 EN: cyclopropane  
 FR: cyclopropane  
 IT: ciclopropano  
 NL: cyclopropan  
 PT: ciclopropano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

F+ ; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

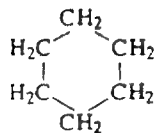
F+	
	R : 12
	S : (2-)9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 110-82-7

EEC No 203-806-2

No 601-017-00-1



ES : ciclohexano  
 DA : cyclohexan  
 DE : Cyclohexan  
 EL : κυκλοεξάνιο  
 EN : cyclohexane  
 FR : cyclohexane  
 IT : cicloesano  
 NL : cyclohexaan  
 PT : cicloexano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

F ; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

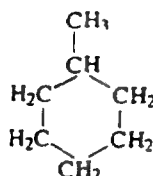
F			R : 11  S : (2-)9-16-33
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 108-87-2

EEC No 203-624-3

No 601-018-00-7



ES: metilciclohexano  
 DA: methylcyclohexan  
 DE: Methylcyclohexan  
 EL: μεθυλοκυκλοεξάνιο  
 EN: methylcyclohexane  
 FR: méthylcyclohexane  
 IT: metilcicloesano  
 NL: methylcyclohexaan  
 PT: metilcicloexano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

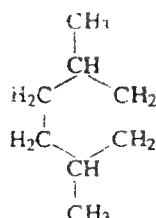
F	
	R : 11
	S : (2)-9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo*


Cas No 589-90-2

EEC No 209-663-2

No 601-019-00-2



ES : 1,4-dimetilciclohexano

DA : 1,4-dimethylcyclohexan

DE : 1,4-Dimethylcyclohexan

EL : 1,4-διμεθυλοκυκλοεξάνιο

EN : 1,4-dimethylcyclohexane

FR : 1,4-diméthylcyclohexane

IT : 1,4-dimetilcicloesano

NL : 1,4-dimethylcyclohexaan

PT : 1,4-dimetilcicloexano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

F; R 11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmärken, Rotulagem

F	
	R : 11
	S : (2-)9-16-33

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 71-43-2

EEC No 200-753-7

No 601-020-00-8

NOTA E



ES: benceno

DA: benzen

DE: Benzol

EL: βενζόλιο

EN: benzene

FR: benzène

IT: benzene

NL: benzeen

PT: benzeno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

F; R 11

Carc. Cat. 1; R 45

T; R 48/23/24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

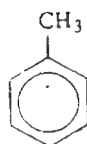
F	T	
		R : 45-11-48/23/24/25
		S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 108-88-3

EEC No 203-625-9

No 601-021-00-3



ES : tolueno  
 DA : toluen  
 DE : Toluol  
 EL : τολουόλιο  
 EN : toluene  
 FR : toluène  
 IT : toluene  
 NL : toluen  
 PT : tolueno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11

Xn; R 20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		R : 11-20
		S : (2-)16-25-29-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*

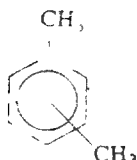
C ≥ 12,5 %	Xn; R 20

Cas No 1330-20-7 (mix)  
95-47-6 (o)  
108-38-3 (m)  
106-42-3 (p)

EEC No 215-535-7 (mix)  
202-422-2 (o)  
203-576-3 (m)  
203-396-5 (p)

No 601-022-00-9

NOTA C



ES: xileno  
DA: xylen  
DE: Xylol  
EL: ξυλόλιο  
EN: xylene  
FR: xylène  
IT: xilene  
NL: xyleen  
PT: xileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10	Xn ; R 20/21	Xi ; R 38
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 10-20/21-38 S : (2-)25

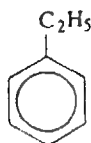
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 20 %	Xn ; R 20/21-38
12,5 % ≤ C < 20 %	Xn ; R 20/21

Cas No 100-41-4

EEC No 202-849-4

No 601-023-00-4



ES : etilbenceno  
 DA : ethylbenzen  
 DE : Ethylbenzol  
 EL : αιθυλοβενζόλιο  
 EN : ethylbenzene  
 FR : ethylbenzène  
 IT : etilbenzene  
 NL : ethylbenzeen  
 PT : etilbenzeno

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F, R 11

Xn; R 20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		R: 11-20 S: (2-)16-24/25-29

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xn; R 20

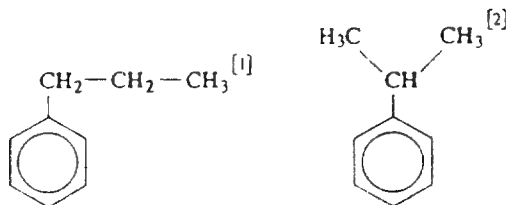


Cas No 103-65-1 [1]  
98-82-8 [2]

EEC No 203-132-9 [1]  
202-704-5 [2]

No 601-024-00-X

NOTA C



ES: propilbenceno [1] e isopropilbenceno; cumeno [2]  
 DA: phenylpropan [1] og isopropylbenzen; cumen [2]  
 DE: Propylbenzol [1] und Isopropylbenzol; Cumol [2]  
 EL: προπυλοδενζόλιο [1] και ισοπροπυλοδενζόλιο· κουμόλιο [2]  
 EN: propylbenzene [1] and isopropylbenzene; cumene [2]  
 FR: propylbenzène [1] et isopropylbenzène; cumène [2]  
 IT: propilbenzene [1] e isopropilbenzene; cumene [2]  
 NL: propylbenzeen [1] en isopropylbenzeen; cumeen [2]  
 PT: propilbenzeno [1] e isopropilbenzeno; cumeno [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

R 10

Xi; R 37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 10-37

S : (2)

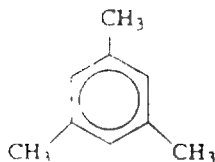
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xi; R 37

Cas No 108-67-8

EEC No 203-604-4

No 601-025-00-5



ES : 1,3,5-trimetilbenceno ; mesitileno

DA : mesitylen , 1,3,5-trimethylbenzen

DE : Mesityien ; 1,3,5-Trimethylbenzol

EL : μεσιτυλένιο · 1,3,5-τριμεθυλοβενζόλιο

EN : mesitylene

FR : mesitylène ; 1,3,5-triméthylbenzène

IT : mesitilene

NL : mesityleen

PT : mesitileno ; 1,3,5-trimetilbenzeno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xi ; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 10-37

S : (2)

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

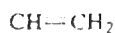
C ≥ 25 %	Xi ; R 37

Cas No 100-42-5

EEC No 202-851-5

No 601-026-00-0

NOTA D




ES : estireno  
 DA : styren  
 DE : Styrol  
 EL : στυρόλιο  
 EN : styrene  
 FR : styrene  
 IT : surene  
 NL : styreen  
 PT : estireno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 10	Xn ; R 20	Xi ; R 36/38
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 10-20-36/38 S : (2+)-23

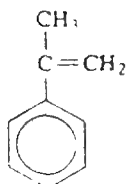
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 12,5 %	Xn ; R 20-36/38

Cas No 98-83-9

EEC No 202-705-0

No 601-027-00-6



ES : isopropenilbenceno ; α-metilestireno  
 DA : 1-methyl-1-phenylethen ; α-methylstyren  
 DE : Isopropenylbenzol ; α-Methylstyrol  
 EL : ισοπροπενυλοβενζόλιο · α-μεθυλοστυρόλιο  
 EN : isopropenylbenzene ; α-methylstyrene  
 FR : isopropenylbenzène ; α-méthylstyrène  
 IT : isopropenilbenzene ; α-metilstirene  
 NL : isopropenylbenzeen ; α-methylstyreen  
 PT : isopropenilbenzeno ; α-metilestireno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

R 10

Xi ; R 36/37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 10-36/37

S : (2)

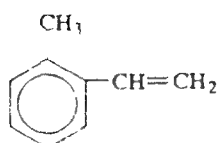
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xi ; R 36/37

Cas No 611-15-4

EEC No 210-256-7

No 601-028-00-1



ES: 2-viniltolueno; o-metilestireno

DA: 2-methylstyren; 2-vinyltoluen

DE: o-Methylstyrol; 2-Vinyl-toluol;

EL: ο-μεθυλοστυρόλιο · 2-βινυλτολουόλιο

EN: o-methylstyrene; 2-vinyltoluene

FR: o-methylstyrène; 2-vinyltoluène

IT: o-metilstirene; 2-viniltoluene

NL: o-methylstyreen; 2-vinyltolueen

PT: o-metilestireno; 2-viniltolueno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20
	S : (2-)24

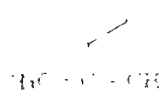
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

C ≥ 25 %	Xn; R 20

Cas No 138-86-3

DEC No 205-341-0

No 601-029-00-7



ES: 1,8(9)-p-mentadieno; dipenteno

DA: 1,8(9)-p-menthadien; dipenten

DE: p-Menthadien-1,8(9); Dipenten

EL: π-μινθα-1,8(9)-διένιο διπεντένιο

EN: p-mentha-1,8(9)-diene; dipentene

FR: p-mentha-1,8(9)-diène; dipentène

IT: p-menta-1,8(9)-diene; dipentene

NL: dipenteen

PT: p-menta-1,8(9)-dieno; dipenteno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xi; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R: 10-38

S: (2-)28

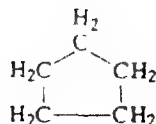
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	Xi; R 38

Cas No 287-92-3

EEC No 206-016-6

No 601-030-00-2



ES: ciclopentano

DA: cyclopentan

DE: Cyclopentan

EL: κυκλοπεντάνιο

EN: cyclopentane

FR: cyclopentane

IT: ciclopentano

NL: cyclopentaan

PT: ciclopentano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F



R: 11

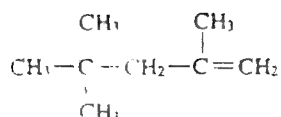
S: (2-)9-16-29-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 107-39-1

EEC No 203-486-4

No 601-031-00-8

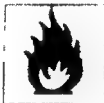


ES : 2,4,4-trimetil-1-penteno : diisobutileno  
 DA : 2,4,4-trimethyl-1-penten  
 DE : 2,4,4-Trimethyl-1-penten  
 EL : 2,4,4-τριμεθυλο-πεντ-1-ένιο : δι-ισοβουτυλένιο  
 EN : 2,4,4-trimethylpent-1-ene , di-isobutylene  
 FR : 2,4,4-triméthyl-i-pentene  
 IT : 2,4,4-trimetil-1-pentene  
 NL : 2,4,4-trimethyl-1-penteen  
 PT : 2,4,4-trimetil-1-penteno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

F ; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>F</p> 	<p>R : 11</p> <p>S : (2-)9-16-29-33</p>
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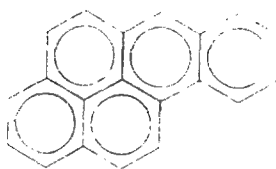
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 50-32-8

EEC No 200-028-5

No 601-032-00-3



ES: benzo[a]pireno; benzo[d,e,f]criseno  
 DA: benzo[a]pyren; benzo[d,e,f]chrysen  
 DE: Benzo[a]pyren; Benzo[d,e,f]chrysen  
 EL: βενζο[α]πυρένιο · βενζο[δ,ε,φ]χρυσένιο  
 EN: benzo[a]pyrene; benzo[d,e,f]chrysene  
 FR: benzo[a]pyrène; benzo[d,e,f]chrysène  
 IT: benzo[a]pirene; benzo[d,e,f]crisene  
 NL: benzo[a]pyreen; benzo[d,e,f]chryseen  
 PT: benzo[a]pireno; benzo[d,e,f]criseno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

Muta. Cat. 2; R 46

Repr. Cat. 2; R 60-61

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

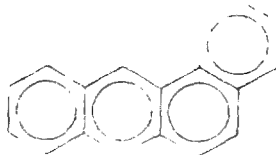
T	
	R : 45-46-60-61
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 56-55-3

EEC No 200-280-6

No 601-033-00-9



ES. benzo[a]antraceno  
 DA. benzo[a]anthracen  
 DE. Benzo[a]anthracen  
 EL. βενζο[α]ανθρακένιο  
 EN. benzo[a]anthracene  
 FR. benzo[a]anthracène  
 IT. benzo[a]antracene  
 NL. benzo[a]antraceen  
 PT. benzo[a]antraceno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

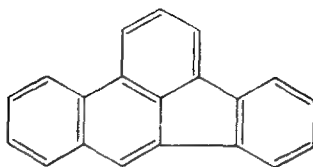
T	
	R : 45
	S : 53-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 205-99-2

EEC No 205-911-9

No 601-034-00-4



ES: benzo[b]fluoranteno; benzo[e]acefenantrileno  
 DA: benzo[b]fluoranthen; benzo[e]acephenanthrylen  
 DE: Benzo[b]fluoranthen; Benzo[e]acephenanthrylen  
 EL: βενζο[β]φλουορανθένιο · βενζο[ε]ακεφαινανθρυλένιο  
 EN: benzo[b]fluoranthene; benzo[e]acephenanthrylene  
 FR: benzo[b]fluoranthène; benzo[e]acéphénanthrylène  
 IT: benzo[b]fluorantene; benzo[e]acefenantrilene  
 NL: benzo[b]fluorantheen; benzo[e]acefenantryleen  
 PT: benzo[b]fluoranteno; benzo[e]acefenantrileno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

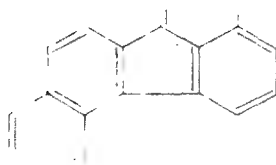
<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 205-82-3

EEC No 205-910-3

No 601-035-00-X



ES: benzo[j]fluoranteno

DA: benzo[j]fluoranthén

DE: Benzo[j]fluoranthén

EL: βενζο[j]φλουορανθένιο

EN: benzo[j]fluoranthene

FR: benzo[j]fluoranthène

IT: benzo[j]fluorantene

NL: benzo[j]fluorantheen

PT: benzo[j]fluoranteno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

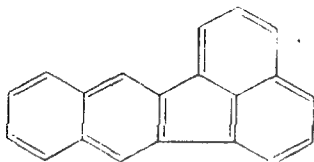
T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 207-08-9

EEC No 205-916-6

No 601-036-00-5



ES: benzo[k]fluoranteno

DA: benzo[k]fluoranthén

DE: Benzo[k]fluoranthén

EL: βενζο[κ]φλουορανθένιο

EN: benzo[k]fluoranthene

FR: benzo[k]fluoranthène

IT: benzo[k]fluorantene

NL: benzo[k]fluorantheen

PT: benzo[k]fluoranteno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 45</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 110-54-3

EEC No 203-777-6

No 601-037-00-0



ES: n-hexano

DA: n-hexan

DE: n-Hexan

EL: n-εξάνιο

EN: n-hexane

FR: n-hexane

IT: n-esano

NL: n-hexaan

PT: n-hexano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação.*

F; R 11

Xn; R 48/20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		R : 11-48/20
		S : (2·)9-16-24/25-29-51

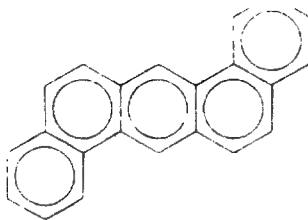
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 5 %	Xn; R 48/20

Cas No 53-70-3

EEC No 200-181-8

No 601-041-00-2



ES: dibenzo[a,h]antraceno

DA: dibenz[a,h]anthracen

DE: Dibenz[a,h]anthracen

EL: διβενζο[α,η]ανθρακένιο

EN: dibenz[a,h]anthracene

FR: dibenzo[a,h]anthracène

IT: dibenzo[a,h]antracene

NL: dibenzo[a,h]antracene

PT: dibenze[a,h]antraceno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 45

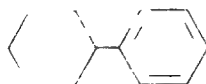
S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92-52-4

EEC No 202-163-5

No 601-042-00-8



ES bifenilo , difenilo  
 DA biphenyl , diphenyl  
 DE Biphenyl , Diphenyl  
 EL biphenyl διφαινυλιό  
 EN biphenyl ; diphenyl  
 FR biphenyle , diphenyle  
 IT bifenile , difenile  
 NL bifenyl , difenyl  
 PT bifenilo , defenilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificaçao*

X <sub>i</sub> , R 36/37/38	N, R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

X <sub>i</sub>	N	
		R : 36/37/38-50/53
		S : (2-)23-60-61

*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*




Cas No 95-63-6

EEC No 202-436-9

No 601-043-00-3



ES: 1,2,4-trimetilbenceno

DA: 1,2,4-trimethylbenzen

DE: 1,2,4-Trimethylbenzol

EL: 1,2,4-τριμεθυλοβενζόλιο

EN: 1,2,4-trimethylbenzene

FR: 1,2,4-triméthylbenzène

IT: 1,2,4-trimetilbenzene

NL: 1,2,4-trimethylbenzeen

PT: 1,2,4-trimetilbenzeno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

R 10

Xn; R 20

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 10-20-36/37/38

S : (2-)26

*Límites de concentración, Kohcentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 77-73-6

EEC No 201-052-9




No 601-044-00-9

ES: 3a,4,7,7a-tetrahidro-4,7-metanoindeno  
 DA: 3a,4,7,7a-tetrahydro-4,7-methanoinden  
 DE: 3a,4,7,7a-Tetrahydro-4,7-methanoinden  
 EL: 3a,4,7,7a-τετραϋδρο-4,7-μεθανολινδένιο  
 EN: 3a,4,7,7a tetrahydro-4,7-methanoindene  
 FR: 3a,4,7,7a tétrahydro-4,7-methanoindene  
 IT: 3a,4,7,7a-tetraidro-4,7-metanoindene, dicitlopentadiene  
 NL: 3a,4,7,7a tetrahydro-4,7-methanoindeen  
 PT: 3a,4,7,7a-tetrahidro-4,7-metanoindeno  
 SI: 3a,4,7,7a-tetrahydro-4,7-metaniindeen  
 SV: 3a,4,7,7a-tetrahydro-4,7-metanoinden, dicyklopentadien

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F, R 11	Xn; R 20/22	Xi; R 36/37/38	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinndi, Markning*

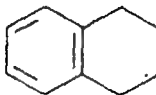
F	Xn	N	
			
			R: 11-20/22-36/37/38-51/53
			S: 12 36/37-61

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoivusrajat, Konzentrationsgränser*


Cas No 119-64-2

EEC No 204-340-2

No 601-045-00-4



ES: 1,2,3,4-tetrahidronaftaleno

DA: 1,2,3,4-tetrahydronsphthalen

DE: 1,2,3,4-Tetrahydronaphthalin ; Tetralin

EL: 1,2,3,4-τετραύδρωναφθαλίνιο

EN: 1,2,3,4-tetrahydronaphthalene

FR: 1,2,3,4-tétrahydronaphtalène

IT: 1,2,3,4-tetraidronaftalene ; tetralina

NL: 1,2,3,4-tetrahydronaftaleen

PT: 1,2,3,4-tetrahidronaftaleno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi; R 36/38 R 19

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

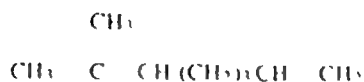
Xi	
	R : 19-36/38
	S : (2-)26-28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 42152-47-6

EEC No 404-210-7

No 601-046-00-X



ES 7-metilocta-1,6-dieno  
 DA 7-methylocta-1,6-dien  
 DE 7-Methylocta-1,6-dien  
 EL 7-μεθυλοκτα-1,6-διένιο  
 EN 7-methylocta-1,6-diene  
 FR 7-méthylocta-1,6-diène  
 IT 7-metilocta-1,6-diene  
 NL 7-methylocta-1,6-dien  
 PT 7-metilocta-1,6-dieno

Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificazião

R 10

N, R 50-53

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiketazje Etichetatura Kenmerken, Rotulagem



Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως Concentration limits  
 Limites de concentration Limite di concentrazione Concentrazioni grenzen Limites de concentraçào


Cas No 17092-80-7

EEC No 404-150-1

No 601-047-00-5

CH<sub>2</sub>

H C C H

ES m-menta-1,3(8)-dieno  
 DA m-mentha-1,3(8)-dien  
 DE m-Mentha-1,3(8)-dien  
 EL m-μεντα-1,3(8)-διενιο  
 EN m-mentha-1,3(8)-dien  
 FR m-mentha-1,3(8) diene  
 IT m-menta-1,3(8) diene  
 NL m-mentha-1,3(8)-dien  
 PT m-menta-1,3(8)-dieno

Classification Klassifizierung Einstufung Ταξινόμηση Classification, Classification Classificazione, Indeling, Classificação

X<sub>1</sub>, R 38

N, R 51-53

Etiquetado Etikettierung Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura, Kenmerken, Rotulagem

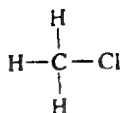
X <sub>1</sub>	N	
		R : 38-51/53 S : (2-)37 61

Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limit, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração


Cas No 74-87-3

EEC No 200-817-4

No 602-001-00-7



ES: clorometano, cloruro de metilo

DA: chlormethan; methylchlond

DE: Chlormethan; Methylchlond

EL: χλωρομεθάνιο μεθυλοχλωρίδιο

EN: chloromethane; methyl chloride

FR: chlorométhane; chlorure de méthyle

IT: clorometano; metile cloruro

NL: chloormethaan; methylchlond

PT: clorometano; cloreto de metilo

Classificacão, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

F+; R 12

Carc. Cat. 3; R 40.

Xn; R 48/20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F+	Xn	
		R : 12-40-48/20
		S : (2)-9-16-33

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 74-83-9

EEC No 200-813-2

No 602-002-00-2



ES bromometano , bromuro de metilo  
 DA brommethan , methylbromid  
 DE Brommethan , Methylbromid  
 EL βρωμομεθανιο , βρωμιουχο μεθυλιο , μεθυλοβρωμιοιο  
 EN bromomethane , methyl bromide  
 FR bromomethane , bromure de methyle  
 IT bromometano , bromuro di metile  
 NL broommethaan , methylbromide  
 PT bromometano , brometo de metilo

*Classificaton, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Γ , R 23	Xi , R 36/37/38	N , R 50-53	N , R 59
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Γ	N	
		R . 23 36/37/38-50/53-59
		S . (1/2-)15-27-36/37/39-38-45-59-61

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 74-95-3

EEC No 200-824 2

No 602-003-00-8




ES dibromometano  
 DA dibrommethan  
 DE Dibrommethan  
 EL διβρωμομεθάνιο  
 EN dibromomethane  
 FR dibromomethane  
 GR dibromometano  
 NL dibroommethaan  
 PT dibromometano  
 FI dibromimetanaani, metylenidibromidi  
 SV dibrommetan, metylenbromid

*Classification Klassifisering Einstufung Ταξινόμηση Classification,  
 Classificazione Classificazione, Inndeling, Classificação, Luokitus, Klassifisering*

Xn, R 20	R 52-53
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*Etiquetado, Etikettering Kennzeichnung Επισήμανση Labelling,  
 Etiquetage Fichettatura Kenmerken, Rotulagem Merkinnat Markning*

<p>Xn</p> 	<p>R: 20 52/53</p> <p>S: (2 )2+ 61</p>
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*Limites de concentration Konzentrationsgrenzen, Konzentration grenzuete Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração Pitoisuusrajat, Konzentrationsgränser*

C ≥ 12,5 %	Xn, R 20



Cas No 75-09-2

EEC No 200-838-9

No 602-004-00-3

CH<sub>2</sub>Cl<sub>2</sub>

ES: diclorometano; cloruro de metileno

DA: dichlormethan; methylenchlorid

DE: Dichlormethan; Methylenchlorid

EL: διχλωρομεθάνιο · μεθυλενοδιχλωρίδιο

EN: dichloromethane; methylene chloride

FR: dichlorométhane; chlorure de méthylène

IT: diclorometano; cloruro di metilene

NL: methyleenchloride

PT: diclorometano; cloreto de metileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R 40

S: (2-)23-24/25-36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 74-88-4

EFC No 200-819 5

No 602 005-00 9



ES ioduro de metilo , yodometano  
 DA methylodid , iodmethan  
 DE Methylodid , Jodmethan  
 EL ιωδιουχο μεθύλιο ιωδομεθανιο  
 EN methyl iodide , iodomethane  
 FR iodure de methyle , iodomethane  
 IT. metil ioduro , iodometano  
 NL methylodide , joodmethaan  
 PT iodeto de metilo , iodometano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc Cat 3 , R 40	Xn , R 21	T , R 23/25	Xi , R 37/38
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

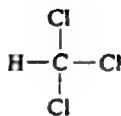
T	
	R : 21-23/25-37/38-40
	S : (1/2)-36/37-38-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 67-66-3

EEC No 200-663-8

No 602-006-00-4



ES: triclorometano; cloroformo

DA: trichlormethan; chloroform

DE: Trichlormethan; Chloroform

EL: τριχλωρομεθάνιο · χλωροφόρμιο

EN: trichloromethane; chloroform

FR: trichlorométhane; chloroforme

IT: triclorometano; cloroformio

NL: trichloormethaan; chloroform

PT: triclorometano; cloroformio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 22-48/20/22

Xi; R 38

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-38-40-48/20/22

S : (2-)36/37

Límites de concentración, Konzentrationgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 20 %	Xn; R 22-38-40-48/20/22
5 % ≤ C < 20 %	Xn; R 22-40-48/20/22
1 % ≤ C ≤ 5 %	Xn; R 40

Cas No 75-25-2

EEC No 200 854 6

No 602-007-00-X



ES: bromoformo

DA: bromoform

DE: Bromoform; Tribrommethan

EL: δρωμοφόρμιο

EN: bromoform; tribromomethane

FR: bromoforme

IT: bromoformio, tribromometano

NL: bromoform

PT: bromoforme



FI: bromoformi, tribromimetani

SV: bromoform, tribrommetan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification*  
*Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T, R 23	Xi, R 36/38	N, R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling*  
*Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T	N	
		R. 23 36/38-51/53
		S (1/2) 28-45 61

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεων*  
*Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen*  
*Limites de concentração, Pitoisunrajat, Koncentrationsgränser*


Cas No 56-23-5

EEC No 200-262-8

No 602-008-00-5





ES: tetracloruro de carbono  
 DA: carbontetrachlorid  
 DE: Kohlenstofftetrachlorid; Tetrachlormethan  
 EL: τετραχλωρίδιο του άνθρακα  
 EN: carbon tetrachloride; tetrachloromethane  
 FR: tetrachlorure de carbone  
 IT: tetracloruro di carbonio; tetrachlorometano  
 NL: koolstoftetrachloride  
 PT: tetracloreto de carbono  
 FI: hiilitetrakloridi  
 SV: koltetraklorid; tetraklormetan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3; R 40	T; R 23/24/25-48/23	R 52-53	N; R 59
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

T	N	
		R: 23/24/25-40-48/23-52/53-59
		S: (1/2-)23-36/37-45-59-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*

C ≥ 1 %	T; R 23/24/25-40-48/23
0,2 % ≤ C < 1 %	Xn; R 20/21/22-48/20

Cas No 75-00-3

EEC No 200-830-5

No 602-009-00-0





ES: cloroetano  
 DA: chlorethan  
 DE: Chlorethan; Ethylchlorid  
 EL: χλωροαιθάνιο  
 EN: chloroethane  
 FR: chloroéthane  
 IT: cloroetano  
 NL: chloorethaan  
 PT: cloroetano  
 FI: kloorietaani; etyylikloridi  
 SV: klorethan; etylklorid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F +; R 12	Carc. Cat. 3; R 40	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

F +	Xn	
		
		R: 12-40-52/53
		S: (2-)9-16-33-36/37-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã, Pitoisuusrajat, Koncentrationsgränser*


Cas No 106-93-4

EEC No 203-444-5

No 602-010-00-6

NOTA E





ES: 1,2-dibromoetano  
 DA: 1,2-dibromethan  
 DE: 1,2-Dibromethan; Ethylendibromid  
 EL: 1,2-διβρωμοαιθάνιο  
 EN: 1,2-dibromoethane  
 FR: 1,2-dibromoéthane  
 IT: 1,2-dibromoetano  
 NL: 1,2-dibroomethaan  
 PT: 1,2-dibromoetano  
 FI: 1,2-etyleenidibromidi  
 SV: 1,2-dibrometan; 1,2-etylendibromid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45	T; R 23/24/25	Xi; R 36/37/38	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinntät, Märkning*

T	N	
		R: 45-23/24/25-36/37/38-51/53 S: 53-45-61

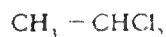
*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*

C ≥ 20 %	T; R 45-23/24/25-36/37/38
1 % ≤ C < 20 %	T; R 45-23/24/25
0,1 % ≤ C < 1 %	T; R 45-20/21/22

Cas No 75-34-3

EEC No 200-863-5

No 602-011-00-1





ES: 1,1-dicloroetano  
 DA: 1,1-dichlorethan  
 DE: 1,1-Dichlorethan  
 EL: 1,1-διχλωροαιθάνιο  
 EN: 1,1-dichloroethane  
 FR: 1,1-dichloroéthane  
 IT: 1,1-dicloroetano  
 NL: 1,1-dichloorethaan  
 PT: 1,1-dicloroetano  
 FI: 1,1-dikloorietaani  
 SV: 1,1-diklorethan; etylidendiklorid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	Xn; R 22	Xi; R 36/37	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnt, Märkning*

F	Xn	
		
		R: 11-22-36/37-52/53
		S: (2-)16-23-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*

C ≥ 20 %	Xn; R 22-36/37
12,5 % ≤ C < 20 %	Xn; R 22



Cas No 107-06-2

EEC No 203-458-1

No 602-012-00-7

NOTA E



ES: 1,2-dicloroetano; cloruro de etileno

DA: 1,2-dichlorethan; ethylendichlorid

DE: 1,2-Dichlorethan; Ethylenchlorid

EL: 1,2-διχλωροαιθάνιο · διχλωροαιθυλένιο

EN: 1,2-dichloroethane; ethylene dichloride

FR: 1,2-dichloroéthane; chlorure d'éthylène

IT: 1,2-dicloroetano; etilene dicloruro

NL: 1,2-dichloorethaan; ethyleenchloride

PT: 1,2-dicloroetano; cloreto de etileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

F; R 11

Carc. Cat. 2; R 45

Xn; R 22

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	T	
		R : 45-11-22-36/37/38
		S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

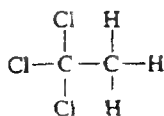
C ≥ 25 %	T; R 45-22-36/37/38
20 % ≤ C < 25 %	T; R 45-36/37/38
0,1 % ≤ C < 20 %	T; R 45

Cas No 71-55-6

EEC No 200-756-3

No 602-013-00-2

NOTA F



ES: 1,1,1-tricloroetano; metilcloroformo

DA: 1,1,1-trichlorethan; methylchloroform

DE: 1,1,1-Trichlorethan; Methylchloroform

EL: 1,1,1-τριχλωροαιθάνιο; μεθυλοχλωροφόρμιο

EN: 1,1,1-trichloroethane; methyl chloroform

FR: 1,1,1-trichloroéthane; méthylchloroforme

IT: 1,1,1-tricloroetano; metilcloroformio

NL: 1,1,1-trichloorethaan; methylchloroform


PT: 1,1,1-tricloroetano; metilclorofórmio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn; R 20

N; R 59

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 20-59
		S : (2-)24/25-59-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 79-00-5

EEC No 201-166-9

No 602-014-00-8



ES: 1,1,2-tricloroetano

DA: 1,1,2-trichlorethan

DE: 1,1,2-Trichlorethan

EL: 1,1,2-τριχλωροαιθάνιο

EN: 1,1,2-trichloroethane

FR: 1,1,2-trichloroéthane

IT: 1,1,2-tricloroetano

NL: 1,1,2-trichloorethaan

PT: 1,1,2-tricloroetano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>Xn</p> 	<p>R: 20/21/22</p> <p>S: (2-)</p>
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*Limites de concentració, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 5 %	Xn; R 20/21/22

Cas No 79-34-5

EEC No 201-197-8

No 602-015-00-3



ES : 1,1,2,2-tetracloroetano : tetracloruro de acetileno

DA : 1,1,2,2-tetrachlorethan

DE : 1,1,2,2-Tetrachlorethan

EL : 1,1,2,2-τετραχλωροαιθάνιο

EN : 1,1,2,2-tetrachloroethane

FR : 1,1,2,2-tétrachloroéthane

IT : 1,1,2,2-tetracloroetano

NL : 1,1,2,2-tetrachloorethaan

PT : 1,1,2,2-tetracloroetano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T+ ; R 26/27 N ; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	N	
		R : 26/27-51/53
		S : (1/2)-38-45-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 7 %	T+ ; R 26/27
1 % ≤ C < 7 %	T ; R 23/24
0,1 % ≤ C < 1 %	Xn ; R 20/21

Cas No 79-27-6

EEC No 201-191-5

No 602-016-00-9


CHBr<sub>4</sub> - CHBr<sub>3</sub>

ES: 1,1,2,2-tetrabromoetano  
 DA: 1,1,2,2-tetrabromethan  
 DE: 1,1,2,2-Tetrabromethan  
 EL: 1,1,2,2-τετραβρωμοαιθάνιο  
 EN: 1,1,2,2-tetrabromoethane  
 FR: 1,1,2,2-tétrabromoéthane  
 IT: 1,1,2,2-tetrabromoetano  
 NL: 1,1,2,2-tetrabroomethaan  
 PT: 1,1,2,2-tetràbromoetano  
 FI: 1,1,2,2-tetrabromietaani  
 SV: 1,1,2,2-tetrabrometan

*Classification, Klassificering, Einstufung, Ταξινόηση Classification  
 Classificazione, Indéling, Classificação, Luokitus, Klassificering*

T+; R 26	Xi, R 36	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinäät, Märkning*

T+	R: 26 36 52/53
	S (1/2-)24-27 45-61

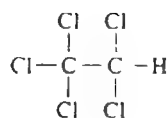
*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*

C ≥ 20 %	T+, R 26-36
7 % ≤ C < 20 %	T+, R 26
1 % ≤ C < 7 %	T; R 23
0,1 % ≤ C < 1 %	Xn; R 20

Cas No 76-01-7

EEC No 200-925-1

No 602-017 00-4





ES . pentacloroetano  
 DA . pentachlorethan  
 DE . Pentachlorethan  
 EL . πενταχλωροαιθάνιο  
 EN . pentachloroethane  
 FR . pentachloroethane  
 IT . pentacloroetano  
 NL . pentachloorethaan  
 PT . pentacloroetano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 3 ; R 40	T ; R 48/23	N ; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem*

T	N	
		
		R : 40-48/23-51/53
		S : (1/2-)23-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 1 %	T ; R 40-48/23
0,2 % ≤ C < 1 %	Xn ; R 48/20

Cas No 540-54-5 [1]  
75-29-6 [2]

EEC No 208-749-7 [1]  
200-858-8 [2]

No 602-018-00-X

NOTA





ES: 1-cloropropano [1]; 2-cloropropano [2]  
DA: 1-chlorpropan [1]; 2-chlorpropan [2]  
DE: 1-Chlorpropan [1]; 2-Chlorpropan [2]  
EL: 1-χλωροπροπάνιο [1]; 2-χλωροπροπάνιο [2]  
EN: 1-chloropropane [1]; 2-chloropropane [2]  
FR: 1-chloropropane [1]; 2-chloropropane [2]  
IT: 1-cloropropano [1]; 2-cloropropano [2]  
NL: 1-chloorpropan [1]; 2-chloorpropan [2]  
PT: 1-cloropropano [1]; 2-cloropropano [2]  
FI: 1-klooripropani [1]; 2-klooripropani [2]  
SV: 1-klorpropan [1]; 2-klorpropan [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classificazione, Indeling, Classificação, Luokitus, Klassifizierung*

F, R 11 Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

F	Xn	R: 11-20/21/22
		S: (2-)-9-29

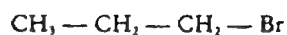
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεων,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusrajat, Konzentrationsgrenser*

C ≥ 25 %	Xn; R 20/21/22

Gas No 106-94-5

EEC No 203-445-0

No 602-019-00-5



ES: 1-bromopropano; bromuro de propilo  
 DA: 1-bromopropan; propylbromid  
 DE: 1-Bromopropan; Propylbromid  
 EL: 1-βρωμοπροπάνιο προκυλοβρωμίδιο  
 EN: 1-bromopropane; propyl bromide  
 FR: 1-bromopropane; bromure de n-propyle  
 IT: 1-bromopropano; bromuro di propile  
 NL: 1-propylbromide  
 PT: 1-bromopropano; brometo de n-propilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

R 10

Xn; R 20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 10-20

S : (2-)9-24

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 78-87-5

EEC No 201-152-2

No 602-020-00-0



ES: 1,2-dicloropropano; dicloruro de propileno

DA: 1,2-dichlorpropan; propylendichlorid

DE: 1,2-Dichlorpropan; Propylendichlorid

EL: 1,2-διχλωροπροπάνιο · διχλωριούχο προπυλένιο

EN: 1,2-dichloropropane; propylene dichloride

FR: 1,2-dichloropropane; dichlorure de propylène

IT: 1,2-dicloropropano; dicloruro di propilene

NL: 1,2-dichloorpropan; propyleendichloride

PT: 1,2-dicloropropano; dicloreto de propileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

F; R 11

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xn	
		
		R : 11-20/22
		S : (2-)16-24

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limieten de concentratie, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No' 96 12-8

FEC No 202-479-3

No 602-021-00-6

NOTA E




ES: 1,2-dibromo-3-cloropropano  
 DA: 1,2-dibrom 3-chloropropan  
 DE: 1,2 Dibrom-3-chloropropan  
 EL: 1,2-διδρωμο-2-χλωροπροπάνιο  
 EN: 1,2-dibromo-3-chloropropane  
 FR: 1,2-dibromo-3-chloropropane  
 IT: 1,2-dibromo-3-cloropropano  
 NL: 1,2-dibroom-3-chloorpropan  
 PT: 1,2-dibromo-3-cloropropano  
 FI: 1,2-dibromi-3-klooripropani  
 SV: 1,2-dibrom-3-kloropropan

*Classificacón Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione Indeling, Classificação, Luokitus, Klassificering*

Carc Cat 2, R 45	Muta Cat 2, R 46	Repr Cat. 1, R 60	T, R 25	Xn, R 48/20/22
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R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling  
 Etiquetage, Etichettatura Kenmerken, Rotulagem, Merkinnat Markning*

<p>T</p> 	<p>R: 45-46 60-25 48/20/22-52/53          S: 53 45 61</p>
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*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione Concentratiegrenzen,  
 Limites de concentraçao Pitoisuusrajat Konzentrationsgrenzen*


Cas No 543-59-9 [1]  
625-29-6 [2]  
616-20-6 [3]

EEC No 208-846-4 [1]  
210-885-7 [2]  
210-467-4 [3]

No 602-022-00-1

NOTA C





ES: 1-cloropentano [1]; 2-cloropentano [2]; 3-cloropentano [3]  
DA: 1-chlorpentan [1]; 2-chlorpentan [2]; 3-chlorpentan [3]  
DE: 1-Chlorpentan [1]; 2-Chlorpentan [2]; 3-Chlorpentan [3]  
EL: 1-χλωροπεντάνιο [1]; 2-χλωροπεντάνιο [2]; 3-χλωροπεντάνιο [3]  
EN: 1-chloropentane [1]; 2-chloropentane [2]; 3-chloropentane [3]  
FR: 1-chloropentane [1]; 2-chloropentane [2]; 3-chloropentane [3]  
IT: 1-cloropentano [1]; 2-cloropentano [2]; 3-cloropentano [3]  
NL: 1-chloorpentaan [1]; 2-chloorpentaan [2]; 3-chloorpentaan [3]  
PT: 1-cloropentano [1]; 2-cloropentano [2]; 3-cloropentano [3]  
FI: 1-klooripentaani [1]; 2-klooripentaani [2]; 3-klooripentaani [3]  
SV: 1-klorpentan [1]; 2-klorpentan [2]; 3-klorpentan [3]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11 Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

F	Xn	
		R: 11-20/21/22 S: (2-)9-29

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*

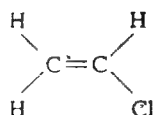
C ≥ 25 %	Xn, R 20/21/22

Cas No 75-01-4

EEC No 200-831-0

No 602-023-00-7

NOTA D



ES: cloruro de vinilo; cloroetileno

DA: vinvichlorid; chlorethylen

DE: Vinylchlorid; Chlorethylen

EL: βινυλοχλωρίδιο· χλωροαιθυλένιο

EN: vinyl chloride; chloroethylene

FR: chlorure de vinyle; chloroéthylène

IT: vinile cloruro; cloroetilene

NL: vinylchloride; chloorethyleen

PT: cloreto de vinilo; cloroetileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F+; R 12

Carc. Cat. 1; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F+	T	
		
		R : 45-12
		S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 593-60-2

EEC No 209-800-6

No 602-024-00-2





ES: bromoetileno  
 DA: bromethylen, vinyl bromide  
 DE: Bromethylen; Vinylbromid  
 EL: βρωμοαιθυλένιο  
 EN: bromoethylene  
 FR: bromoéthylène  
 IT: bromoetilene  
 NL: broomethyleen  
 PT: bromoetileno  
 FI: bromietyleeni, vinylibromidi  
 SV: brometen, vinylbromid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F +, R 12	Carc. Cat. 2, R 45
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat Märkning*

F +	T	
		R: 45-12
		S: 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçao, Pitoisuusraajat, Koncentrationsgrænser*


Cas No 75-35-4

EEC No 200-864-0

No 602-025-00-8

NOTA D



ES: 1,1-dicloroetileno; cloruro de vinilideno

DA: 1,1-dichlorethylen; vinylidenchlorid

DE: 1,1-Dichlorethen; Dichlorethylen

EL: 1,1-διχλωροαιθυλένιο · βινυλιδενοχλωρίδιο

EN: 1,1-dichloroethylene; vinylidene chloride

FR: 1,1-dichloroéthylène

IT: 1,1-dicloroetilene; cloruro di vinilidene

NL: 1,1-dichlooretheen; dichloorethyleen

PT: 1,1-dicloroetileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

F+; R 12

Xn; R 20-40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F+	Xn	
		R : 12-20-40
		S : (2-)7-16-29

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 12,5 %	Xn; R 20-40
1 % ≤ C < 12,5 %	Xn; R 40

Cas No 540-59-0 [1]  
156-59-2 [2]  
156-60-5 [3]

EEC No 208-750-2 [1]  
205-859-7 [2]  
205-860-2 [3]

No 602-026-00-3

NOTA C





- ES: 1,2-dicloroetileno [1]; *cis*-dicloroetileno [2]; *trans*-dicloroetileno [3]  
 DA: 1,2-dichlorethylen [1]; *cis*-dichlorethylen [2]; *trans*-dichlorethylen [3]  
 DE: 1,2-Dichlorethylen [1]; *cis*-Dichlorethylen [2]; *trans*-Dichlorethylen [3]; 1,2-Dichlorethen [1]; *cis*-Dichlorethen [2]; *trans*-Dichlorethen [3]  
 EL: 1,2-διχλωροαιθυλένιο [1]; *cis*-διχλωροαιθυλένιο [2]; *trans*-διχλωροαιθυλένιο [3]  
 EN: 1,2-dichloroethylene [1]; *cis*-dichloroethylene [2]; *trans*-dichloroethylene [3]  
 FR: 1,2-dichloroéthylène [1]; *cis*-dichloroéthylène [2]; *trans*-dichloroéthylène [3]  
 IT: 1,2-dicloroetilene [1]; *cis*-dicloroetilene [2]; *trans*-dicloroetilene [3]  
 NL: 1,2-dichloorethyleen [1]; *cis*-dichloorethyleen [2]; *trans*-dichloorethyleen [3]  
 PT: 1,2-dicloroetileno [1]; *cis*-dicloroetileno [2]; *trans*-dicloroetileno [3]  
 FI: 1,2-dikloorietyleni [1]; *cis*-dikloorietyleni [2]; *trans*-dikloorietyleni [3]  
 SV: 1,2-dikloretylen [1]; *cis*-dikloretylen [2]; *trans*-dikloretylen [3]; 1,2-dikloreten [1]; *cis*-dikloreten [2]; *trans*-dikloreten [3]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11    Xn; R 20    R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

F	Xn	
		
		R: 11-20-52/53
		S: (2-)-7-16-29-61

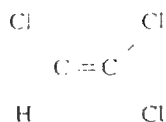
*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoiusurajat, Koncentrationsgränser*

C ≥ 12,5 %	Xn, R 20

Cas No 79-01-6

EEC No 201-167-4

No 602-027-00-9



ES: tricloroetileno  
 DA: trichlorethylene  
 DE: Trichlorethylen  
 EL: τριχλωροαιθυλένιο  
 EN: trichloroethylene  
 FR: trichloroéthylène  
 IT: tricloroetilene  
 NL: trichloorethyleen  
 PT: tricloroetileno  
 FI: trikloorietyleni  
 SV: trikloreten

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3; R 40

R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn



R: 40 52/53

S: (2-)23-36/37-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*

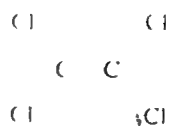
C ≥ 1 %	Xn; R 40



Cas No 127 18-4

EFC No 204-825 9

No 602-028-00-4





ES tetracloroetileno  
 DA tetrachlorethylen  
 DE Tetrachlorethylen, Perchlorethylen  
 EL τετραχλωροαιθυλενιο  
 EN tetrachloroethylene  
 FR tetrachloroethylene  
 IT tetracloroetilene, perchloroetilene  
 NL tetrachloorethyleen  
 PT tetracloroetileno  
 FI tetrakloorietyleeni  
 SV tetrakloreten

*Classification Klassificering Einstufung, Ταξινόμηση, Classification*  
*Classificazione Classificazione, Indeling, Classificação Luokitus, Klassificering*

Carc. Cat. 3, R 40	N, R 51-53
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*Etiquetado Etikettering Kennzeichnung, Επισήμανση, Labelling*  
*Etiquetage Etichettatura Kenmerken Rotulagem Merkinnat, Markning*

Xn	N	
		R 40 51/53
		S (2) 23 36/37-61

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκεντρώσεως*  
*Concentration limits Limites de concentration, Limiti di concentrazione, Concentratiegrenzen*  
*Limites de concentração Pitoisuusraajat Konzentrationsgränser*

C ≤ 1 %	Xn, R 40

Cas No 107-05-1

EEC No 203-457-6

No 602 029-00-X

NOT A D



ES: 3-cloropropeno; cloruro de alilo

DA: 3-chlorpropen; allylchlorid

DE: 3-Chlorpropen; Allylchlorid

EL: 3-χλωροπροπένιο· αλλιλοχλωρίδιο

EN: 3-chloropropene; allyl chloride

FR: 3-chloropropène; chlorure d'allyle

IT: 3-cloropropene; cloruro di allile




NL: 3-chloorpropeen; allylchloride

PT: 3-cloropropeno; cloreto de alilo

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11	T+; R 26	N; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	T+	N	
			R: 11-26-50 S: (1/2-)16-29-33-45-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 542-75-6 [1]  
10061-01-5 [2]

EEC No 208-826-5 [1]  
233-195-8 [2]

No 602-030-00-5

NOTA D

NOTA C


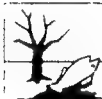


ES: 1,3-dicloropropeno [1]; (Z)-1,3-dicloropropeno [2]  
DA: 1,3-dichlorpropen [1]; (Z)-1,3-dichlorpropen [2]  
DE: 1,3-Dichlorpropen [1]; (Z)-1,3-Dichlorpropen [2]  
EL: 1,3-διχλωροπροπένιο [1]; (Z)-1,3-διχλωροπροπένιο [2]  
EN: 1,3-dichloropropene [1]; (Z)-1,3-dichloropropene [2]  
FR: 1,3-dichloropropène [1]; (Z)-1,3-dichloropropène [2]  
IT: 1,3-dicloropropene [1]; (Z)-1,3-dicloropropene [2]  
NL: 1,3-dichloorpropeen [1]; (Z)-1,3-dichloorpropeen [2]  
PT: 1,3-dicloropropeno [1]; (Z)-1,3-dicloropropeno [2]  
FI: 1,3-diklooripropeen [1]; (Z)-1,3-diklooripropeen [2]  
SV: 1,3-diklorpropen [1]; (Z)-1,3-diklorpropen [2]

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 10	T, R 25	Xn; R 20/21	Xi; R 36/37/38	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

T	N	
		
		R: 10-20/21-25-36/37/38-43-50/53
		S: (1/2-)36/37-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusrajat, Koncentrationsgränser*


Cas No 563-58-6

EEC No 209-253-3

No 602-031-00-0





ES: 1,1-dicloropropeno  
 DA: 1,1-dichlorpropen  
 DE: 1,1-Dichlorpropen  
 EL: 1,1-διχλωροπροπένιο  
 EN: 1,1-dichloropropene  
 FR: 1,1-dichloropropène  
 IT: 1,1-dicloropropene  
 NL: 1,1-dichloorpropen  
 PT: 1,1-dicloropropeno  
 FI: 1,1-diklooripropeeni  
 SV: 1,1-diklorpropen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	T; R 25	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnet, Märkning*

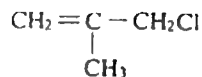
F	T	
		
		R: 11-25-52/53
		S: (1/2-)16-29-33-45-61

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Konzentrationsgrænser*


Cas No 563-47-3

EEC No 209-251-2

No 602-032-00-6






ES: 3-cloro-2-metilpropeno  
 DA: 3-chlor-2-methylpropen  
 DE: 3-Chlor-2-methylpropen; Methallylchlorid  
 EL: 3-χλωρο-2-μεθυλοπροπένιο  
 EN: 3-chloro-2-methylpropene  
 FR: 3-chloro-2-méthylpropene  
 IT: 3-cloro-2-metilpropene  
 NL: 3-chloor-2-methylpropeen  
 PT: 3-cloro-2-metilpropeno  
 FI: 3-kloori-2-metyylipropeeni; metallyylikloridi  
 SV: 3-klor-2-metylpropen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F, R 11	Xn, R 20/22	C, R 34	R 43	N, R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

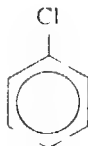
F	C	N	
			R: 11 20/22-34-43-51/53
			S: (2-)9 16-26-29-36/37/39-45-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitaisuusrajat, Konzentrationsgranser*


Cas No 108-90-7

EEC No 203-628-5

No 602 033-00 1



ES: clorobenceno  
 DA: chlorbenzen  
 DE: Chlorbenzol  
 EL: χλωροβενζόλιο  
 EN: chlorobenzene  
 FR: chlorobenzène  
 IT: clorobenzene  
 NL: chloorbenzeen  
 PT: clorobenzeno  
 FI: klooribentseeni  
 SV: klorbenzen

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 10	Xn; R 20	N, R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn	N	
		R: 10 20 51/53 S: (2) 24/25-61

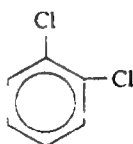
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçã, Pitoiusuusrajat, Koncentrationsgrænser*

C ≥ 5 %	Xn, R 20

Cas No 95-50-1

EEC No 202-425-9

No 602-034-00-7



ES : 1,2-diclorobenceno ; o-diclorobenceno

DA : 1,2-dichlorbenzen ; ortho-dichlorbenzen

DE : 1,2-Dichlorbenzol ; o-Dichlorbenzol

EL : 1,2-διχλωροβενζόλιο· o-διχλωροβενζόλιο

EN : 1,2-dichlorobenzene ; o-dichlorobenzene

FR : 1,2-dichlorobenzène ; o-dichlorobenzène

IT : 1,2-diclorobenzene ; o-diclorobenzolo

NL : 1,2-dichloorbenzeen

PT : 1,2-diclorobenzeno ; o-diclorobenzeno .

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Xi ; R 36/37/38

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 22-36/37/38-50/53
		S : (2-)23-60-61

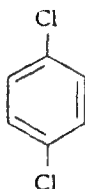
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 20 %	Xn ; R 22-36/37/38
5 % ≤ C < 20 %	Xn ; R 22

Cas No 106-46-7

EEC No 203-400-5

No 602-035-00-2




ES : 1,4-diclorobenceno ; p-diclorobenceno  
 DA : 1,4-dichlorbenzen ; para-dichlorbenzen  
 DE : 1,4-Dichlorbenzol ; p-Dichlorbenzol  
 EL : 1,4-διχλωροβενζόλιο ; π-διχλωροβενζόλιο  
 EN : 1,4-dichlorobenzene ; p-dichlorobenzene  
 FR : 1,4-dichlorobenzène ; p-dichlorobenzène  
 IT : 1,4-diclorobenzene ; p-diclorobenzolo  
 NL : 1,4-dichloorbenzeen  
 PT : 1,4-diclorobenzeno ; p-diclorobenzeno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

Xi ; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22-36/38
	S : (2-)22-24/25-46

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

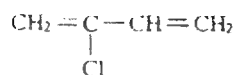



Cas No 126-99-8

EEC No 204-818-0

No 602-036-00-8

NOTA D



ES: 2-cloro-1,3-butadieno; cloropreno

DA: 2-chlor-1,3-butadien; chloropren

DE: 2-Chlor-1,3-butadien; Chloropren

EL: 2-χλωρο-1,3-βουταδιένιο· χλωροπρένιο

EN: 2-chlorobuta-1,3-diene; chloroprene

FR: 2-chloro-1,3-butadiène; chloroprène

IT: 2-cloro-1,3-butadiene; cloroprene

NL: 2-chloor-1,3-butadien; chloropreen

PT: 2-cloro-1,3-butadieno; cloropreno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

F; R 11

Xn; R 20/22

Xi; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

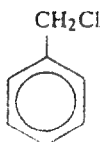
F	Xn	
		
		R : 11-20/22-36
		S : (2-)16

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 100-44-7

EEC No 202-853-6

No 602-037-00-3



ES: α-clorotolueno; cloruro de bencilo

DA: α-chlortoluen; benzylchlorid

DE: α-Chlor-toluol; Benzylchlorid

EL: α-χλωροτολουόλιο · βενζυλοχλωρίδιο

EN: α-chlorotoluene; benzyl chloride

FR: α-chlorotoluène; chlorure de benzyle

IT: α-clorotoluene; cloruro di benzile

NL: benzylchloride

PT: α-clorotolueno; cloreto de benzilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40	T; R 23	Xn; R 22	Xi; R 37/38-41
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 22-23-37/38-40-41
	S : (1/2-)36/37-38-45

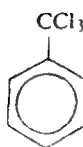
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 98-07-7

EEC No 202-634-5

No 602-038-00-9

NOTA E



ES: α,α,α-triclorotolueno; triclorometilbenceno

DA: α,α,α-trichlortoluen; trichlormethylbenzen

DE: α,α,α-Trichlor-toluol

EL: α,α,α-τριχλωροτολουόλιο · δεινζενυλοτριχλωρίδιο

EN: α,α,α-trichlorotoluene; benzotrichloride

FR: α,α,α-trichlorotoluène; chlorure de benzényle

IT: α,α,α-triclorotolueno; benzo tricloruro

NL: α,α,α-trichloortolueen

PT: α,α,α-triclorotolueno; cloreto de benzenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

T; R 23

Xn; R 22

Xi; R 37/38-41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R: 45-22-23-37/38-41

S: 53-45

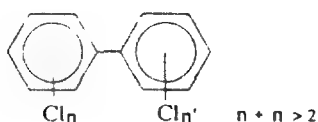
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1336-36-3

EEC No 215-648-1

No 602-039-00-4

NOTA C



ES: bifenilos policlorados; PCB  
 DA: polychloreerde biphenyls; PCB  
 DE: Polychlorierte Biphenyle; PCB  
 EL: πολυχλωροδιφαινύλια; PCB  
 EN: polychlorobiphenyls; PCB  
 FR: biphényles chlorés; diphenyles chlorés; PCB  
 IT: policlorodifenili; PCB  
 NL: gechloreerde diphenylen; PCB  
 PT: policlorodifenilos; PCB

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 33

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	N	
		R : 33-50/53
		S : (2-)35-60-61

*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

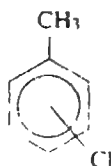
C ≥ 0.005 %	Xn ; R 33

Cas No	95-49-8 [1]
	108-41-8 [2]
	106-43-4 [3]
	25168-05-2 [4]

EEC No	202-424-3 [1]
	203-580-5 [2]
	203-397-0 [3]
	246-698 2 [4]

No 602-040-00-X

NOTA C



- ES. 2-clorotolueno [1], 3-clorotolueno [2], 4-clorotolueno [3], clorotolueno [4]  
 DA. 2-chlortoluen [1], 3-chlortoluen [2], 4-chlortoluen [3], chlortoluen [4]  
 DE. 2-Chlortoluol [1], 3-Chlortoluol [2], 4-Chlortoluol [3], Chlortoluol [4]  
 EL. 2-χλωροτολουόλη [1] 3-χλωροτουλουόλη [2] 4-χλωροτολουόλη [3] χλωροτολουόλιο [4]  
 EN. 2-chlorotoluene [1], 3-chlorotoluene [2], 4-chlorotoluene [3], chlorotoluene [4]  
 FR. 2-chlorotoluène [1], 3-chlorotoluène [2], 4-chlorotoluène [3], chlorotoluène [4]  
 IT. 2-clorotoluene [1], 3-clorotoluene [2], 4 clorotoluene [3], clorotoluene [4]  
 NL. 2-chloortolueen [1], 3-chloortolueen [2], 4-chloortolueen [3], chloortolueen [4]  
 PT. 2-clorotolueno [1], 3-clorotolueno [2], 4 clorotolueno [3], clorotolueno [4]  
 FI. 2-klooritolueeni [1], 3-klooritolueeni [2], 4-klooritolueeni [3], klooritolueeni [4]  
 SV. 2-klortoluen [1], 3-klortoluen [2], 4 klortoluen [3], klortoluen [4]

*Classification Klassifizierung Einstufung Ταξινόμηση, Classification,  
 Classification Classificazione Indeling Classificação Luokitus, Klassificering*

Xn; R 20 N, R 51-53

*Etiquetado, Etikettering, Kennzeichnung Επισημάνση Labelling,  
 Etiquetage, Etichettatura Kenmerken, Rotulagem, Merkinnat, Märkning*

Xn	N	
		R. 20 51/53
		S: (2-)24/25-61

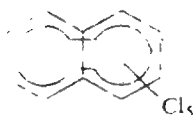
*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrationsgrenzen,  
 Limites de concentração, Pitoisuusraajat Konzentrationsgrenzen*


Cas No 1321-64-8

EEC No 215-320-8

No 602-041-00-5

NOTA C



ES : pentacloronaftaleno

DA : pentachlornaphthalen

DE : Pentachlor-naphthalin

EL : πενταχλωροναφθαλίνιο

EN : pentachloronaphthalene

FR : naphthalène pentachloré ; pentachloronaphtalène

IT : pentacloronaftalina

NL : pentachloornaphtaleen

PT : pentacloronaftaleno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 21/22	Xi ; R 36/38	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	N	
		R : 21/22-36/38-S0/53
		S : (2-)35-60-61

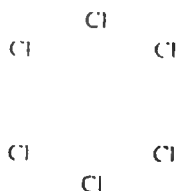
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No

E.C. No

No 602-042-00-0

NOTA C



- ES 1,2,3,4,5,6-hexaclorociclohexanos excepto los especialmente indicados en este Anexo
- DA 1,2,3,4,5,6-hexachlorocyclohexaner med undtagelse af sådanne angivet andetsteds i dette bilag
- DE 1,2,3,4,5,6-Hexachlorocyclohexane mit Ausnahme der namentlich in diesem Anhang bezeichneten
- EL 1,2,3,4,5,6-εξαχλωροκυκλοεξάνιο, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος
- EN 1,2,3,4,5,6-hexachlorocyclohexanes with the exception of those specified elsewhere in this Annex
- FR 1,2,3,4,5,6-hexachlorocyclohexanes à l'exception de ceux nommément désignés dans cette annexe
- IT 1,2,3,4,5,6-esaclorocicloesani esclusi quelli espressamente indicati in questo allegato
- NL 1,2,3,4,5,6-hexachloorcyclohexanen met uitzondering van de in deze bijlage met name genoemde
- PT 1,2,3,4,5,6-hexaclorocicloexanos com excepção dos expressamente referidos no presente anexo
- FI 1,2,3,4,5,6-heksakloorisykloheksaani paitsi muualla lassa luetteessa mainitut
- SV 1,2,3,4,5,6-hexaklorcyklohexaner med undantag för de iörensingar som är upptagna på annat ställe i bilagan

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassifizierung*

Carc. Cat. 3, R 40	T, R 25	Xn, R 21	N, R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

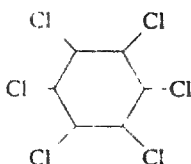
T	N	
		R: 21-25-40-50/53
		S: (1/2-)22-36/37-45-60-61

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoimustapit, Konzentrationsgrenzen*


Cas No 58-89-9

EEC No 200-401-2

No 602-043-00-6



ES: γ-1,2,3,4,5,6-hexaclorociclohexano ; lindano

DA: lindan ; γ-1,2,3,4,5,6-hexachlorcyclohexan

DE: Lindan ; γ-1,2,3,4,5,6-Hexachlor-cyclohexan

EL: λιντάν· γ-1,2,3,4,5,6-εξαχλωροκυκλοεξάνιο

EN: lindane ; γ-BHC ; γ-1,2,3,4,5,6-hexachlorocyclohexane

FR: lindane ; γ-1,2,3,4,5,6-hexachlorocyclohexane

IT: lindano ; γ-1,2,3,4,5,6-esacloro-cicloesano

NL: lindaan ; γ-1,2,3,4,5,6-hexachloorcyclohexaan

PT: lindano ; γ-1,2,3,4,5,6-hexaclorocicloexano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T ; R 23/24/25

Xi ; R 36/38

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		R : 23/24/25-36/38-50/53
		S : (1/2-)13-45-60-61

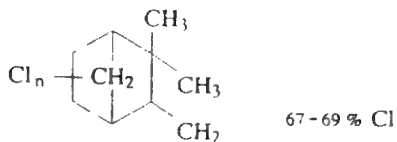
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 8001-35-2

EEC No 232-283-3

No 602-044-00-1



ES: toxafeno

DA: toxaphen

DE: Toxaphen; Camphechlor

EL: τοξοφαίνιο

EN: Toxaphene; camphechlor

FR: toxaphène

IT: toxafene; camfeclor

NL: toxafeen

PT: toxafeno

FI: toksafeeni; kamfekloori

SV: toxafen; kamfeklor (ISO)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat 3; R 40	T; R 25	Xn; R 21	Xi; R 37/38	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnyt, Märkning*

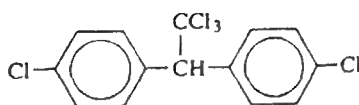
T	N	
		R: 21-25-37/38-40-50/53
		S: (1/2-)36/37-45-60-61

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào, Pitoisuusraajat, Konzentrationsgrænser*


Cas No 50-29-3

EEC No 200-024-3

No 602-045-00-7



- ES: DDT (nombre común, no adoptado por ISO), clofenotano (DCI), dicofano, 1,1,1-tricloro-2,2-bis(4-clorofenil)etano; diclorodifeniltricloroetano
- DA: DDT (ikke anerkendt af ISO); clofenotan (INN), dicophan 1,1,1-trichlor-2,2-bis(4-chlorophenyl)ethan; dichlordiphenyltrichlorethan
- DE: DDT (nicht als ISO-Kurzname anerkannt); Clofenotan (INN), Dicophan; 1,1,1-Trichlor-2,2-bis(4-chlorophenyl)ethan; Dichlordiphenyltrichlorethan
- EL: DDT (ονομασία που δεν έχει υιοθετηθεί από τον ISO) clofenotane (INN) · dicophane 1,1,1-τριχλωρο-2,2-δισ-(4-χλωροφαινυλ)αιθάνιο · διχλωροδιφαινυλοτριχλωροαιθάνιο
- EN: DDT (common name not adopted by ISO); clofenotane (INN); dicophane; 1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane; dichlorodiphenyltrichloroethane
- FR: DDT (nom commun non adopté par ISO); clofénotane (INN), dicophane; 1,1,1-trichloro-2,2-bis(4-chlorophényl)ethane; dichlorodiphényltrichloroéthane
- IT: DDT (denominazione non adottata dall'ISO), clofenotano (INN); dicofano 1,1,1-tricloro-2,2-bis(4-clorofenil)etano; diclorodifeniltricloroetano
- NL: DDT (benaming niet aanvaard door ISO); clofenotaan (INN); dicofaan, 1,1,1-trichloor-2,2-bis(4-chloorfenyl)ethaan; dichloordifenylntrichloorethaan
- PT: DDT (nome comum não adoptado por ISO), clofenotano (DCI); dicofano; 1,1,1-tricloro-2,2-bis(4-clorofenil)etano; diclorodifeniltricloroetano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T; R 25-48/25

Carc. Cat. 3; R 40

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

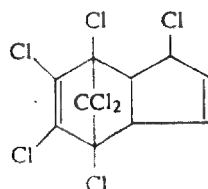
T	N	
		R : 25-40-48/25-50/53
		S : (1/2-)22-36/37-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*


Cas No 76-44-8

EEC No 200-962-3

No 602-046-00-2



- ES : heptacolor (ISO) ; 1,4,5,6,7,8,8-heptacolor-3a,4,7,7a-tetrahydro-4,7-metanoindano  
 DA : heptachlor (ISO) ; 1,4,5,6,7,8,8-heptachlor-3a,4,7,7a-tetrahydro-4,7-methanoinden  
 DE : heptachlor (ISO) ; 1,4,5,6,7,8,8-Heptachlor-3a,4,7,7a-tetrahydro-4,7-methanoinden  
 EL : heptachlor (ISO) ; 1,4,5,6,7,8,8-επταχλωρο-3α,4,7,7α-τετραυδρο-4,7-μεθανοϊνδένιο  
 EN : heptachlor (ISO) ; 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene  
 FR : heptachlor (ISO) ; 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-méthanoindène  
 IT : eptacolor (ISO) ; 1,4,5,6,7,8,8-eptacolor-3a,4,7,7a-tetraidro-4,7-metanoindene  
 NL : heptachloor (ISO) ; 1,4,5,6,7,8,8-heptachloor-3a,4,7,7a-tetrahydro-4,7-methaaninden  
 PT : heptaclor (ISO) ; 1,4,5,6,7,8,8-heptacolor-3a,4,7,7a-tetraidro-4,7-metanoindano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T ; R 24/25	Carc. Cat. 3 ; R 40	R 33	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

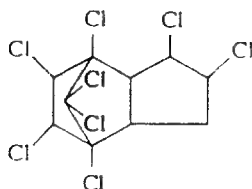
T	N	
		R : 24/25-33-40-50/53
		S : (1/2-36/37-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 57-74-9

EEC No 200-349-0

No 602-047-00-8



ES: clordano (ISO)

DA: chlordan (ISO); 1,2,4,5,6,7,8,8-octachlor-3a,4,7,7a-tetrahydro-4,7-methanoindan

DE: chlordan (ISO); 1,2,4,5,6,7,8,8-Octachlor-3a,4,7,7a-tetrahydro-4,7-methanoindan

EL: chlordan (ISO); 1,2,4,5,6,7,8,8-οκταχλωρο-3α,4,7,7α-τετραυδρο-4,7-μεθανοϊνδάνιο

EN: chlordan (ISO); 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-4,7-methanoindan

FR: chlordan (ISO); 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tétrahydro-4,7-méthanoindan

IT: clordano (ISO); 1,2,4,5,6,7,8,8-ottacloro-3a,4,7,7a-tetraidro-4,7-metanoindano

NL: chloordaan (ISO); 1,2,4,5,6,7,8,8-octachloor-3a,4,7,7a-tetrahydro-4,7-methaanindaan

PT: clordano (ISO)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Xn; R 21/22

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

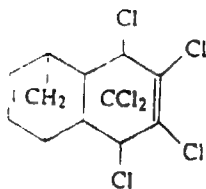
Xn	N	
		R : 21/22-40-50/53
		S : (2-)-36/37-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 309-00-2

EEC No 206-215-8

No 602-048-00-3



ES: aldrin (ISO)  
 DA: aldrin (ISO)  
 DE: aldrin (ISO)  
 EL: aldrin (ISO) αλδρίνη  
 EN: aldrin (ISO)  
 FR: aldrin (ISO)  
 IT: aldrin (ISO)  
 NL: aldrin (ISO)  
 PT: aldrin (ISO)

*Classificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

T; R 24/25-48/24/25

Carc. Cat. 3; R 40

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

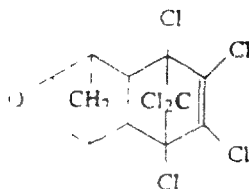
T	N	
		R : 24/25-40-48/24/25-50/53
		S : (1/2-)22-36/37-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 60-57-1

EEC No 200-484-5

No 602-049-00-9



ES : dieldrina (ISO)

DA : dieldrin (ISO)

DE : dieldrin (ISO)

EL : dieldrin (ISO) · διελδρίνη

EN : dieldrin (ISO)

FR : dieldrine (ISO)

IT : dieldrin (ISO)

NL : dieldrine (ISO)

PT : dieldrino (ISO)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T+ ; R 27

T ; R 25-48/25

Carc. Cat. 3 ; R 40

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+

N



R : 25-27-40-48/25-50/53

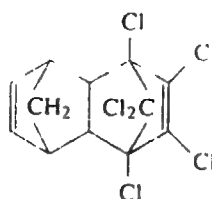
S : (1/2)-22-36/37-45-60-61

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 465-73-6

EEC No 207-366-2

No 602-050-00-4



- ES. (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-hexacloro-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -hexahidro-1,4 5,8-dimetanonaftaleno, isodrin  
 DA (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-hexachlor-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -hexahydro-1,4 5,8-dimethanonaphtalen, isodrin  
 DE. (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-Hexachlor-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -hexahydro-1,4 5,8-dimethanonaphthalin, Isodrin  
 EL. (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-εξαχλωρο-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -εξαυδρο-1,4 5,8 διμεθανοναφθαλένιο ισουτριν  
 EN. (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-hexachloro-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -hexahydro 1,4 5,8 dimethanonaphthalene, isodrin  
 FR: (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-hexachloro-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -hexahydro-1,4 5,8-diméthanonaphtalène, isodrine  
 IT (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-esacloro-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -esaidro-1,4 5,8-dimetanonaftalene, isodrin  
 NL (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-hexachloor-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -hexahydro 1,4 5,8-dimethanonaftaleen, isodrin  
 PT. (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-hexacloro-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -hexahidro-1,4 5,8-dimetanonaftaleno; isodrine  
 FI. (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-heksakloori-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -heksahydro-1,4,5,8-dimetanonaftaleeni, isodriini  
 SV. (1 $\alpha$ ,4 $\alpha$ ,4 $\alpha\beta$ ,5 $\beta$ ,8 $\beta$ 8 $\alpha\beta$ )-1,2,3,4,10,10-hexaklor-1,4,4 $\alpha$ ,5,8,8 $\alpha$ -hexahydro-1,4,5,8-dimetanonaftalen, isodrin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T+; R 26/27/28 N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

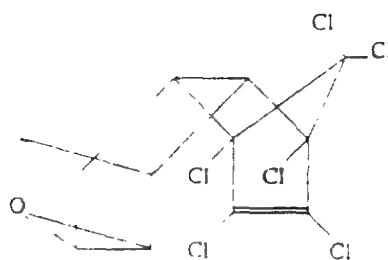
T+	N	
		R: 26/27/28-50/53
		S: (1/2-)13-28-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*


Cas No 72-20-8

EEC No 200-775-7

No 602-051-00-X



- ES Dieldrin (ISO) ; 1,2,3,4,10,10-hexacloro-6,7-epoxi-1,4,4a,5,6,7,8,8a-octahidro-1,4 :5,8-dimetanonaftaleno  
 DA Dieldrin (ISO) ; 1,2,3,4,10,10-hexachlor-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4 :5,8-dimethanonaphthalen  
 DE Dieldrin (ISO) ; 1,2,3,4,10,10-Hexachlor-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4 :5,8-dimethanonaphthalin  
 EL Dieldrin (ISO) ; 1,2,3,4,10,10-εξαχλωρο-6,7-εποξυ-1,4,4α,5,6,7,8,8α-οκταύδρο-1,4 :5,8-διμεθανοναφθαλίνιο  
 EN Dieldrin (ISO) ; 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4 :5,8-dimethanonaphthalene  
 FR Dieldrine (ISO) ; 1,2,3,4,10,10-hexachloro-6,7-époxy-1,4,4a,5,6,7,8,8a-octahydro-1,4 :5,8-diméthanonaphthalène  
 IT Dieldrina (ISO) ; 1,2,3,4,10,10-esacloro-6,7-epossi-1,4,4a,5,6,7,8,8a-ottaidro-1,4 :5,8-dimetanonaftaliene  
 NL Dieldrine (ISO) ; 1,2,3,4,10,10-hexachloor-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4 :5,8-dimethanonaftaleen  
 PT Dieldrine (DCI) 1,2,3,4,10,10-hexacloro-6,7-epoxi-1,4,4a,5,6,7,8,8a-octaidro-1,4 :5,8-dimetanonaftaleno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Classificazione, Indeling, Classificação

T+ ; R 28	T ; R 24	N ; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	N	
		R : 24-28-50/53*
		S : (1/2-)22-36/37-45-60-61

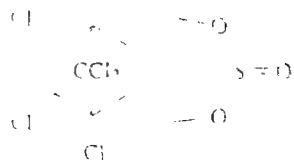
Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 115-29-7

EEC No 204-079-4

No 602-052-00-5



ES: endosulfán (ISO), sulfito de 1,2,3,4,7,7-hexacloro-8,9,10-trinorborn-2-en-5,6-ilendimetilico

DA: endosulfan (ISO); 1,2,3,4,7,7-hexachlor-8,9,10-trinorborn-2-en-5,6-ylendimethylsulfit

DE: endosulfan (ISO); 1,2,3,4,7,7-Hexachlor-8,9,10-trinorborn-2-en-5,6-ylendimethylsulfit

EL: endosulphan (ISO): 6,9-μεθανο-2,3,4 δενζοδιοξαθειοεπινο-6,7,8,9,10,10-εξαχλωρο-1,5,5α,6,9,9α-εξαυδρο-3-οξειδίο

EN: endosulfan (ISO); 1,2,3,4,7,7-hexachloro-8,9,10-trinorborn-2-en-5,6-ylenedimethyl sulphite

FR: endosulfan (ISO), sulfite de 1,2,3,4,7,7-hexachloro-8,9,10-trinorborn-2-ène-5,6-ylène diméthyle

IT: endosulfan (ISO); solfito di 1,2,3,4,7,7-esacloro-8,9,10-trinorborn-2-en-5,6-ilendimetile

NL: endosulfan (ISO); 1,2,3,4,7,7-hexachloor-8,9,10-trinorborn-2-een-5,6-yleendimethylsulfit

PT: endossulfane (ISO); sulfito de 1,2,3,4,7,7-hexacloro-8,9,10-trinorborn-2-en-5,6-ilenodimetilico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T; R 24/25

Xi; R 36

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

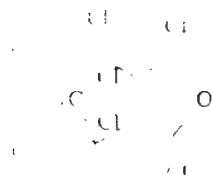
T	N	
		R : 24/25-36-50/53
		S : (1/2-)28-36/37-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 297-78-9

EEC No 206-045-4

No 602-053-00-0





- ES isobenzan (ISO) : 1,3,4,5,6,7,8-octacloro-1,3,3a,4,7,7a-hexahidro-4,7-metanoisobenzofurano  
 DA isobenzan (ISO) : 1,3,4,5,6,7,8-octachlor-1,3,3a,4,7,7a-hexahydro-4,7-methanoisobenzofuran  
 DE isobenzan (ISO) : 1,3,4,5,6,7,8-Octachlor-1,3,3a,4,7,7a-hexahydro-4,7-methanoisobenzofuran  
 EL isobenzan (ISO) : 1,3,4,5,6,7,8-οκταχλωρο-1,3,3α,4,7,7α-εξαυδρο-4,7-μεθανοϊσοδενζοφουράνιο  
 EN isobenzan (ISO) : 1,3,4,5,6,7,8-octachloro-1,3,3a,4,7,7a-hexahydro-4,7-methanoisobenzofuran  
 FR isobenzan (ISO) : 1,3,4,5,6,7,8-octachloro-1,3,3a,4,7,7a-hexahydro-4,7-méthanoisobenzofuranne  
 IT isobenzan (ISO) : 1,3,4,5,6,7,8-ottachloro-1,3,3a,4,7,7a-esaidro-4,7-metanoisobenzofurano  
 NL isobenzan (ISO) : 1,3,4,5,6,7,8-octachloor-1,3,3a,4,7,7a-hexahydro-4,7-methaanisobenzofuraan  
 PT isobenzane (ISO) : 1,3,4,5,6,7,8-octacloro-1,3,3a,4,7,7a hexaidro-4,7- metanoisobenzofurano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

T+ ; R 27/28	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	N	
		
		R : 27/28-50
		S : (1/2-)28-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 556-56-9

EEC No 209-130-4

No 602-054-00-6



ES: 3-iodopropeno; yoduro de alilo

DA: 3-iodpropen; allyliodid

DE: 3-Jodpropen; Allyljodid

EL: 3-ιωδοπροπυλένιο · αλλυλοϊωδιδίο

EN: 3-iodpropene; allyl iodide

FR: 3-iodopropène; iodure d'allyle

IT: 3-iodopropene; ioduro di allile; allile ioduro

NL: 3-iodpropen; allyljodide

PT: 3-iodopropeno; iodeto de alilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 10

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R: 10-34

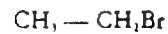
S: (1/2)-7-26-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 74-96-4

EEC No 200-825-8

No 602-055-00-1



ES: bromoetano; bromuro de etilo

DA: bromethan; ethylbromid

DE: Brom-ethan; Ethylbromid

EL: βρωμοαιθάνιο· αιθυλοβρωμίδιο

EN: bromoethane; ethyl bromide

FR: bromoéthane; bromure d'éthyle

IT: bromoetano; bromuro di etile; etile bromuro

NL: broomethaan

PT: bromoetano; brometo de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20/21/22
	S : (2-)28

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 98-08-8

EEC No 202-635-0

No 602-056-00-7

ES : α,α,α-τρίφθοροτολουένο ; τριφθορομετιλβενζόνο

DA : α,α,α-τρίφθοροτολίουεν ; τριφθορομεθύλβενζέν

DE : α,α,α-Trifluor-toluol

EL : α,α,α-τριφθοροτολουόλιο· δενζενυλοτριφθορίδιο

EN : α,α,α-trifluorotoluene ; benzotrifluoride

FR : α,α,α-trifluorotoluène ; fluorure de benzényle

IT : α,α,α-trifluorotoluene ; benzotrifluoruro


NL : α,α,α-trifluortolueen ; benzotrifluoride

PT : α,α,α-trifluorotolueno ; fluoreto de benzenilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

F : R 11    N ; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

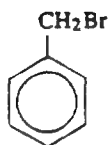
F	N	
		R : 11-51/53
		S : (2-)16-23-61

*Limites de concentraci3n, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraç3o*


Cas No 100-39-0

EEC No 202-847-3

No 602-057-00-2




ES: α-bromotolueno; bromuro de bencilo  
 DA: α-bromtoluen; benzylbromid  
 DE: α-Bromtoluol; Benzylbromid  
 EL: α-βρωμοτολουόλιο · βενζυλοβρωμίδιο  
 EN: α-bromotoluene; benzyl bromide  
 FR: α-bromotoluène; bromure de benzyle  
 IT: α-bromotoluene; bromuro di benzile  
 NL: α-broomtolueen; benzylbromide  
 PT: α-bromotolueno; brometo de benzilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

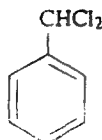
Xi 	R : 36/37/38  S : (2-)39
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 98-87-3

EEC No 202-709-2

No 602-058-00-8



- ES: α,α-diclorotolueno; cloruro de bencilideno  
 DA: α,α-dichlortoluen; benzylidendichlorid  
 DE: α,α-Dichlor-toluol; Benzalchlorid  
 EL: α,α-διχλωροτολουόλιο · βενζυλιδινοχλωρίδιο  
 EN: α,α-dichlorotoluene; benzylidene chloride; benzal chloride  
 FR: α,α-dichlorotoluène; chlorure de benzylidène  
 IT: α,α-diclorotoluene; cloruro di benzilidene; cloruro di benzale  
 NL: α,α-dichloortolueen; benzyliideenchloride  
 PT: α,α-diclorotolueno; cloreto de benzilideno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 3; R 40	T; R 23	Xn; R 22	Xi; R 37/38-41
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 22-23-37/38-40-41
	S : (1/2-)36/37-38-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 109-69-3

EEC No 203-696-6

No 602-059-00-3



ES: 1-clorobutano; cloruro de butilo

DA: 1-chlorbutan

DE: 1-Chlorbutan

EL: χλωροβουτάνιο · βουτυλοχλωρίδιο

EN: 1-chlorobutane; butyl chloride

FR: 1-chlorobutane

IT: 1-clorobutano

NL: 1-chloorbutaan

PT: 1-clorobutano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R: 11
	S: (2)-9-16-29

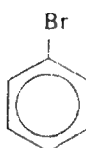
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 108-86-1

EEC No 203-623-8

No 602-060-00-9



ES: bromobenceno  
 DA: brombenzen  
 DE: Brombenzol  
 EL: βρωμοβενζόλιο  
 EN: bromobenzene  
 FR: bromobenzène  
 IT: bromobenzene  
 NL: broombenzeen  
 PT: bromobenzeno  
 FI: bromibentseeni  
 SV: brombenzen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 10	Xi; R 38	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinät, Märkning*

Xi	N	
		R: 10-38-51/53
		S: (2-)61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgrænser*


Cas No 116-15-4

EEC No 204-127-4

No 602-061-00-4



ES: hexafluoropropeno; perfluoropropeno

DA: hexafluorpropen

DE: Hexafluorpropen; Perfluorpropylen

EL: εξαφθοροπροπένιο

EN: hexafluoropropene; hexafluoropropylene

FR: perfluoropropène; hexafluoropropylène

IT: esafluoropropene; perfluoropropene

NL: perfluorpropeen; hexafluorpropeen

PT: hexafluoropropeno; perfluoropropeno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 20

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 20-37

S: (2-)41

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 96-18-4

EEC No 202-486-1

No 602-062-00-X

NOTA D



ES : 1,2,3-tricloropropano

DA : 1,2,3-trichlorpropan

DE : 1,2,3-Trichlorpropan

EL : 1,2,3-τριχλωροπροπάνιον

EN : 1,2,3-trichloropropane

FR : 1,2,3-trichloropropane

IT : 1,2,3-tricloropropano

NL : 1,2,3-trichloorpropan

PT : 1,2,3-tricloropropano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Xn : R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 20/21/22

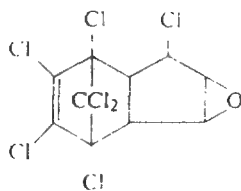
S : (2-)37/39

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1024-57-3

EEC No 213-831-0

No 602-063-00-5



- ES : epoxido de heptacoloro , 2,3-epoxi-1,4,5,6,7,8,8-heptacoloro-3a,4,7,7a-tetrahidro-4,7-metanoindano  
 DA : heptachlorepoxyd , 2,3-epoxy-1,4,5,6,7,8,8-heptachlor-3a,4,7,7a-tetrahydro-4,7-methanoindan  
 DE : Heptachlorepoxyd , 2,3-Epoxy-1,4,5,6,7,8,8-heptachlor-3a,4,7,7a-tetrahydro-4,7-methanoindan  
 EL : heptachlor epoxide , 2,3-εποξυ-1,4,5,6,7,8,8-επταχλωρο-3α,4,7,7α-τετραϋδρο-4,7-μεθανοϊνδάνιο  
 EN : heptachlor epoxide , 2,3-epoxy-1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindane  
 FR : epoxyde d'heptachlore , 2,3-époxy-1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tétrahydro-4,7-méthanoindane  
 IT : epossido di eptacoloro , 2,3-eossi-1,4,5,6,7,8,8-eptacoloro-3a,4,7,7a-tetraidro-4,7-metanoindano  
 NL : heptachloorepoxyde , 2,3-epoxy-1,4,5,6,7,8,8-heptachloor-3a,4,7,7a-tetrahydro-4,7-methaanindaan  
 PT : epoxido de heptacoloro , 2,3-epoxi-1,4,5,6,7,8,8-heptacoloro-3a,4,7,7a-tetrahidro-4,7-metanoindano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T ; R 25	Carc. Cat. 3 ; R 40	R 33	N ; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		R : 25-33-40-50/53
		S : (1/2-)36/37-45-60-61

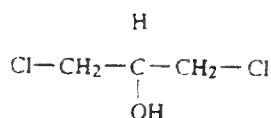
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 96-23-1

EEC No 202-491-9

No 602-064-00-0

NOTA E



ES : 1,3-dicloro-2-propanol

DA : 1,3-dichlor-2-propanol

DE : 1,3-Dichlor-2-propanol

EL : 1,3-διχλωρο-2-προπανόλη

EN : 1,3-dichloro-2-propanol

FR : 1,3-dichloro-2-propanol

IT : 1,3-diċloro-2-propanolo

NL : 1,3-dichloor-2-propanol

PT : 1,3-dicloro-2-propanol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

T; R 25

Xn; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 45-21-25

S : 53-45

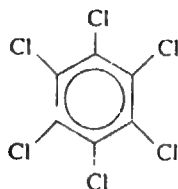
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 118-74-1

EEC No 204-273-9

No 602-065-00-6

NOTA E



ES: hexaclorobenceno

DA: hexachlorbenzen

DE: Hexachlorbenzol

EL: εξαχλωροβενζόλιο

EN: hexachlorobenzene

FR: hexachlorobenzène

IT: esaclorobenzene

NL: hexachloorbenzeen

PT: hexaclorobenzeno

FI: heksaklooribentseeni

SV: hexaklorbenzen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45	T, R 48/25	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Étiquetage, Etichettatura, Kenmerken Rotulagem, Merkinnai, Markning*

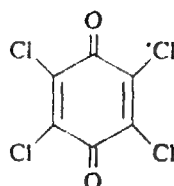
T	N	
		R: 45 48/25-50/53
		S: 53-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Ορια σύγκλιτησης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentraçào, Pitoisuusraajat Koncentrationsgrænser*


Cas No 118-75-2

EEC No 204-274-4

No 602-066-00-1



ES: tetracoloro-p-benzoquinona  
 DA: tetrachlor-p-benzoquinon  
 DE: Tetrachlor-p-benzochinon, Chloranil  
 EL: τετραχλωρο-παρα-δενζοκινόνη  
 EN: tetrachloro-p-benzoquinone  
 FR: tetrachloro-p-benzoquinone  
 IT: tetracoloro-p-benzochinone, cloranile  
 NL: tetrachloor-p-benzochinon  
 PT: tetracoloro-p-benzoquinona  
 FI: tetrakloori-p-bentsokinoni, kloranili  
 SV: tetraklor-p-benzokinon

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/38	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

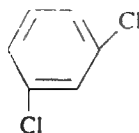
Xi	N	
		R: 36/38-50/53
		S: (2-)37-60-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçào, Pitoisuusraajat, Konzentrationsgränser*


Cas No 541-73-1

EEC No 208-792-1

No 602 067-00 7



ES: 1,3-diclorobenceno

DA: 1,3-dichlorbenzen

DE: 1,3-Dichlorbenzol

EL: 1,3-διχλωροβενζόλιο

EN: 1,3-dichlorbenzene

FR: 1,3-dichlorobenzène

IT: 1,3-diclorobenzene

NL: 1,3-dichloorbenzeen

PT: 1,3-diclorobenzeno

FI: 1,3-diklooribentseeni

SV: 1,3-diklorbenzen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn, R 22

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn	N	
		R: 22-51/53
		S: (2)61

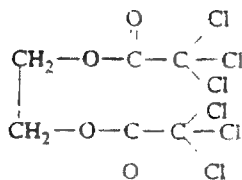
*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisiusrajat, Konzentrationsgränser*




Cas No 2514-53-6

EEC No 219-732-9

No 602-068-00-2



ES: bis(tricloroacetato) de etileno  
 DA: ethylenbis(trichloracetat)  
 DE: Ethylenbis(trichloracetat)  
 EL: δις(τριχλωροξικό) αιθυλένιο  
 EN: ethylene bis(trichloroacetate)  
 FR: bis(trichloroacétate) d'éthylène  
 IT: bis(tricloroacetato) di etilene  
 NL: ethyleenbis(trichlooracetaat)  
 PT: bis(tricloroacetato) de etileno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Xi; R 38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 38

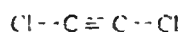
S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 7572-29-4

EEC No —

No 602-069-00-8





ES · dicloroacetileno  
 DA · dikloroacetylen  
 DE · Dichloroacetylen  
 EL · διχλωροακετυλένιο  
 EN · dichloroacetylene  
 FR · dichloroacétylène  
 IT · dicloroacetilene  
 NL · dichloroacetyleen  
 PT · dicloroacetileno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

E ; R 2	Carc. Cat. 3 ; R 40	Xn ; R 48/20
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

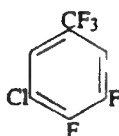
E	Xn	
		
		R : 2-40-48/20
		S : (2-)36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 77227-99-7

EEC No 401-930-3

No 602-070-00-3



ES: 3-cloro-4,5,6,6-tetrafluorotolueno

DA: 3-chlor-4,5,6,6-tetrafluortoluen

DE: 3-Chlor-4,5,6,6-tetrafluortoluol

EL: 4,5,6,6-τετραφθορο-3-χλωροτολουόλιο

EN: 3-chloro-4,5,6,6-tetrafluorotoluene

FR: 3-chloro-4,5,6,6-tetrafluorotoluène

IT: 3-cloro-4,5,6,6-tetrafluorotoluene

NL: 3-chloor-4,5,6,6-tetrafluortolueen

PT: 3-cloro-4,5,6,6-tetrafluortolueno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

R 10	Xn; R 20/22	N; R 50-58
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem

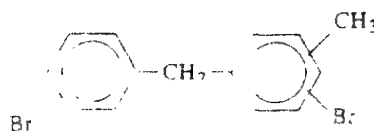
Xn	N	
		R : 10-20/22-50-58
		S : (2-)51-60-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 99688-47-8

EEC No 402-210-1

No 602-071-00-9



ES: bromobencilbromotolueno, mezcla de isómeros

DA: brombenzylbromtoluen, blanding af isomerer

DE: Brombenzylbromtoluol, Isomerengemisch

EL: βρωμοδενζυλοδρωμοτολουολιο, μείγμα ισομερών

EN: bromobenzylbromotoluene, mixture of isomers

FR: bromobenzylbromotoluène, mélange disomères

IT: bromobenzilbromotoluene, miscela di isomeri

NL: brombenzylbroomtolueen, mengsel van isomeren

PT: bromobenzilbromotolueno, mistura de isómeros

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 48/22

R 43

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

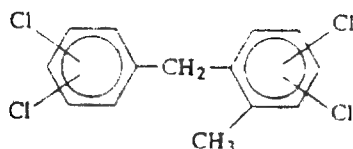
Xn	N	
		R : 43-48/22-50/53
		S : (2-)24-37-41-60-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 76253-60-6

EEC No 278-404-3

No 602-072-00-4



ES : dicloro (diclorofenil)metil metilbenceno, mezcla de isómeros (diclorofenil) (dicloroócul)metano, mezcla de isómeros (IUPAC)

DA : dichloro((dichlorophenyl)methyl)methylbenzen, blandig af isomerer

DE : Dichlor (dichlorophenyl)methyl methylbenzol, Isomerengemisch

EL : (διχλωρο-ο-πινυλο) (διχλωροτολουολο)μεθάνιο, μείγμα ισομερών

EN : dichloro [(dichlorophenyl)methyl]methylbenzene, mixed isomers ; (dichlorophenyl)(dichlorotolyl)methane, mixed isomers (IUPAC)

FR : dichloro((dichlorophényl)méthyl)méthylbenzène, mélange d'isomères ; (dichlorophényl)(dichlorotolyl)méthane, mélange d'isomères (IUPAC)

IT : dicloro (diclorofenil)metil metilbenzene, miscela di isomeri

NL : dichloor (dichloorfenyl)methyl methylbenzeen, mengsel van isomeren

PT : dicloro (diclorofenil)metil metilbenzeno, mistura de isómeros

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

N	
	R : 50/53
	S : 60-61

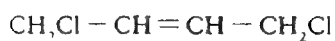
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 764-41-0

EEC No 212-121-8

No 602-073-00-X

NOTA E





ES: 1,4-diclorobut-2-eno  
 DA: 1,4-dichlorbut-2-en  
 DE: 1,4-Dichlorbut-2-en  
 EL: 1,4-διχλωροβουτ-2-ένιο  
 EN: 1,4-dichlorobut-2-ene  
 FR: 1,4-dichlorobut-2-ène  
 IT: 1,4-diclorobut-2-ene  
 NL: 1,4-dichloorbut-2-een  
 PT: 1,4-diclorobut-2-eno  
 FI: 1,4-diklooribut-2-eeni  
 SV: 1,4-diklorbut-2-en

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45	T+; R 26	T; R 24/25	C; R 34	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnt, Märkning*

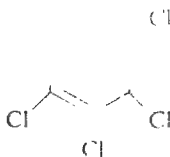
T+	N	
		R: 45-24/25-26-34-50/53
		S: 53-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*


Cas No 608-93-5

EEC No 210-172-0

No 602-074-00-5



ES: pentaclorobenceno  
 DA: pentachlorbenzen  
 DE: Pentachlorbenzol  
 EL: πενταχλωροβενζόλιο  
 EN: pentachlorobenzene  
 FR: pentachlorobenzène  
 IT: pentaclorobenzene  
 NL: pentachloorbenzeen  
 PT: pentaclorobenzeno  
 FI: pentaklooribentseeni  
 SV: pentaklorbenzen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	Xn; R 22	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

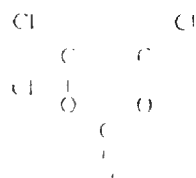
F	Xn	N	
			R: 11-22-50/53
			S: (2-)41-46-50-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen,  
 Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*


Cas No 22432-68-4

EEC No 404-060-2

No 602-075-00-0



ES 4,4,5,5-tetracloro-1,3-dioxolano-2-one  
 DA 4,4,5,5-tetrachlor-1,3-dioxolan-2-on  
 DE 4,4,5,5-Tetrachlor-1,3-dioxolan-2-on  
 EL 4,4,5,5-τετραχλωρο-1,3-διοξολαν-2-όν  
 EN 4,4,5,5-tetrachloro-1,3-dioxolane-2-one  
 FR 4,4,5,5-tétrachloro-1,3-dioxolanne-2-one  
 IT 4,4,5,5-tetracoloro-1,3-diossolano-2-one  
 NL 4,4,5,5-tetrachloor-1,3-dioxolan-2-on  
 PT 4,4,5,5-tetracoloro-1,3-dioxolano-2-one

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+; R 26	Xn; R 22	C; R 34
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem*

<p>T+</p> 	<p>R : 22-26-34</p> <p>S : (1/2-)9-26-26-36/37/39-45</p>
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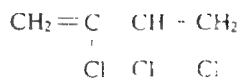
*Limits de conținut, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Οριακές ποσότητες, Concentration limits, Límites de contenido, Grenzen der Konzentration, Concentrazioni, Limites de concentração*




Cas No 2431-50-7

EEC No 219-397-9

No 602-076-00-6





ES: 2,3,4-triclorobut-1-eno  
 DA: 2,3,4-trichlorbut-1-en  
 DE: 2,3,4-Trichlorbut-1-en  
 EL: 2,3,4-τριχλωροβουτ-1-ένιο  
 EN: 2,3,4-trichlorobut-1-ene  
 FR: 2,3,4-trichlorobut-1-ène  
 IT: 2,3,4-triclorobut-1-ene  
 NL: 2,3,4-trichloorbut-1-een  
 PT: 2,3,4-triclorobut-1-eno  
 FI: 2,3,4-triklooribut-1-eeni  
 SV: 2,3,4-triklorbut-1-en

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23	Carc. Cat 3; R 40	Xn; R 22	Xi; R 36/37/38	N, R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

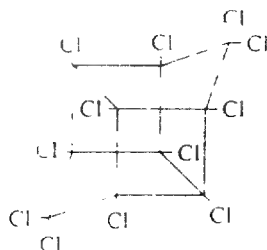
T	N	
		R: 22-23-36/37/38-40-50/53
		S: (1/2-)36/37-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçã, Pitoisuusrajat, Koncentrationsgränser*


Cas No 2385-85-5

EEC No 219-196-6

No 602-077-00-1

ES : dodecachloropentacyclo[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]decano , mirexDA : dodecachloropentacyclo[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]decan , mirexDE : Dodecachloropentacyclo[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]decan , MirexEL : δωδεκαχλωροπεντακυκλο[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]δεκάνιο· mirexEN : dodecachloropentacyclo[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]decane , mirexFR : dodécachloropentacyclo[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]décane , mirexIT : dodecachloropentacyclo[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]decano ; mirexNL : dodecachloropentacyclo[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]decaan ; mirexPT : dodecachloropentacyclo[5.2.1.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]decano , mirex

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 3 ; R 40	Repr. Cat. 3 ; R 62-63	R 64	Xn ; R 21/22	N ; R 50/53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

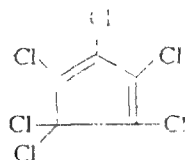
Xn	N	
		R : 21/22-40-50/53-62-63-64
		S : (2-)13-36/37-46-60-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 77-47-4

EEC No 201-029-3

No 602-078-00-7



ES: hexaclorociclopentadieno

DA: hexachlorcyclopentadien

DE: Hexachlorcyclopentadien

EL: εξαχλωροκυκλοπενταδιένιο

EN: hexachlorocyclopentadiene

FR: hexachlorocyclopentadiène

IT: esaclorociclopentadiene

NL: hexachloorcyclopentadien

PT: hexaclorociclopentadieno



FI: heksakloorisyklopentadieeni

SV: hexaklorcyklopentadien

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 \* Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering

T+; R 26	T; R 24	Xn; R 22	C; R 34	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinäät, Märkning

T+	N	
		R: 22-24-26-34-50/53
		S: (1/2-)25-39-45-53-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusrajat, Konzentrationsgränser


Cas No 67-56-1

EEC No 200-659-6

No 603-001-00-X



ES: metanol; alcohol metílico

DA: methanol; methylalkohol

DE: Methanol; Methylalkohol

EL: μεθανόλη · μεθυλική αλκοόλη

EN: methanol; methyl alcohol

FR: methanol; alcool méthylique

IT: metanolo; alcool metilico

NL: methanol; methylalcohol

PT: metanol; álcool metílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

F; R 11

T; R 23/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	T	
		
		R: 11-23/25
		S: (1/2-)7-16-24-45

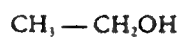
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*

C ≥ 20 %	T; R 23/25
3 % ≤ C < 20 %	Xn; R 20/22

Cas No 64-17-5

EEC No 200-578-6

No 603-002-00-5




ES: etanol; alcohol etílico  
 DA: ethanol; ethylalkohol  
 DE: Ethanol; Ethylalkohol  
 EL: αιθανόλη · αιθυλική αλκοόλη  
 EN: ethanol; ethyl alcohol  
 FR: ethanol; alcool éthylique  
 IT: etanolo; alcool etílico  
 NL: ethanol; ethylalcohol  
 PT: etanol; álcool etílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>F</p> 	<p>R : 11</p> <p>S : (2-)-7-16</p>
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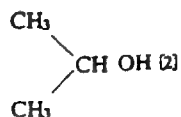
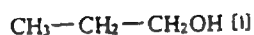
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 71-23-8 [1]  
.67-63-0 [2]

EEC No 200-746-9 [1]  
200-661-7 [2]

No 603-003-00-0

NOTA C



ES: 1-propanol; alcohol propílico [1] 2-propanol; alcohol isopropílico [2]  
DA: 1-propanol; propylalkohol [1] og 2-propanol; isopropylalkohol [2]  
DE: 1-Propanol; Propylalkohol [1] und 2-Propanol; Isopropylalkohol [2]  
EL: προπανόλη· προπυλική αλκοόλη [1] και ισοπροπυλική αλκοόλη [2]  
EN: propan-1-ol; propyl alcohol [1] and propan-2-ol; isopropyl alcohol [2]  
FR: 1-propanol; alcool propylique [1] et 2-propanol; alcool isopropylique [2]  
IT: 1-propanolo; alcool propilico [1] e 2-propanolo; alcool isopropilico [2]  
NL: 1-propanol; propylalcohol [1] en 2-propanol; isopropylalcohol [2]  
PT: 1-propanol; álcool propílico [1] e 2-propanol; álcool isopropílico [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R: 11
	S: (2-)7-16

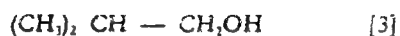
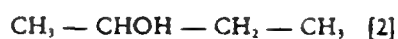
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 71-36-3 [1]  
78-92-2 [2]  
78-83-1 [3]

EEC No 200-751-6 [1]  
201-158-5 [2]  
201-148-0 [3]

No 603-004-00-6

NOTA C



ES: butanol; alcohol butílico (excepto el 2-metil-2-propanol; alcohol *tert*-butílico)

DA: butanol (med undtagelse af *tert*-butylalkohol); butylalkohol

DE: Butanol; Butylalkohol (mit Ausnahme von *tert*-Butanol)

EL: βουτανόλη · βουτυλική αλκοόλη (εκτός από την τριτοταγή βουτυλική αλκοόλη · 2-μεθυλο-2-προπανόλη)

EN: butanol; butyl alcohol (except *tert*-butyl alcohol)

FR: butanol; alcool butylique (sauf le 2-méthyl-2-propanol; alcool *tert*-butylique)

IT: butanolo; alcool butilico (eccetto alcool *terz*-butilico)

NL: butanol; butylalcohol (behalve *tert*-butylalcohol)

PT: butanol; álcool butílico (com excepção do 2-metil-2-propanol; álcool *tert*-butílico)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

R 10

Xn; R 20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 10-20

S : (2-)16

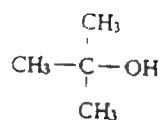
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xn; R 20

Cas No 75-65-0

EEC No 200-889-7

No 603-005-00-1

ES: 2 metil-2-propanol; alcohol *tert*-butílicoDA: 2-methyl-2-propanol; *tert*-butylalkoholDE: 2-Methylpropanol-2; *tert*-Butylalkohol

EL: 2-μεθυλο-2-προπανόλη· τριτοταγής βουτυλική αλκοόλη

EN: 2-methylpropan-2-ol; *tert*-butyl alcoholFR: 2-methyl-2-propanol; alcool *tert*-butyliqueIT: 2-metilpropan-2-olo; alcool *terz*-butílicoNL: *tert*-butylalcoholPT: 2-metil-2-propanol; álcool *tert*-butílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11

Xn; R 20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		R: 11-20
		S: (2)-9-16

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

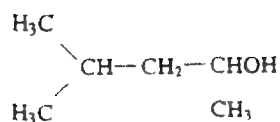
C ≥ 25 %	Xn; R 20



Cas No 108-11-2

EEC No 203-551-7

No 603-008-00-8



- ES: 4-metil-2-pentanol; alcohol metilamílico  
 DA: 4-methyl-2-pentanol; methylamylalkohol  
 DE: 4-Methyl-pentan-2-ol; Methylamylalkohol  
 EL: 4-μεθυλο-πενταν-2-όλη · μεθυλδίσσοβουτυλο-μεθανόλη  
 EN: 4-methylpentan-2-ol; methyl isobutyl carbinol  
 FR: 4-méthyl-2-pentanol; alcool méthylamylique; méthylisobutylcarbinol  
 IT: 4-metilpentan-2-olo; metilisobutilcarbinolo; metilamil alcool  
 NL: 4-methylpentan-2-ol; methylamylalcohol  
 PT: 4-metil-2-pentanol; álcool metilamílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

R 10

Xi; R 37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 10-37

S : (2-)24/25

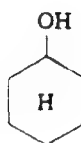
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xi; R 37

Cas No 108-93-0

EEC No 203-630-6

No 603-009-00-3



ES: ciclohexanol

DA: cyclohexanol

DE: Cyclohexanol

EL: κυκλοεξανόλη

EN: cyclohexanol

FR: cyclohexanol

IT: cicloesanol

NL: cyclohexanol

PT: ciclohexanol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn; R 20/22

Xi; R 37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20/22-37/38
	S : (2-)24/25

*Límites de concentración, Koncentratiegrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*

C ≥ 25 %	Xn; R 20/22-37/38
20 % ≤ C < 25 %	Xi; R 37/38

Cas No 30899-19-5

EEC No 250-378-8

No 603-006-00-7

NOTA C



ES: pentanol; alcohol amílico (excepto el 2-metil-2-butanol; alcohol terc-amílico)

DA: pentanol; amylalkohol (med undtagelse af tert-pentylalkohol)

DE: Amylalkohol (mit Ausnahme von tert-Pentanol)

EL: αμυλική αλκοόλη (εκτός από την τριτοταγή πεντανόλη · 2-μεθυλο-2-βουτανόλη)

EN: amyl alcohol (except *tert*-pentanol)FR: pentanol; alcool amylique (sauf le 2-méthyl-2-butanol; alcool *tert*-amylique)

IT: alcool amilico (eccetto alcool amilico terziario)

NL: amylalcohol (behalve *tert*-pentanol)PT: pentanol; álcool amílico (com excepção de 2-metil-2-butanol; álcool *tert*-amílico)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xn; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 10-20

S : (2-)24/25

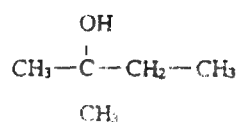
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 25 %	Xn; R 20

Cas No 75-85-4

EEC No 200-908-9

No 603-007-00-2



- ES : 2-metil-2-butanol ; alcohol terci-amilico  
 DA : 2-methyl-2-butanol ; tert-pentylalkohol  
 DE : 2-Methylbutanol-2 ; tert-Pentanol  
 EL : 2-μεθυλο-2-δουτανόλη · τριτοταγής αμυλική αλκοόλη  
 EN : 2-methylbutan-2-ol ; tert-pentanol  
 FR : 2-methyl-2-butanol ; alcool tert-amylique  
 IT : 2-metilbutan-2-olio ; alcool amilico terziario  
 NI : 2-methylbutan-2-ol ; tert-pentanol  
 PT : 2-metil-2-butanol ; álcool terci-amilico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F ; R 11

Xn ; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rosulagem

F	Xn	
		
		R : 11-20
		S : (2)-9-16-24/25

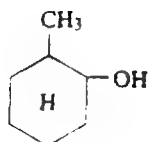
Límites de concentración, Koncentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	Xn ; R 20

Cas No 583-59-5

EEC No 209-512-0

No 603-010-00-9



ES: 2-metilciclohexanol

DA: 2-methylcyclohexanol

DE: 2-Methylcyclohexanol

EL: 2-μεθυλοκυκλοεξανόλη

EN: 2-methylcyclohexanol

FR: 2-méthylcyclohexanol

IT: 2-metilcicloesano

NL: 2-methylcyclohexanol

PT: 2-metilciclohexanol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn; R 20

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20
	S : (2-)24/25

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào*

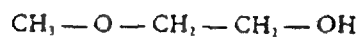
C ≥ 25 %	Xn; R 20

Cas No 109-86-4

EEC No 203-713-7

No 603-011-00-4

NOTA E



ES: 2-metoxietanol; éter monometílico de etilenglicol; metilglicol

DA: 2-methoxyethanol; methylglykol

DE: 2-Methoxy-ethanol; Methylglykol

EL: 2-μεθοξυαιθανόλη · μεθυλογλυκόλη · μονομεθυλαιθέρας της αιθυλενογλυκόλης

EN: 2-methoxyethanol; ethylene glycol monomethyl ether

FR: 2-méthoxyéthanol; éther monométhylique d'éthylène-glycol; méthylglycol

IT: 2-metossietanolo; etilenglicol-monometiletere; metilglicol

NL: 2-methoxyethanol; glycolmonomethylether; methylglycol

PT: 2-metoxietanol; éter monometílico de etilenoglicol; metilglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

R 10

Repr. Cat. 2; R 60-61

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R: 60-61-10-20/21/22

S: 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 110-80-5

EEC No 203-804-1

No 603-012-00-X

NOTA E



ES: 2-etoxietanol; éter monoetilico del etilenglicol; etilglicol

DA: 2-ethoxyethanol; ethylglykol

DE: 2-Ethoxy-ethanol; Ethylglykol

EL: 2-αιθοξυαιθανόλη · αιθυλογλυκόλη · μονοαιθυλαιθέρας της αιθυλενογλυκόλης

EN: 2-ethoxyethanol; ethylene glycol monoethyl ether

FR: 2-éthoxyéthanol; éther monoéthylique d'éthylène-glycol; éthylglycol

IT: 2-etossietanolo; etilenglicol-monoetiletere; etilglicol

NL: 2-ethoxyethanol; glycolmono-ethylether; ethylglycol

PT: 2-etoxietanol; éter monoetilico do etilenoglicol; etilglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Indeling, Classificação

R 10

Repr. Cat. 2; R 60-61

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

T



R : 60-61-10-20/21/22

S : 53-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 109-59-1

EEC No 203-685-6

No 603-013-00-5

$$\begin{array}{c} \text{H} \\ | \\ \text{CH} - \text{O} - \text{CH}_2 - \text{CH}_2\text{OH} \\ | \\ \text{H} \end{array}$$

ES: 2 isopropoxietanol; eter monoisopropilico del etilenglicol; isopropilglicol

DA: 2 isopropoxyethanol; isopropylglycol

DE: 2 Isopropoxy-ethanol; Isopropylglykol

EL: 2 ισοπροποξυαιθανόλη · ισοπροπυλογλυκόλη · μονοϊσοπροπυλαιθέρας της αιθυλενογλυκόλης

EN: 2 isopropoxyethanol; ethylene glycol monoisopropyl ether

FR: 2-isopropoxyethanol; éther monoisopropylique d'éthylène-glycol; isopropylglycol

IT: 2 isopropossietanolo; etilenglicol-monoisopropil etero; isopropilglicol

NL: 2-isopropoxyethanol; glycolisopropylether; isopropylglycol

PT: 2 isopropoxietanol; éter monoisopropílico do etilenoglicol; isopropilglicol

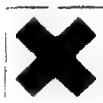
Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 20/21-36

S: (2-)24/25

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

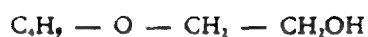
C ≥ 25 %	Xn; R 20/21-36
20 % ≤ C < 25 %	Xi; R 36



Cas No 111-76-2

EEC No 203-905-0

No 603-014-00-0



ES: 2-butoxi-etanol; éter monobutílico del etilenglicol; butilglicol

DA: 2-butoxyethanol; butylglycol

DE: 2-Butoxy-ethanol; Butylglykol

EL: 2-βουτοξυαιθανόλη · βουτυλογλυκόλη · μονοβουτυλαιθέρας της αιθυλενογλυκόλης

EN: 2-butoxyethanol; ethylene glycol monobutyl ether

FR: 2-butoxyéthanol; ether monobutylique d'éthylène-glycol; butylglycol

IT: 2-butosietanolo; etilenglicol-monobutiletere; butilglicol

NL: 2-butoxyethanol; glycolmonobutylether; butylglycol

PT: 2-butoxi-etanol; éter monobutílico do etilenglicol; butilglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Xi; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 20/21/22-37

S: (2-)24/25

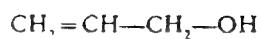
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 20 %	Xn; R 20/21/22-37
12,5 % ≤ C < 20 %	Xn; R 20/21/22

Cas No 107-18-6

EEC No 203-470-7

No 603-015-00-6



ES alcohol alílico

DA allylalkohol

DE Allylalkohol

EL αλλυλική αλκοόλη

EN allyl alcohol

FR alcool allylique ; prop-2-en-1-ol

IT alcole allylico



NL allylalkohol

PT álcool alílico

Classification, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificação, Indeling, Classificação

R 10	T ; R 23/24/25	Xi ; R 36/37/38	N ; R 50
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

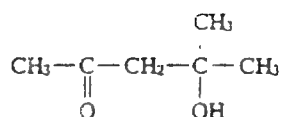
T	N	
		
		R : 10-23/24/25-36/37/38-50
		S : (1/2-)36/37/39-38-45-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 123-42-2

EEC No 204-626-7

No 603-016-00-1



ES: 4-hidroxi-4-metil-pentanona; alcohol de diacetona

DA: 4-hydroxy-4-methyl-2-pentanone; diacetonalcohol

DE: 4-Hydroxy-4-methyl-pentan-2-on; Diacetonalcohol

EL: 4-υδροξυ-4-μεθυλο-πενταν-2-όνη · διακετονο-αλκοόλη

EN: 4-hydroxy-4-methylpentan-2-one; diacetone alcohol

FR: 4-hydroxy-4-méthyl-2-pentanone; diacétone-alcool

IT: 4-idrossi-4-metil-pentan-2-one; diacetonalcool

NL: 4-hydroxy-4-methylpentan-2-on; diacetonalcohol

PT: 4-hidroxi-4-metil-2-pentanona; álcool de diacetona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36

S : (2-)24/25

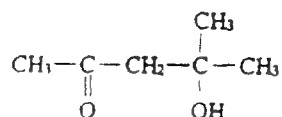
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 10 %	Xi; R 36

Cas No 123-42-2

EEC No 204-626-7

No 603-017-00-7



ES: 4-hidroxi-4-metil-2-pentanona técnico: alcohol de diacetona técnico

DA: diacetonealkohol, teknisk

DE: Diacetonalcohol, technisch

EL: διακετονο-αλκοόλη, βιομηχανικής καθαρότητας

EN: diacetone alcohol, technical

FR: diacétone-alcool, technique

IT: diacetonalcool, tecnico

NL: diacetonalcohol, technisch

PT: álcool de diacetona, técnico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xi	
		
		R : 11-36
		S : (2-)7-16-24/25

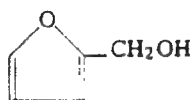
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	Xi; R 36

Cas No 98-00-0

EEC No 202-626-1

No 603-018-00-2



ES: alcohol furfurílico

DA: furfurylalkohol

DE: Furfurylalkohol

EL: φουρφουρυλαλκοόλη · φουρφουρυλική αλκοόλη

EN: furfuryl alcohol

FR: alcool furfurylique

IT: alcool furfurilico


NL: furfurylalkohol

PT: álcool furfurílico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20/21/22 S : (2)

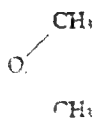
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào

C ≥ 5 %	Xn; R 20/21/22

Cas No 115-10-6

EEC No 204-065-8

No 603-019-00-8



ES: eter dimetilico; dimetileter

DA: dimethylether

DE: Dimethylether

EL: διμεθυλαιθέρας

EN: dimethyl ether

FR: oxvae de diméthyle; éther methylique

IT: dimetiletere; ossido di metile


NL: dimethylether

PT: dimetiléter; éter metilico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

F+; R 12

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

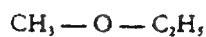
F+	
	R: 12
	S: (2-)9-16-33

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 540-67-0

EEC No —

No 603-020-00-3



ES: eter etilmetílico; etilmetileter

DA: methylethylether

DE: Ethylmethylether

EL: μεθυλαιθυλαιθέρας

EN: ethyl methyl ether

FR: oxyde d'éthyle et de méthyle

IT: etil-metil-etero

NL: ethylmethylether

PT: eter etilmetílico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

F+; R 12

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F+



R: 12

S: (2-)9-16-33

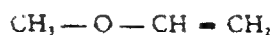
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçõe


Cas No 107-25-5

EEC No 203-475-4

No 603-021-00-9

NOTA D



ES: eter metilvinílico; metilvinileter

DA: methoxyethen; methylvinylether

DE: Methylvinylether

EL: μεθυλοδινυλαιθέρας

EN: methyl vinyl ether

FR: oxyde de méthyle et de vinyle

IT: metil-vinil-etero

NL: methylvinylether

PT: eter metilvinílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação:*

F+; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

F+	
	R: 12
	S: (2-)9-16-33

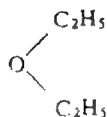
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 60-29-7

EEC No 200-467-2

No 603-022-00-4



ES: eter dietílico; dietileter  
 DA: diethylether; ether  
 DE: Diethylether; Ether  
 EL: διαιθυλαιθέρας· αιθέρας  
 EN: diethyl ether; ether  
 FR: ~~oxyde~~ de diéthyle; éther éthylique  
 IT: etere etilico  
 NL: diethylether  
 PT: dietiléter; éter etílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F+; R 12	R 19
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

P+ 	R: 12-19 S: (2-)9-16-29-33
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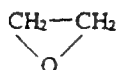
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 75-21-8

EEC No 200-849-9

No 603-023-00-X

NOTA B



ES: óxido de etileno; oxirano

DA: ethylenoxid; oxiran

DE: Ethylenoxid; Oxiran

EL: αιθυλενοξείδιο οξιράνιο

EN: ethylene oxide; oxirane

FR: oxide d'éthylène; oxiranne

IT: ossido di etilene; ossirano



NL: ethyleenoxide; oxiran

PT: óxido de etileno; oxirano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F+; R 12	Carc. Cat. 2; R 45	Muta. Cat. 2; R 46	T; R 23	Xi; R 36/37/38
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*Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

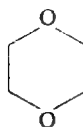
F+	T	
		
		R: 45-46-12-23-36/37/38
		S: 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào*


Cas No 123-91-1

EEC No 204-661-8

No 603-024-00-5



ES : 1,4-dioxano

DA : 1,4-dioxan

DE : 1,4-Dioxan

EL : 1,4-διοξάνη

EN : 1,4-dioxane

FR : 1,4-dioxane

IT : 1,4-diossano

NL : 1,4-dioxaan

PT : 1,4-dioxano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

F : R11-19

Carc. Cat. 3 ; R 40

Xi ; R 36/37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		R : 11-19-36/37-40
		S : (2-)16-36/37

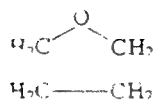
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 20 %	Xn ; R 40-36/37
1 % ≤ C < 20 %	Xn ; R 40

Cas No 109-99-9

EEC No 203-726-8

No 603-025-00-0



ES: tetrahidroturano

DA: tetrahydrofuran

DE: Tetrahydrofuran

EL: τετραϋδροφουράνιο

EN: tetrahydrofuran

FR: tetrahydrofurane

IT: tetraidrofurano

NL: tetrahydrofuraan


PT: tetraidrofurano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

F; R 11-19

Xi; R 36/37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xi	
		R : 11-19-36/37
		S : (2-)16-29-33

Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

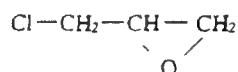
C ≥ 25 %	Xi; R 36/37

Cas No 106-89-8

EEC No 203-439-8

No 603-026-00-6

NOTA F



ES: 1-cloro-2,3-epoxipropano; epiclorohidrina  
 DA: 1-chlor-2,3-epoxypropen; epichlorhydrin  
 DE: 1-Chlor-2,3-epoxypropen; Epichlorhydrin  
 EL: 1-χλωρο-2,3-εποξυπροπάνιο· επιχλωρυδρίνη  
 EN: 1-chloro-2,3-epoxypropane; epichlorhydrin  
 FR: 1-chloro-2,3-époxypropane; épichlorhydrine  
 IT: 1-cloro-2,3-epossipropano; epicloridrina  
 NL: 1-chloor-2,3-epoxypropan; epichloorhydrine  
 PT: 1-cloro-2,3-epoxipropano; epicloridrina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

R 10	Carc. Cat. 2; R 45	T; R 23/24/25	C; R 34	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	R: 45-10-23/24/25-34-43
	S: 53-45

Límites de concentración, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração

C ≥ 10 %	T; R 45-23/24/25-34-43
5 % ≤ C < 10 %	T; R 45-23/24/25-36/38-43
1 % ≤ C < 5 %	T; R 45-23/24/25-43
0,1 % ≤ C < 1 %	Xn; R 20/21/22

Cas No 107-21-1

EEC No 203-473-3

No 603-027-00-1



ES: etanodiol; etilenglicol

DA: 1,2-ethandiol; ethylenglycol; glykol

DE: Ethandiol; Glykol

EL: αιθυλενογλυκόλη· γλυκόλη

EN: ethanediol; ethylene glycol

FR: éthylène-glycol

IT: glicol etilenico; etilen glicol

NL: 1,2-ethaandiol

PT: etandiol; etilenoglicol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 25 %	Xn; R 22

Cas No 107-07-3

EEC No 203-459-7

No 603-028-00-7



ES: 2-cloroetanol; etilen-clorhidrina

DA: 2-chlorethanol; ethylenchlorhydrin

DE: 2-Chlor-ethanol; Ethylenchlorhydrin

EL: 2-χλωροαιθανόλη · αιθυλενο-χλωροϋδρίνη

EN: 2-chloroethanol; ethylene chlorohydrin

FR: 2-chloroéthanol; éthylène-chlorhydrine

IT: 2-cloroetanolo; cloridrina etilenica

NL: 2-chloorethanol; glycolmonochloorhydrine; ethyleen-chloorhydrine

PT: 2-cloroetanol; etilenocloridrina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T+</p> 	<p>R : 26/27/28</p> <p>S : (1/2-)7/9-28-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração

C ≥ 7 %	T+; R 26/27/28
1 % ≤ C < 7 %	T; R 23/24/25
0,1 % ≤ C < 1 %	Xn; R 20/21/22

Cas No 111-44-4

EEC No 203-870-1

No 603-029-00-2



ES: eter 2,2'-dicloroetilico; bis-(2-cloroetil)éter

DA: 2,2'-dichlordiethylether; bis(2-chlorethyl)ether

DE: 2,2'-Dichlor-diethylether

EL: 2,2-διχλωρο-διαιθυλαιθέρας

EN: bis(2-chloroethyl) ether

FR: oxyde de bis-(2-chloroéthyle); éther 2,2'-dichloroethylique

IT: 2,2'-dicloroetiletere

NL: 2,2'-dichloorethylether

eter 2,2'-dicloroetilico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

R 10

T+; R 26/27/28

Xn; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R: 10-26/27/28-40

S: (1/2-)/7/9-27-38-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

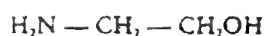
C ≥ 7 %	T+; R 26/27/28-40
1 % ≤ C < 7 %	T; R 23/24/25-40
0,1 % ≤ C < 1 %	Xn; R 20/21/22



Cas No 141-43-5

EEC No 205-483-3

No 603-030-00-8



ES: 2-aminoetanol; etanolamina

DA: 2-aminoethanol; ethanolamin

DE: 2-Amino-ethanol; Ethanolamin

EL: 2-αμινοαιθανόλη· αιθανολαμίνη

EN: 2-aminoethanol; ethanolamine

FR: 2-aminoéthanol; éthanolamine

IT: 2-aminoetanolo; etanolamina

NL: 2-amino-ethanol; ethanolamine

PT: 2-aminoetanol; etanolamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 20

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 20-36/37/38

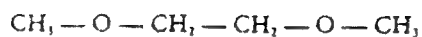
S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 110-71-4

EEC No 203-794-9

No 603-031-00-3



ES: 1,2-dimetoxietano; eter dimetilico del etilenglicol

DA: 1,2-dimethoxyethan; ethylenglycoldimethylether

DE: 1,2-Dimethoxy-ethan, Dimethylglykol

EL: διμεθοξυαιθάνιο; διμεθυλαιθέρας της αιθυλενογλυκόλης

EN: 1,2-dimethoxyethane; ethylene glycol dimethyl ether

FR: 1,2-diméthoxyéthane; éther diméthylque d'éthylene-glycol

IT: 1,2-dimetossietano; etilenglicol-dimetilètere; dimetilglicol

NL: 1,2-dimethoxyethaan; ethyleenglycoldimethylether

PT: 1,2-dimetoxietano; etilenoglicoldimetiléter

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

R 10

R 19

Xn; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 10-19-20

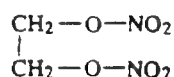
S : (2-)24/25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 628-96-6

EEC No 211-063-0

No 603-032-00-9



ES: dinitrato de etilenglicol

DA: 1,2-ethandioldinitrat; ethylenglycoldinitrat

DE: Glykoldinitrat; Nitroglykol

EL: νιτρογλυκόλη· δινιτρικός εστέρας της γλυκόλης

EN: ethylene dinitrate; ethylene glycol dinitrate

FR: dinitrate de glycol; nitroglycol

IT: nitroglicol; etilenglicol dinitrato


NL: glycoldinitraat; dinitroglycol

PT: dinitrato de glicol; dinitroglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

E; R 2	T+; R 26/27/28	R 33
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem

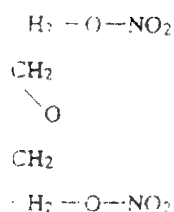
E	T+	
		
		R : 2-26/27/28-33
		S : (1/2-)33-35-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 693-21-0

EEC No 211-745-8

No 603-033-00-4



- ES: dinitrato de dietilenglicol  
 DA: 2,2'-oxydiethanoldinitrat; diethylenglycoldinitrat  
 DE: Bis(hydroxy-ethyl)-ether-dinitrat; Diethylenglykoldinitrat  
 EL: δινιτρικός εστέρας της διαιθυλενογλυκόλης  
 EN: diethylene glycol dinitrate; digol dinitrate  
 FR: dinitrate de 2,2'-oxydiéthanol; dinitrate de diéthylène glycol  
 IT: dinitrodiglicol; dietilenglicol dinitrato  
 NL: diglycoldinitraat  
 PT: dinitrato de 2,2'-oxidietanol; dinitrato de dietilenoglicol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação.*

E; R 3	T+; R 26/27/28	R 33
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*Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

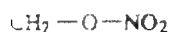
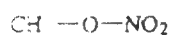
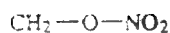
E	T+	
		
		R : 3-26/27/28-33
		S : (1/2-)33-35-36/37-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 55-63-0

EEC No 200-240-8

No 603-034-00-X



ES: trinitrato de glicerol; nitroglicerina

DA: glyceroltrinitrat, glycerylnitrat; nitroglycerin

DE: Glycerintrinitrat; Nitroglycerin

EL: νιτρογλυκερίνη· τρινιτροεστέρας της γλυκερίνης

EN: glycerol trinitrate; nitroglycerine

FR: trinitrate de glycérol; nitroglycérine

IT: nitroglicerina; glicerina trinitrato

NL: glyceroltrinitraat; nitroglycerine

PT: trinitrato de glicerol; nitroglicerina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

E; R 3

T+; R 26/27/28

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E

T+



R : 3-26/27/28-33

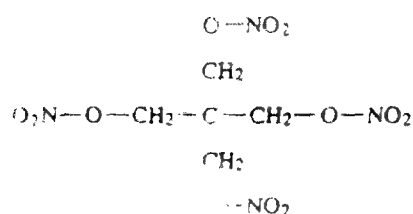
S : (1/2-)33-35-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào


Cas No 78-11-5

EEC No 201-084-3

No 603-035-00-5



ES: tetranitrato de pentaeritritol; pentrita  
 DA: pentaerythritoltetranitrat; PETN; pentnit  
 DE: Pentaerythrittetranitrat; Nitropenta, Pentrit  
 EL: τετρανιτροεστέρας του πενταερυθρίτη· P.E.T.N· πενθρίτης  
 EN: pentaerythritol tetranitrate; P.E.T.N.  
 FR: tetranitrate de pentaérythritol; penthrite  
 IT: tetranitropentaentrite; pentnit.  
 NL: pentaerytnet-tetranitraat; pentniet  
 PT: tetranitrato de pentaeritritol; pentrite

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

E; R 3

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

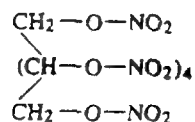
E	
	R : 3
	S : (2-)35

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 15825-70-4

EEC No 239-924-6

No 603-036-00-0



ES: hexanitrato de manitol; nitromanitol

DA: mannitolhexanitrat; nitromannit

DE: Mannithexanigrat; Nitromannit

EL: εξανιτροεστέρας του μανίτη · νιτρομανίτης

EN: mannitol hexanitrate; nitromannite

FR: hexanitrate de mannitol; nitromannite

IT: mannitol-esanitrato; nitromannite

NL: manniethexanitraat; nitromanniet

PT: hexanitrato de manitol; nitromanite

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R 3

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E	
	R : 3
	S : (2-)35

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

—

EEC No

—

No 603-037-00-6

ES: nitrato de celulosa; nitrocelulosa, conteniendo más de 12,6 % de nitrógeno

DA: cellulose nitrat; nitrocellulose, indeholdende mere end 12,6 % nitrogen

DE: Nitrozellulose mit mehr als 12,6 % Stickstoff

EL: νιτροκυτταρίνη περιέχουσα άζωτο άνω του 12,6 %

EN: cellulose nitrate; nitrocellulose, containing more than 12,6 % nitrogen

FR: nitrate de cellulose; nitrocellulose, contenant plus de 12,6 % d'azote

IT: nitrocellulosa contenente più del 12,6 % d'azoto

NL: nitrocellulosen met meer dan 12,6 % stikstof

PT: nitrato de celulose; nitrocelulose, contendo mais de 12,6 % de azoto

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R 3

R 1

Etiquetado, Etikettering, Kennzeichnung, Ετικευση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

E



R: 1-3

S: (2-35)

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No —

EEC No —

No 603-037-01-3

ES: nitrato de celulosa; nitrocelulosa, conteniendo menos de 12,6 % de nitrógeno

DA: cellulosenitrat; nitrocellulose, indeholdende højst 12,6 % Nitrogen

DE: Nitrocellulose mit höchstens 12,6 % Stickstoff

EL: νιτροκυτταρίνη περιέχουσα άζωτο κάτω του 12,6 %

EN: cellulose nitrate; nitrocellulose, containing a maximum of 12,6 % nitrogen

FR: nitrate de cellulose; nitrocellulose, contenant un maximum de 12,6 % d'azote

IT: nitrocellulosa contenente non più del 12,6 % d'azoto

NL: nitrocellulosen met maximaal 12,6 % stikstof

PT: nitrato de celulose; nitrocelulose, contendo no máximo 12,6 % de azoto

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F



R : 11

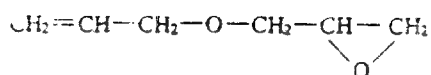
S : (2-)16-33-37/39

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 106-92-3

EEC No 203-442-4

No 603-038-00-1



allil-2,3-epoxipropileter-1 ; eter de alilo y de glicidilo

DA allyloxy-2,3-epoxy-propan ; allylglycidylether

DE allyloxy-2,3-epoxy-propan ; allylglycidylether

EL αλλυλο-2,3-εποξυπροπυλαιθέρας · αλλυλογλυκιδυλαιθέρας

EN allyl 2,3-epoxypropyl ether ; allyl glycidyl ether

FR allyloxy-2,3-époxypropane ; oxyde d'allyle et de glycidyle

IT allilossi-2,3-epossipropano ; allil-glicidil-etere

NL allyloxy-2,3-epoxy-propan ; allylglycidylether

PT aliloxi-2,3-epoxipropano ; eter alilglicidílico

Classificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 20

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem

<div data-bbox="338 1433 373 1458">Xn</div> <div data-bbox="304 1478 405 1576">  </div> <div data-bbox="944 1487 1059 1514">R : 20-43</div> <div data-bbox="944 1541 1088 1570">S : (2-)24/25</div>
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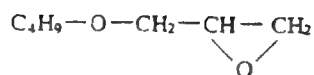
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	Xn ; R 20-43
1 % ≤ C < 25 %	Xi ; R 43

Cas No 2426-08-6

EEC No 219-376-4

No 603-039-00-7



- ES: butil-2,3-epoxipropileter; éter de n-butilo y de glicidilo  
 DA: 1-butoxy-2,3-epoxypropan; butylglycidylether  
 DE: 1-Butoxy-2,3-epoxy-propan; n-Butylglycidylether  
 EL: δουτυλο-2,3-εποξυπροπυλαιθέρας· δουτυλογλυκιδυλαιθέρας  
 EN: butyl 2,3-epoxypropyl ether; butyl glycidyl ether  
 FR: 1-butoxy-2,3-époxypropane; oxyde de n-butyle et de glycidyle  
 IT: 1-butossi-2,3-epossipropano; n-butil-glicidil-etero; BGE  
 NL: 1-butoxy-2,3-epoxy-propan; n-butylglycidylether; BGE  
 PT: 1-butoxi-2,3-epoxipropano; óxido de n-butilo e de glicidilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Xn; R 20	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20-43 S : (2-)24/25

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 25 %	Xn; R 20-43
1 % ≤ C < 25 %	Xi; R 43

Cas No —

EEC No —

No 603-040-00-2

NOTA A



ES: metóxidos alcalinos; metilatos alcalinos

DA: alkalimethanolater; alkalimethoxider

DE: Alkalimethylate

EL: μεθοξείδια αλκαλίων

EN: alkali methoxides

FR: methylates alcalins

IT: metilati alcalini

NL: alkalimethylaten; alkalimethoxiden

PT: metilatos alcalinos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação :*

F; R 11	R 14	C; R 34
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

P	C	
		
		R : 11-14-34
		S : (1/2-)8-16-26-43-45

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No —

No 603-041-00-8

NOTA A



ES: etóxidos alcalinos; etilatos alcalinos

DA: alkaliethanolater; alkaliethoxider

DE: Alkaliethylate

EL: αιθοξειδία αλκαλίων

EN: alkali ethoxides

FR: ethylates alcalins

IT: etilati alcalini

NL: alkaliethylaten; alkaliethoxiden

PT: etilatos alcalinos



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F; R 11

R 14

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

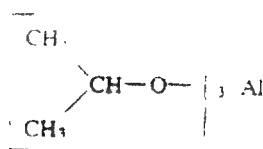
F	C	
		
		R : 11-14-34
		S : (1/2-)8-16-26-43-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 555-31-7

EEC No 209-090-8

No 603-042-00-3



ES: isopropoxido de aluminio; isopropilato de aluminio

DA: aluminium-2-propanolat; aluminiumisopropoxid

DE: Aluminium-triisopropylat

EL: τρι-ισοπροποξυαργίλλιο

EN: aluminium-tri-isopropoxide

FR: isopropylate d'aluminium

IT: isopropilato di alluminio

NL: aluminiumisopropylaat; aluminium tri-iso-propoxide

PT: trisopropóxido de alumínio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação :

F; R11

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichestatura, Kenmerken, Rotulagem

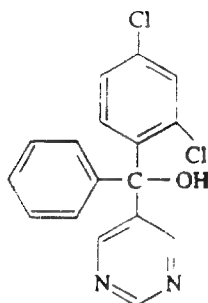
P	
	R : 11
	S : (2-)8-16

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 26766-27-8

EEC No —

No 603-043-00-9



ES: τριανιμόλ ; (2,4-διχλωροφενίλ)(φενίλ)(5-πιριμιδινίλ)μεθανόλ

DA: trianimol ; 2,4-dichlorophenyl-α-phenyl-pyrimidin-5-yl-methanol

DE: Trianimol ; α-2,4-Dichlor-phenyl-α-phenyl-pyrimidin-5-yl-methanol

EL: τριανιμόλ ; 2,4-διχλωρο-α-(πιριμιδιν-5-υλο)δεσζυδρυλική αλκοόλη, (2,4-διχλωροφαινυλο)(φαινυλο)-  
(5-πιριμιδινυλο)μεθανόλη

EN: trianimol ; 2,4-dichloro-α-(pyrimidin-5-yl) benzhydryl alcohol

FR: trianimol ; (2,4-dichlorophényl)(phényl)(5-pyrimidinyl)méthanol

IT: τριανιμόλ ; (2,4-διχλωροφενίλ)(φενίλ)(5-πιριμιδινίλ)μεθανόλ

NL: trianimol ; α-2,4-dichloorfenyl-α-fenylpyrimidin-5-ylmethanol

PT: τριανιμόλ ; (2,4-διχλωροφενίλ)(φενίλ)(5-πιριμιδινίλ)μεθανόλ

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

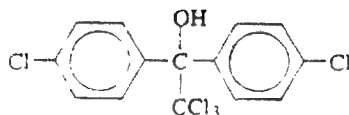
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 115-32-2

EEC No 204-082-0

No 603-044-00-4



- ES : dicofof (ISO) ; 2,2,2-tricloro-1,1-bis-(4-clorofenil)etanol  
 DA : dicofof (ISO) ; 2,2,2-trichlor-1,1-bis-(4-chlorphenyl)ethanol  
 DE : Dicofof (ISO) ; 2,2,2-Trichlor-1,1-bis(4-chlorphenyl)ethanol  
 EL : dicofof (ISO) ; 2,2,2-τριχλωρο-1,1-δισ(4-χλωροφαινυλο)αιθανόλη  
 EN : dicofof (ISO) ; 2,2,2-trichloro-1,1-bis(4-chlorophenyl)ethanol  
 FR : dicofof (ISO) ; 2,2,2-trichloro-1,1-bis(4-chlorophényl)éthanol  
 IT : dicofof (ISO) ; 2,2,2-tricloro-1,1-bis(4-clorofenil)etanolo  
 NL : dicofof (ISO) ; 2,2,2-trichloor-1,1-bis(4-chloorfenyl)ethanol  
 PT : dicofof (ISO) ; 2,2,2-tricloro-1,1-bis (4-clorofenil) etanol

*Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação :*

Xn ; R 21/22	Xi ; R 38	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 21/22-38-43 S : (2-)36/37

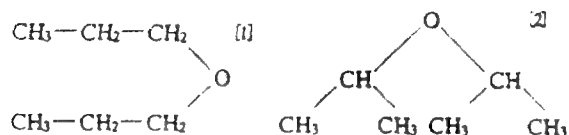
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*




Cas No 111-43-3 [1]  
108-20-3 [2]

EEC No 203-869-6 [1]  
203-560-6 [2]

No 603-045-00-X



ES: eter dipropílico [1] y,éter diisopropílico [2]

DA: dipropylether [1]; diisopropylether [2]

DE: Di-n-propylether [1]; Di-isopropylether [2]

EL: δι-η-προπυλαιθέρας [1], δι-ισοπροπυλαιθέρας [2]

EN: di-n-propyl ether [1]; di-isopropyl ether [2]

FR: oxyde de di-n-propyle; éther propylique [1], oxyde de diisopropyle; éther isopropylique [2]

IT: di-n-propil etere [1]; di-isopropil etere [2]

NL: di-n-propylether [1]; di-isopropyl ether [2]

PT: eter di-η-propílico [1]; éter diisopropílico [2]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

R 19

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>P</p> 	<p>R : 11-19</p> <p>S : (2-)9-16-33</p>
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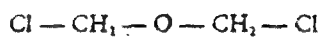
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 542-88-1

EEC No 208-832-8

No 603-046-00-5

NOTA E



- ES: eter diclorometilico; éter bisclorometilico  
 DA: bis(chlormethyl)ether; dichlordimethylether  
 DE: Bis(chlormethyl)ether  
 EL: διχλωρομεθυλαιθέρας  
 EN: bis (chloromethyl) ether  
 FR: oxide de bis(chlorométhyle); éther bis (chloromethylique)  
 IT: ossido di bis (clorometile); bis (clorometil) etere  
 NL: bis(chloormethyl)ether; dichloordimethylether  
 PT: eter bis(clorometílico); óxido de bis (clorometilo)

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

R 10	Carc. Cat. 1; R 45	T+; R 26	T; R 24	Xn; R 22
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

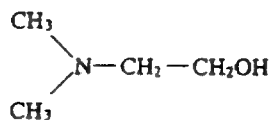
T+		R : 45-10-22-24-26 S : 53-45
		

*Límites de concentración, Konzentrationgrenzwerte, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite de concentratie, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 108-01-0

EEC No 203-542-8

No 603-047-00-0



ES : 2-dimetilaminoetanol

DA : 2-dimethylaminoethanol

DE : 2-Dimethylamino-ethanol

EL : 2-διμεθυλαμινοαιθανόλη

EN : 2-dimethylaminoethanol

FR : 2-diméthylaminoéthanol

IT : 2-dimetilaminoetanolo

NL : 2-dimethylaminoethanol

PT : 2-dimetilaminoetanol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

R 10

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xi



R : 10-36/37/38

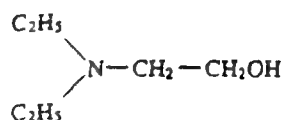
S : (2-)28

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 100-37-8

EEC No 202-845-2

No 603-048-00-6



ES : 2-diethylaminoethanol

DA : 2-diethylaminoethanol

DE : 2-Diethylamino-ethanol

EL : 2-διαεθυλαμινοαιθανόλη

EN : 2-diethylaminoethanol

FR : 2-diéthylaminoéthanol

IT : 2-diethylaminoetanolo

NL : 2-diethylaminoethanol

PT : 2-diethylaminoethanol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi ; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/37/38

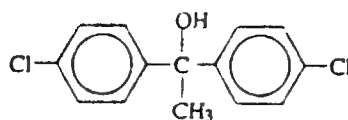
S : (2-)28

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 80-06-8

EEC No 201-246-3

No 603-049-00-1



- ES: clorfenetol (ISO); 1,1-bis(4-clorotenil)etanol  
 DA: chlorfenethol (ISO); 1,1-bis (4-chlorophenyl) ethanol  
 DE: chlorfenethol (ISO); 1,1-Bis (4-chlorophenyl) ethanol  
 EL: chlorfenethol (ISO) · 1,1-δισ(4-χλωροφαινυλ)αιθανόλη  
 EN: chlorfenethol (ISO); 1,1-bis (4-chlorophenyl) ethanol  
 FR: chlorféthol (ISO); 1,1-bis (4-chlorophényl) éthanol  
 IT: clorfenetol (ISO); 1,1-bis (4-clorofenil) etanolo  
 NL: chloorfenethol (ISO); 1,1-bis(4-chloorfenyl) ethanol  
 PT: clorfenetol (ISO); 1,1-bis (4-clorofenil) etanol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

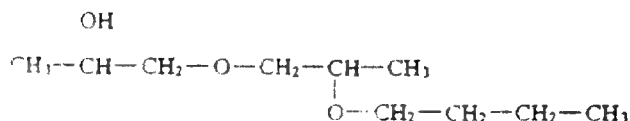
Xn	
	R : 22
	S : (2-)36

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 24083-03-2

EEC No 246-011-6

No 603-050-00-7



ES: 1-(2-butoxipropoxi)-2-propanol

DA: 1-(2-butoxypropoxy)-2-propanol

DE: 1-(2-Butoxypropoxy)-2-propanol

EL: 1-(2-δουτοξυπροποξυ)-2-προπανολη · μονοδουτυλικός αιθήρ της διπροπυλενογλυκόλης

EN: 1-(2-Butoxypropoxy)propan-2-ol

FR: 1-(2-Butoxypropoxy)-2-propanol; éther monobutylique du dipropylène-glycol

IT: 1-(2-butossi propossi)-2-propanolo; etere monobutilico del dipropilenglicole)

NL: 1-(2-butoxypropoxy)-2-propanol

PT: 1-(2-butoxipropoxi)-2-propanol; eter monobutílico do dipropilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

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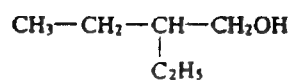
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 25 %	Xn; R 21/22

Cas No 97-95-0

EEC No 202-621-4

No 603-051-00-2



ES : 2-etil-1-butanol  
 DA : 2-ethylbutanol  
 DE : 2-Ethylbutanol  
 EL : 2-αιθυλοβουτανόλη  
 EN : 2-ethylbutan-1-ol  
 FR : 2-éthylbutanol  
 IT : 2-etilbutanolo  
 NL : 2-ethylbutanol  
 PT : 2-etilbutanol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Xn ; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 21/22 S : (2)

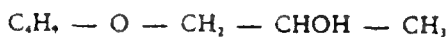
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xn ; R 21/22

Cas No 5131-66-8

EEC No 225-878-4

No 603-052-00-8



ES: 3-butoxi-2-propanol

DA: 3-butoxy-2-propanol

DE: 3-Butoxy-2-propanol

EL: 3-βουτοξυ-2-προπανόλη· μονοβουτυλικός αιθέρας της προπυλενογλυκόλης

EN: 3-butoxypropan-2-ol; propylene glycol monobutyl ether

FR: 3-butoxy-2-propanol; éther monobutylique du propylène-glycol

IT: 3-butossi-2-propanolo

NL: 3-butoxy-2-propanol

PT: 3-butoxi-2-propanol; éter monobutílico do propilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R: 36/38

S: (2)

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração

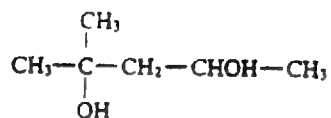
C ≥ 20 %	Xi; R 36/38



Cas No 107-41-5

EEC No 203-489-0

No 603-053-00-3



ES: 2-metil-2,4-pentanodiol

DA: 2-methyl-2,4-pentandiol

DE: 2-Methyl-2,4-pentandiol

EL: 2-μεθυλο-2,4-πεντανοδιόλη

EN: 2-methylpentane-2,4-diol

FR: 2-méthyl-2,4-pentandiol

IT: 2-metil-2,4-pentandiolo

NL: 2-methyl-2,4-pentaandiol

PT: 2-metil-2,4-pentanodiol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

Xi 	R : 36/38 S : (2)
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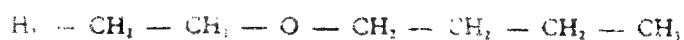
*Límites de concentración, Koncentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	Xi; R 36/38

Cas No 142-96-1

EEC No 205-575-3

No 603-054-00-9



ES eter di n-butilico; oxido de dibutilo

DA dibutylether; di-n-butylether

DE Di-n-butylether

EL κανονικός διβουτυλαιθέρας

EN di-n-butyl ether; dibutyl ether

FR oxyde de dibutyle; éther n-butylique

IT di-n-butil-etere

NL di-n-butylether

PT eter n-butílico

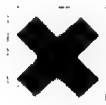
Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação

R 10

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 10-36/37/38

S : (2)

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraço

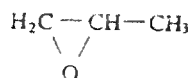
C ≥ 10 %	Xi; R 36/37/38

Cas No 75-56-9

EEC No 200-879-2

No 603-055-00-4

NOTA E



ES: oxido de propileno; 1,2-epoxipropano; metiloxirano  
 DA: propylenoxid; 1,2-epoxypropan; methyloxiran  
 DE: Propylenoxid; 1,2-Epoxypropan; Methyloxiran  
 EL: 1,2-προπυλενοξείδιο · 1,2-εποξυπροπάνιο · μεθυλοξιράνιο  
 EN: propylene oxide; 1,2-epoxypropane; methyloxirane  
 FR: oxyde de propylène; 1,2-époxypropane; méthyloxiranne  
 IT: propilene ossido; 1,2-epossipropano; metilossirano  
 NL: propyleenoxide; 1,2-epoxypropan; methyloxiraan  
 PT: óxido de propileno; 1,2-epoxipropano; metiloxirano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*



F+; R 12

Carc. Cat. 2; R 45

Xn; R 20/21/22

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+	T	
		R : 45-12-20/21/22-36/37/38
		S : 53-45

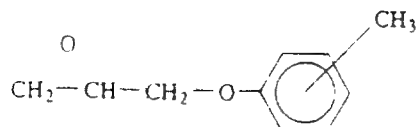
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 26447-14-3

EEC No 247-711-4

No 603-056-00-X

NOTA C




- ES: éter de 1,2-epoxipropiltolilo; óxido de glicidilo y de tolilo  
 DA: 1,2-epoxy-3-(tolylloxy)-propan; cresylglycidylether  
 DE: 1,2-Epoxy-3-(tolylloxy)-propan; Kresylglycidylether  
 EL: 1,2-εποξυ-3-(τολουλοξυ)-προπάνιο  
 EN: 1,2-epoxy-3-(tolylloxy)propane; cresyl glycidyl ether  
 FR: 1,2-époxy-3-(tolylloxy)propane; oxyde de glycidyle et de tolyle  
 IT: 1,2-epossi-3(tolilossi)-propano; cresile glicidile etere  
 NL: 1,2-epoxy-3 (tolylloxy)-propaan; cresylglycidylether  
 PT: 1,2-epoxi-3-(toliloxi)-propano; óxido de glicidilo e de tolilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R: 38
	S: (2-)26-28

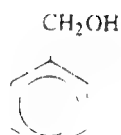
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 2 %	Xi; R 38

Cas No 100-51-6

EEC No 202-859-9

No 603-057-00-5



ES: alcohol bencílico

DA: benzylalkohol

DE: Benzylalkohol

EL: βενζυλική αλκοόλη

EN: benzyl alcohol

FR: alcool benzylique

IT: alcool benzilico

NL: benzylalcohol

PT: alcool benzílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Xn; R 20/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20/22
	S : (2-)26

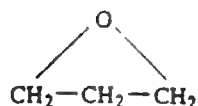
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xn; R 20/22

Cas No 503-30-0

EEC No 207-964-3

No 603-058-00-0



ES: 1,3-εποξυπροπανο; óxido de trimetileno

DA: oxetan

DE: 1,3-Epoxypropan; 1,3-Propylenoxid

EL: 1,3-προπυλενοξείδιο · 1,3-εποξυπροπάνιο

EN: 1,3-propylene oxide

FR: 1,3-époxypropane; oxyde de triméthylène

IT: 1,3-epossipropano

NL: 1,3-epoxypropan; 1,3-propyleenoxide

PT: 1,3-εποξυπροπανο

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F; R 11

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		
		R : 11-20/21/22
		S : (2)-9-16-26-29

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 111-27-3

EEC No 203-852-3

No 603-059-00-6



ES: 1-hexanol

DA: 1-hexanol

DE: 1-Hexanol

EL: 1-εξανόλη

EN: hexan-1-ol

FR: 1-hexanol; alcool hexylique

IT: 1-esanolo


NL: 1-hexanol

PT: 1-hexanol; álcool hexílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>Xn</p> 	<p>R : 22</p> <p>S : (2-)24/25</p>
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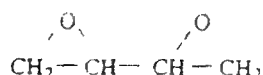
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xn; R 22

Cas No 1464-53-5

EEC No 215-979-1

No 603-060-00-1



ES: 1,2,3,4-diepoxi-butano

DA: diepoxy-1,2,3,4-butan; butan-1,2,3,4-diepoxid

DE: 1,2,3,4-Diepoxybutan; Butadien diepoxyd

EL: 1,2,3,4-διεποξυβουτάνιο

EN: 1,2,3,4-diepoxybutane; butadiene diepoxide

FR: 1,2,3,4-diépoxybutane; diépoxyde de butadiène

IT: 1,2,3,4 diepossì-butano

NL: 1,2,3,4-diepoxybutaan; butadien diepoxide

PT: 1,2,3,4-diepoxi-butano; diepoxibutadieno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

T; R 23/24/25

Xi; R 36/37/38

Xn; R 40

R 42/43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	R : 23/24/25-36/37/38-40-42/43
	S : (1/2-)23-24-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

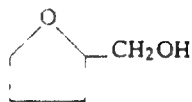
C ≥ 20 %	T; R 23/24/25-36/37/38-40-42/43
1 % ≤ C < 20 %	T; R 23/24/25-40-42/43
0,1 % ≤ C < 1 %	Xn; R 20/21/22-42/43



Cas No 97-99-4

EEC No 202-625-6

No 603-061-00-7




- ES: 2-hidroxiometiltetrahidrofurano; alcohol tetrahidrofurfurilico  
 DA: 2-hydroxymethyloxolan; tetrahydrofurfurylalkohol  
 DE: Tetrahydrofurfurylalkohol; 2-Hydroxymethyltetrahydrofuran  
 EL: τετραυδροφουρφυρυλαλκοόλη · 2-υδροξυμεθυλοτετραυδροφουράνιο  
 EN: tetrahydro-2-furylmethanol; tetrahydrofurfuryl alcohol  
 FR: tétrahydro-2-furylméthanol; alcool tétrahydrofurfurylique  
 IT: tetraidro-2-furilmetanolo; alcool tetraidrofurfurilico  
 NL: tetrahydro-2-furfurylmethanol  
 PT: tetraidro-2-furfurilmetanol; álcool tetraidrofurfurílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Xi; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi 	R : 36  S : (2-)39
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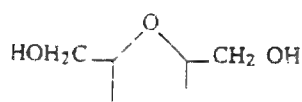
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xi; R 36

Cas No 104-80-3

EEC No 203-239-0

No 603-062-00-2



ES dihidroximetiltetrahidrofurano

DA 2,5-bis(hydroxymethyl)oxolan , 2,5-bis-(hydroxymethyl)-tetrahydrofuran

DE 2,5-Bis-(hydroxymethyl)-tetrahydrofuran

EL δις-(υδροξυμεθυλο)-τετραυδροφοουράνιο

EN tetrahydrofuran-2,5-diyl dimethanol

FR tetrahydrofurane-2,5-diyl diméthanol , 2,5-bis(hydroxymethyl) tétrahydrofurane

IT 2,5 bis (idrossimetile) tetraidrofurano

NL 2,5 bis (hydroxymethyl) tetrahydrofuraan

PT 2,5-bis(hidroximetil)tetraidrofurano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi ; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/37/38

S : (2-)39

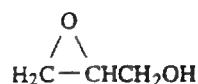
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	Xi ; R 36/37/38

Cas No 556-52-5

EEC No 209-128-3

No 603-063-00-8



ES: 2,3-epoxi-1-propanol; glicidol

DA: 2,3-epoxypropanol; glycidol

DE: 2,3-Epoxy-1-propanol; Glycidol

EL: 2,3-εποξυ-1-προπανόλη

EN: 2,3-epoxy-1-propanol; glycidol

FR: 2,3-époxy-1-propanol; glycidol

IT: 2,3-epossi-1-propanolo

NL: 2,3-epoxy-1-propanol

PT: 2,3-epoxi-1-propanol; glicidol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T; R 23

Xn; R 21/22

Xi; R 36/37/38

R 42/43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 23-21/22-36/37/38-42/43

S : (1/2)-45

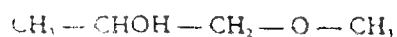
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 20 %	T; R 23-21/22-36/37/38-42/43
5 % ≤ C < 20 %	T; R 23-21/22-42/43
1 % ≤ C < 5 %	Xn; R 20/21/22-42/43

Cas No 107-98-2

EEC No 203-539-1

No 603-064-00-3



ES: 1-metoxi-2-propanol; éter monomeólico del propilenglicol

DA: 1-methoxy-2-propanol

DE: 1-Methoxy-2-propanol; Propylenglykolmonomethylether

EL: 1-μεθοξυ-2-προπανόλη· μονομεθυλαιθέρας της προπυλενογλυκόλης

EN: 1-methoxy-2-propanol; monopropylene glycol methyl ether

FR: 1-méthoxy-2-propanol; éther monométhylque du propylène-glycol

IT: 1-metossi-2-propaolo

NL: 1-methoxy-2-propanol; propyleenglycolmonomethylether

PT: 1-metoxi-2-propanol; éter monometílico do propilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

R: 10

S: (2-)24

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração


Cas No 101-90-6

EEC No 202-987-5

No 603-065-00-9



- ES: 1,3-bis(2,3-epoxipropoxi)benceno; éter diglicido del resorcinol  
 DA: 1,3-bis(2,3-epoxypropoxy)benzen; resorcinoldiglycidylether  
 DE: 1,3-Bis(2,3-epoxypropoxy)benzol; Resorcinoldiglycidylether  
 EL: 1,3-δις-(2,3-εποξυπροποξυ)-δενζόλιο; διγλυκιδυλαιθέρας της ρεσορκινάλης  
 EN: 1,3-bis(2,3-epoxypropoxy)benzene; resorcinol diglycidyl ether  
 FR: 1,3-bis(2,3-époxypropoxy)benzene; éther diglycidique du résorcinol  
 IT: 1,3-bis(2,3-epossipropossi)-benzene  
 NL: 1,3-bis(2,3-epoxypropoxy)benzeen; resorsinol diglycidylether  
 PT: 1,3-bis(2,3-epoxipropoxi)benzeno; éter diglicídico do resorcinol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T; R 23/24/25

Xn; R 40

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 23/24/25-40-43 S : (1/2-)23-24-45</p>
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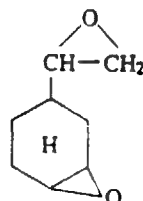
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 1 %	T; R 23/24/25-40-43
0,1 % ≤ C < 1 %	Xn; R 20/21/22

Cas No 106-87-6

EEC No 203-437-7

No 603-066-00-4




- ES: 1-epoxietil-3,4-epoxiciclohexano; diepóxido del vinilciclohexano  
 DA: 1,2-epoxycyclohexan-4-oxiran; 1-epoxyethyl-3,4-epoxycyclohexan  
 DE: 1-Epoxyethyl-3,4-epoxycyclohexan; Vinylcyclohexan-diepoxid  
 EL: 1-εποξυαιθυλο-3,4-επδξυκυκλοεξάνιο  
 EN: 1,2-epoxy-4-epoxyethylcyclohexane; vinylcyclohexane diepoxide  
 FR: 1-époxyéthyl-3,4-époxy-cyclohexane; diépoxyde de vinylcyclohexene  
 IT: 1-epossietil-3,4-epossicicloesano  
 NL: 1-epoxyethyl-3,4-epoxycyclohexaan; vinylcyclohexaandiepoxide  
 PT: 1-epoxietil-3,4-epoxiciclohexano; diepóxido de vinilciclohexano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T; R 23/24/25	Xn; R 40
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 23/24/25-40</p> <p>S : (1/2-)23-24-45</p>
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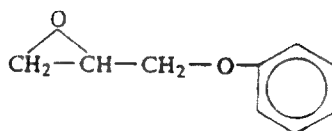
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 1 %	T; R 23/24/25-40
0,1 % ≤ C < 1 %	Xn; R 20/21/22

Cas No 122-60-1

EEC No 204-557-2

No 603-067-00-X



ES: 1,2-epoxi-3-fenoxipropano; óxido de glicidilo y de fenilo

DA: 1,2-epoxy-3-phenoxypropan; phenylglycidylether

DE: 1,2-Epoxy-3-phenoxypropan; Phenylglycidylether

EL: 1,2-εποξυ-3-φαινοξυπροπάνιο

EN: 1,2-epoxy-3-phenoxypropane; phenyl glycidyl ether

FR: 1,2-epoxy-3-phénoxypropane; oxyde de glycidyle et de phényle

IT: 1,2-epossi-3-fenossipropano

NL: 1,2-epoxy-3-fenoxypropaan; phenylglycidylether

PT: 1,2-epoxi-3-fenoxipropano; óxido de glicidol e de fenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaction, Classificazione, Indeling, Classificação

Xn; R 21

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 21-43

S: (2-)24/25

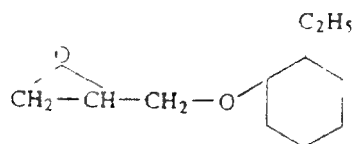
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	Xn; R 21-43
1 % ≤ C < 25 %	Xi; R 43

Cas No 130014-35-6

EEC No —

No 603-068-00-5



- ES : 1-(2-etilciclohexiloxi)-2,3-epoxipropano ; óxido de 2-etilciclohexilo y de glicidilo  
 DA : 1-(2-ethylcyclohexanoxyl)-2,3-epoxypropan ; ethylcyclohexylglycidylether  
 DE : 1-(2-Ethylcyclohexanoxyl)-2,3-epoxypropan ; Ethylcyclohexylglycidylether  
 EL : 2,3-εποξυπροπυλο-2-αιθυλοκυκλοεξυλαιθέρας  
 EN : 2,3-epoxypropyl-2-ethylcyclohexyl ether ; ethylcyclohexylglycidyl ether  
 FR : 1-(2-ethylcyclohexyloxy)-2,3-époxypropane ; oxyde de 2-éthylcyclohexyle et de glycidyle  
 IT : 1-(2-etilciclo esilossi)-2,3-eossipropano ; etil-cicloesil glicidil etere  
 NL : 1-(2-ethylcyclohexanoxyl)-2,3-epoxypropan ; 2-ethylcyclohexyl-glycidylether  
 PT : 1-(2-etilcicloexiloxi)-2,3-epoxipropano ; óxido de 2-etilcicloexilo e de glicidilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xi ; R 36/38	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi 	R : 36/38-43 S : (2-)26-28-37/39
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*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

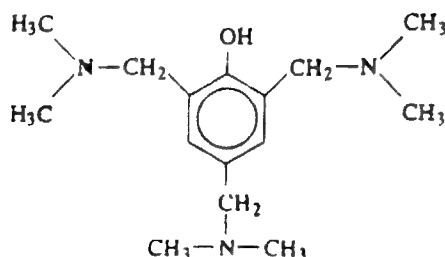
C ≥ 20 %	Xi ; R 36/38-43
1 % ≤ C < 20 %	Xi ; R 43



Cas No 90-72-2

EEC No 202-013-9

No 603-069-00-0



ES : 2,4,6-tris(dimetilaminometil)fenol

DA : 2,4,6-tris(dimethylamino-methyl)-phenol

DE : 2,4,6-Tri-(dimethylaminomethyl)phenol

EL : 2,4,6-τρι-(διμεθυλαμινομεθυλο)-φαινόλη

EN : 2,4,6-tris(dimethylaminomethyl)phenol

FR : 2,4,6-tris(diméthylaminométhyl)phénol

IT : 2,4,6-tri(dimetil-aminometile) fenolo

NL : 2,4,6-tri(dimethylaminomethyl)fenol

PT : 2,4,6-tri(dimetilaminometil)fenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Xi ; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

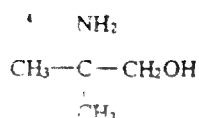
<p>Xn</p> 	<p>R : 22-36/38</p> <p>S : (2-)26-28</p>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 124-68-5

EEC No 204-709-8

No 603-070-00-6



ES 2-amino-2-metil-1-propanol

DA 2-amino-2-methylpropanol

DE 2-Amino-2-methylpropanol

EL 2-αμινο-2-μεθυλοπροπανόλη

EN 2-amino-2-methylpropanol

FR 2-amino-2-methylpropanol

IT 2-amino-2-metilpropanolo

NL 2-amino-2-methylpropanol

PT 2-amino-2-metilpropanol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/38

S : (2)

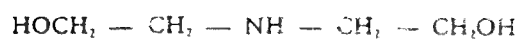
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	Xi; R 36/38

Cas No 111-42-2

EEC No 203-868-0

No 603-071-00-1



ES: 2,2'-iminodietanol; dietanolamina

DA: diethanolamin

DE: Diethanolamin

EL: διαιθανολαμίνη

EN: 2,2' iminodiethanol; diethanolamine

FR: 2,2'-iminodiéthanol; diéthanolamine

IT: 2,2'-diétanolamina

NL: 2,2'-diethanolamine

PT: 2,2'-iminodietanol; dietanolamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificaçãe*

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 36/38

S : (2-)26

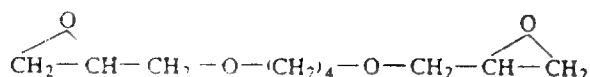
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãe*

C ≥ 10 %	Xi; R 36/38

Cas No 2425-79-8

EEC No 219-371-7

No 603-072-00-7



ES: 1,4-bis(2,3-epoxipropoxi)butano; éter diglicídico del 1,4-butanodiol

DA: butandioldiglycidylether

DE: 1,4-Bis(2,3-epoxypropoxy)butan; 1,4-Butandiol-diglycidylether

EL: 1,4-δισ-(2,3-εποξυπροποξυ)-δουτάνιο

EN: 1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether

FR: 1,4-bis(2,3-époxypropoxy)butane; éther diglycidique du 1,4-butanediol

IT: 1,4-bis-(2,3-epossipropossi)-butano; butandiol glicidil etere

NL: 1,4-bis(2,3 epoxypropoxy)butaan; butaandioldiglycidylether

PT: 1,4-bis(2,3-epoxipropoxi)butano; éter diglicídico do 1,4-butanodiol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21

Xi; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20/21-36/38-43

S : (2-)26-28-37/39

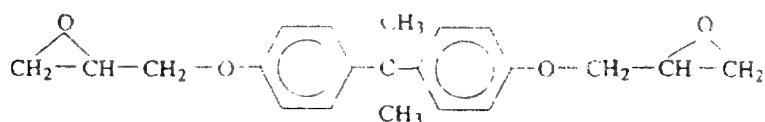
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	Xn; R 20/21-36/38-43
20 % ≤ C < 25 %	Xi; R 36/38-43
1 % ≤ C < 20 %	Xi; R 43

Cas No 1675-54-3

EEC No 216-823-5

No 603-073-00-2



ES: 2,2-bis-[4-(2,3-epoxipropoxi)fenil]propano

DA: bisphenol-A-diglycidylether; 2,2-bis(p-(2,3-epoxypropoxy)phenyl)propan

DE: 4,4'-Methylen diphenyldiglycidylether; Bis(4,4'-glycidylloxyphenyl)-propan

EL: 2,2-δισ-[4-(2,3-εποξυπροποξυ)φαινυλο]-προπάνιο

EN: bis[4-(2,3-epoxypropoxy)phenyl]propane

FR: 2,2-bis[p-(2,3-époxypropoxy)phényl]propane; éther diglycidique du bisphénol A

IT: 2,2-bis-[4-(2,3-eossioproossi)fenil]-propano

NL: 2,2-bis[4(2,3-epoxypropoxy)fenyl]-propaan

PT: 2,2-bis-[4-(2,3-epoxipropoxi)fenil]propano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R 36/38-43

S (2-)28-37/39

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 5 %	Xi; R 36/38-43
1 % ≤ C < 5 %	Xi; R 43

Cas No 25068-38-6

EEC No —

No 603-074-00-8

- ES: producto de reacción: bisfenol-A-epiclorhidrina; resinas epoxi (peso molecular medio  $\leq 700$ )
- DA: reaktionsprodukt: bisphenol-A-diglycidylether; homologe med molekylvægt  $\leq 700$
- DE: Reaktionsprodukt: Bisphenol-A-Epichlorhydrineheize mit durchschnittlichem Molekulargewicht  $\leq 700$
- EL: προϊόν αντίδρασης: δις-φαινολο-Α-(επιχλωρυδρίνη) · εποξυρητίνη (μέσο μοριακό βάρος  $\leq 700$ )
- EN: reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ )
- FR: produit de réaction: bisphénol-A-épichlorhydrine; résines époxydiques (poids moléculaire moyen  $\leq 700$ )
- IT: prodotto di reazione: bisfenolo-A-epicloridrina; resine epossidiche (peso molecolare medio  $\leq 700$ )
- NL: reactieproduct: bisfenol-A-epichloorhydrine; epoxyhars (gemiddeld molecuulgewicht  $\leq 700$ )
- PT: produto de reacção: bisfenol-A-epicloridrina; resinas epoxídicas (peso molecular médio  $\leq 700$ )

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xi; R 36/38	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 36/38-43 S : (2-)28-37/39

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*

C $\geq 5$ %	Xi; R 36/38-43
1 % $\leq$ C < 5 %	Xi; R 43

Cas No 107-30-2

EEC No 203-480-1

No 603-075-00-3

NOTA E



ES: eter clorometil-metilo

DA: chlormethylmethylether; chlordimethylether

DE: Chlormethyl-methylether; Chlordimethylether

EL: χλωρομεθυλο-μεθυλαιθέρας· χλωροδιμεθυλαιθέρας

EN: chlormethyl methyl ether; chlorodimethyl ether

FR: oxyde de chlorométhyle et de méthyle; éther chlorodiméthylique

IT: clorometil (metil) ossido; cloro (metil) etere

NL: chloormethyl-methylether; chloordimethylether

PT: eter clorodimetílico; óxido de clorometilo e de metilo



Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

F; R 11

Carc. Cat. 1; R 45

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

P	T	
		
		R : 45-11-20/21/22
		S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 110-65-6

EEC No 203-788-6

No 603-076-00-9



ES: but-2-ino-1,4-diol; 2-butino-1,4-diol

DA: but-2-yn-1,4-diol; 2-butyne-1,4-diol

DE: But-2-in-1,4-diol; 2-Butin-1,4-diol

EL: βουτ-2-ινο-1,4-διόλη

EN: but-2-yne-1,4-diol; 2-butyne-1,4-diol

FR: but-2-yne-1,4-diol; 2-butyne-1,4-diol

IT: but-2-in-1,4-diolo; 2-butin-1,4-diolo

NL: but-2-yn-1,4-diol; 2-butyne-1,4-diol


PT: but-2-ino-1,4-diol; 2-butino-1,4-diol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T; R 25

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 25-34</p> <p>S : (1/2)-22-36-45</p>
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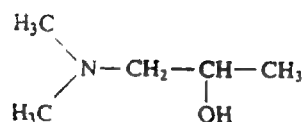
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 108-16-7

EEC No 203-556-4

No 603-077-00-4



ES: 1-dimetilaminopropan-2-ol; dimepranol (DCI)

DA: 1-dimethylaminopropan-2-ol; dimepranol (INN)

DE: 1-Dimethylaminopropan-2-ol; Dimepranol (INN)

EL: 1-διμεθυλαμινοπροπανόλη-2; dimepranol (INN)

EN: 1-dimethylaminopropan-2-ol; dimepranol (INN)

FR: 1-diméthylaminopropan-2-ol; 1-diméthylamino-2-propanol; dimépranol (DCI)

IT: 1-dimetilaminopropan-2-olo; dimepranol (DCI)

NL: 1-dimethylaminopropan-2-ol; dimepranol (INN)

PT: 1-dimetilaminopropano-2-ol; dimepranol (DCI)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

R 10

Xn; R 22

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 10-22-34

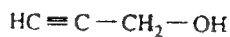
S : (1/2-)23-26-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 107-19-7

EEC No 203-471-2

No 603-078-00-X



ES: prop-2-ino-1-ol, 2-propino-1-ol; alcohol propargílico  
 DA: prop-2-yn-1-ol; propargylalkohol  
 DE: Prop-2-in-1-ol; Propargylalkohol  
 EL: προπ-2-ιν-1-όλη· προπαργυλική αλκοόλη  
 EN: prop-2-yn-1-ol; propargyl alcohol  
 FR: prop-2-yne-1-ol; 2-propyne-1-ol; alcool propargylique  
 IT: prop-2-in-1-olo; alcole propargílico  
 NL: prop-2-yn-1-ol; propargylalcohol  
 PT: prop-2-ino-1-ol; álcool propargílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

R 10

T; R 23/24/25

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

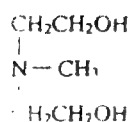
<p>T</p> 	<p>R : 10-23/24/25-34 S : (1/2-)26-28-36-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 105-59-9

EEC No 203-312-7

No 603-079-00-5



ES : 2,2'-metiliminodietanol ; N-metildietanolamina  
 DA : 2,2'-methyliminodiethanol ; N-methyldiethanolamin  
 DE : 2,2'-Methyliminodiethanol ; N-Methyldiethanolamin  
 EL : 2,2'-μεθυλιμινοδιαιθανόλη · N-μεθυλοδιαιθανολαμίνη  
 EN : 2,2'-(methylimino)diethanol ; N-methyldiethanolamine  
 FR : 2,2'-méthyliminodiéthanol ; N-méthyldiéthanolamine  
 IT : 2,2'-metiliminodietanolo ; N-metildietanolamina  
 NL : 2,2'-methyliminodiethanol ; N-methyldiëthanolamine  
 PT : 2,2'-metiliminodietanol ; N-metildietanolamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xi ; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 36
	S : (2-)24

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 109-83-1

EEC No 203-710-0

No 603-080-00-0



ES: 2-metilaminoetanol; N-metil-2-etanolamina

DA: 2-methylaminoethanol; N-methyl-2-aminoethanol; N-methyl-2-ethanolamin

DE: 2-Methylamino-ethanol; N-Methylethanolamin

EL: 2-μεθυλαμινοαιθανόλη; N-μεθυλαιθανολαμίνη

EN: 2-methylaminoethanol; N-methyl-2-ethanolamine; N-methyl-2-amino ethanol

FR: 2-méthylaminoéthanol; N-méthyléthanolamine

IT: 2-metilaminoetanolo; N-metiletanolamina


NL: 2-methylaminoethanol; N-methyl-2-aminoethanol; N-methyl-2-ethanolamine

PT: 2-metilaminoetanol; N-metiletanolamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

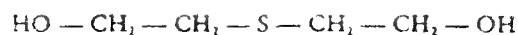
C	
	R : 34
	S : (1/2-)23-26-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 111-48-8

EEC No 203-874-3

No 603-081-00-6




ES : 2,2'-tiodietanol ; tiodiglicol  
 DA : 2,2'-thiodiethanol ; thiodiglycol  
 DE : 2,2'-Thiodiethanol ; Thiodiglykol  
 EL : 2,2'-θειοδιαιθανόλη · θειοδιγλυκόλη  
 EN : 2,2'-thiodiethanol ; thiodiglycol  
 FR : 2,2'-thiodiéthanol ; thiodiglycol  
 IT : tiodiglicol ; 2,2'-tiodietanolo  
 NL : 2,2'-thiodiëthanol ; thiodiglycol  
 PT : 2,2'-tiodietanol ; tiodiglicol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xi ; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

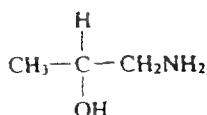
Xi	
	R : 36
	S : (2)

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 78-96-6

EEC No 201-162-7

No 603-082-00-1



ES : 1-aminopropan-2-ol ; isopropanolamina  
 DA : 1-aminopropan-2-ol ; isopropanolamin  
 DE : 1-Aminopropan-2-ol ; Isopropanolamin  
 EL : 1-αμινο-προπανόλη-2 ; ισοπροπανολαμίνη  
 EN : 1-aminopropan-2-ol ; isopropanolamine  
 FR : 1-amino-2-propanol ; isopropanolamine  
 IT : 1-aminopropan-2-olo ; isopropanolamina  
 NL : 1-aminopropan-2-ol ; isopropanolamine  
 PT : 1-amino-2-propanol ; isopropanolamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

C ; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

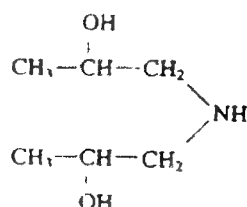
<p>C</p> 	<p>R : 34</p> <p>S : (1/2-)23-26-36-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 110-97-4

EEC No 203-820-9

No 603-083-00-7



ES: 1,1'-iminodipropán-2-ol; diisopropanolamina

DA: 1,1'-iminodipropán-2-ol; diisopropanolamin

DE: 1,1'-Iminodipropán-2-ol; Diisopropanolamin

EL: 1,1'-ιμινοδι-προπανόλη-2· διισοπροπανολαμίνη

EN: 1,1'-iminodipropán-2-ol; di-isopropanolamine

FR: 1,1'-iminodi-2-propanol; diisopropanolamine

IT: 1,1'-iminodi-2-propanolo; diisopropanolamina

NL: 1,1'-iminodipropán-2-ol; diisopropanolamine

PT: 1,1'-iminodipropano-2-ol; diisopropanolamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R: 36

S: (2-)26

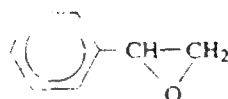
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 96-09-3

EEC No 202-476-7

No 603-084-00-2

NOTA E



ES: oxido de estireno; (epoxietil)bencono; feniloxirano  
 DA: styrenoxid; (epoxyethyl)benzen; phenyloxiran  
 DE: Styroloxid; (Epoxyethyl)benzol; Phenyloxiran  
 EL: οξειδιο του στυρολίου; (εποξυαιθυλο)δενζόλιο; φαινυλοξιράνιο  
 EN: styrene oxide; (epoxyethyl)benzene; phenyloxirane  
 FR: oxyde de styrène; (époxyéthyl)benzène; phényloxirane  
 IT: stirene ossido; (epossietil)benzene; fenilossirano  
 NL: styreenoxide; (epoxyethyl)benzeen; fenylloxiraan  
 PT: oxido de estireno; (epoxietil)benzeno; feniloxirano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Xn; R 21

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R: 45-21-36
	S: 53-45

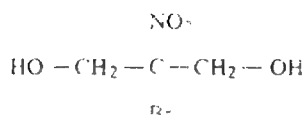
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 52-51-7

EEC No 200-143-0

No 603-085-00-8



ES: bronopol (DCI); 2-bromo-2-nitropropanodiol

DA: bronopol (INN); 2-brom-2-nitropropan-1,3-diol

DE: Bronopol (INN); 2-Brom-2-nitropropan-1,3-diol

EL: bronopol (INN); 2-δρωμο-2-νιτρο-προπανιο-1,3-διόλη

EN: bronopol (INN); 2-bromo-2-nitropropane-1,3-diol

FR: bronopol (DCI); 2-bromo-2-nitropropane-1,3-diol

IT: bronopol (DCI); 2-bromo-2-nitropropan-1,3-diolo

NL: bronopoi (INN); 2-broom-2-nitropropaan-1,3-diol

PT: bronopol (DCI); 2-bromo-2-nitropropanodiol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 21/22	Xi; R 37/38-41	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

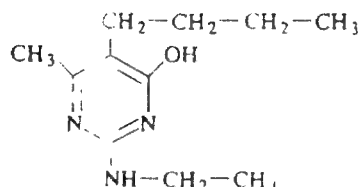
Xn	N	
		R : 21, 22-37/38-41-50/53 S : (2)-26-37/39-60-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 23947-60-6

EEC No 245-949-3

No 603-086-00-3



- ES : etirimol (ISO) ; 5-butil-2-etilamino-6-metilpirimidina-4-ol  
 DA : ethirimol (ISO) ; 5-butyl-2-ethylamino-6-methylpyrimidin-4-ol  
 DE : Ethirimol (ISO) ; 5-Butyl-2-ethylamino-6-methylpyrimidin-4-ol  
 EL : ethirimol (ISO) ; 2-αιθυλαμινο-5-δουτυλο-6-μεθυλο-πυριμιδιν-4-όλη  
 EN : ethirimol (ISO) ; 5-butyl-2-ethylamino-6-methylpyrimidin-4-ol  
 FR : ethirimol (ISO) ; 5-butyl-2-éthylamino-6-méthylpyrimidine-4-ol  
 IT : etirimol (ISO) ; 5-butil-2-etilammino-6-metilpirimidin-4-olo  
 NL : ethirimol (ISO) ; 5-butyl-2-ethylamino-6-methylpyrimidine-4-ol  
 PT : etirimol (ISO) ; 5-butil-2-etilamino-6-metilpirimidin-4-ol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn ; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

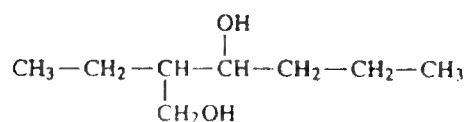
Xn	
	R : 21
	S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãõ


Cas No 94-96-2

EEC No 202-377-9

No 603-087-00-9



ES : 2-etilhexano-1,3-diol ; octilenglicol

DA : 2-ethylhexan-1,3-diol ; octylenglycol

DE : 2-Ethylhexan-1,3-diol ; Octylenglykol

EL : 2-αιθυλεξανο-1,3-διόλη · οκτυλενογλυκόλη

EN : 2-ethylhexane-1,3-diol ; octylene glycol ; ethoexadiol

FR : 2-éthylhexane-1,3-diol ; octylèneglycol

IT : 2-etilesan-1,3-diolo ; ottileneglicole

NL : 2-ethylhexaan-1,3-diol ; octyleenglycol

PT : 2-etilhexano-1,3-diol ; octilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi ; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36

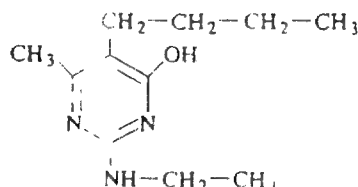
S : (2-)26

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 23947-60-6

EEC No 245-949-3

No 603-086-00-3



- ES : etirimol (ISO) ; 5-butyl-2-etilamino-6-metilpirimidina-4-ol  
 DA : ethirimol (ISO) ; 5-butyl-2-ethylamino-6-methylpyrimidin-4-ol  
 DE : Ethirimol (ISO) ; 5-Butyl-2-ethylamino-6-methylpyrimidin-4-ol  
 EL : ethirimol (ISO) ; 5-βουτυλο-2-εθυλαμινο-6-μεθυλο-πυριμιδιν-4-όλη  
 EN : ethirimol (ISO) ; 5-butyl-2-ethylamino-6-methylpyrimidin-4-ol  
 FR : ethirimol (ISO) ; 5-butyl-2-éthylamino-6-méthylpyrimidine-4-ol  
 IT : etunmol (ISO) ; 5-butil-2-etilammino-6-metilpirimidin-4-olo  
 NL : ethirimol (ISO) ; 5-butyl-2-ethylamino-6-methylpyrimidine-4-ol  
 PT : etirimol (ISO) ; 5-butil-2-etilamino-6-metilpirimidin-4-ol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

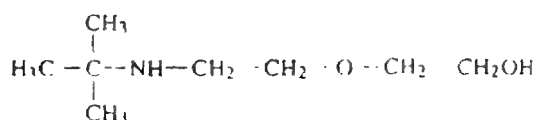
Xn	
	R : 21
	S : (2-)36/37

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No 400-390-6

No 603-089-00-X



ES: 7,7-dimetil-3-oxa-6-azaoctan-1-ol

DA: 7,7-dimethyl-3-oxa-6-azaoctan-1-ol

DE: 7,7-Dimethyl-3-oxa-6-azaoctan-1-ol

EL: 7,7-διμεθυλ-3-οξα-6-αζαοκταν-1-όλη

EN: 7,7-dimethyl-3-oxa-6-azaoctan-1-ol

FR: 7,7-diméthyl-3-oxa-6-azaoctane-1-ol

IT: 7,7-dimetil-3-ossa-6-azaottan-1-olo

NL: 7,7-dimethyl-3-oxa-6-azaoctaan-1-ol

PT: 7,7-dimetil-3-oxa-6-azaoctan-1-ol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

C; R 35

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

C



R 22-35

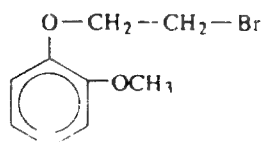
S: (1/2-)26-28-36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào


Cas No 4463-59-6

EEC No 402-010-4

No 603-090-00-5



ES: 2-(2-bromoetoxi)anisol

DA: 2-(2-bromethoxy)anisol

DE: 2-(2-Bromethoxy)anisol

EL: 2-(2-βρωμοαιθοξυ)ανισόλη

EN: 2-(2-bromoethoxy)anisole

FR: 2-(2-bromoethoxy)anisole

IT: 2-(2-bromoetossi)anisolo

NL: 2-(2-broomethoxy)anisool

PT: 2-(2-bromoetoxi)anisole

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 22-52/53

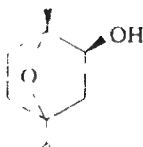
S: (2-)22-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 107133-87-9  
AND  
87172-89-2

EEC No 402-470-6

No 603-091-00-0





ES: exo-4-isopropil-1-metil-1,4-epoxiciclohexan-2-ol  
DA: exo-4-isopropyl-1-methyl-1,4-epoxycyclohexan-2-ol  
DE: Exo-4-isopropyl-1-methyl-1,4-epoxycyclohexan-2-ol  
EL: εξω-4-ισοπροπυλο-1-μεθυλ-1,4-εποξυκυκλοεξαν-2-όλη  
EN: exo-4-isopropyl-1-methyl-1,4-epoxycyclohexan-2-ol  
FR: exo-4-isopropyl-1-méthyl-1,4-époxy-cyclohexane-2-ol  
IT: eso-4-isopropil-1-metil-1,4-epossicicloesano-2-olo  
NL: exo-4-isopropyl-1-methyl-1,4-epoxycyclohexaan-2-ol  
PT: exo-4-isopropil-1-metil-1,4-epoxiciclohexan-2-ol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

O; R 8    Xn; R 22    Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

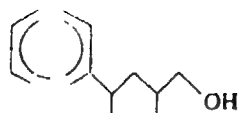
O	Xn	
		R : 8-22-36 S : (2-)26

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 92585-24-5

EEC No 402-770-7

No 603-092-00-6



ES: 4-fenil-2-metilpentanol

DA: 2-methyl-4-phenylpentanol

DE: 2-Methyl-4-phenylpentanol

EL: 2-μεθυλο-4-φαινυλοπεντανόλη

EN: 2-methyl-4-phenylpentanol

FR: 2-méthyl-4-phénylpentanol

IT: 4-fenil-2-metilpentanolo

NL: 4-phenyl-2-methylpentanol

PT: 4-fenil-2-metilpentanol

*Classificação, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 43

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

X <sub>i</sub>	N	
		R · 43-51/53
		S : (2-)24-37-61

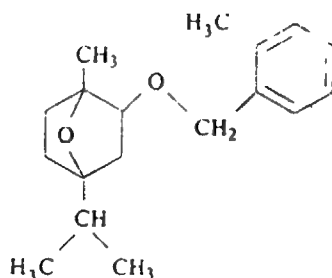
*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No —

EEC No 402-410-9

No 603-093-00-1



ES exo-(+/-)-1-metil-2-(2-metilbenziloxi)-4-isopropil-7-oxabicyclo(2.2.1)heptano

DA exo-(+/-)-1-methyl-2-(2-methylbenzyloxy)-4-isopropyl-7-oxabicyclo(2.2.1)heptan

DE exo-(+/-)-1-Methyl-2-(2-methylbenzyloxy)-4-isopropyl-7-oxabicyclo(2.2.1)heptan

EL εξο-(+/-)-1-μεθυλο-2-(2-μεθυλοβενζυλοξυ)-4-ισοπροπυλο-7-οξάδικοκυκλο(2.2.1)επτάνιο

EN exo-(+/-)-1-methyl-2-(2-methylbenzyloxy)-4-isopropyl-7-oxabicyclo(2.2.1)heptane

FR exo-(+/-)-1-méthyl-2-(2-méthylbenzyloxy)-4-isopropyl-7-oxabicyclo(2.2.1)heptane

IT eso-(+/-)-1-metil-2-(2-metilbenzilossi)-4-isopropil-7-ossabicyclo(2.2.1)eptano

NL exo-(+/-)-1-methyl-2-(2-methylbenzyloxy)-4-isopropyl-7-oxabicyclo(2.2.1)heptaan

PT exo-(+/-)-1-metil-2-(2-metilbenziloxi)-4-isopropil-7-oxabicyclo(2.2.1)heptano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn, R 20 N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

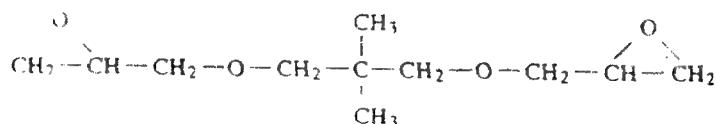
Xn	N	
		R : 20-51/53 S : (2-)22-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 17557-23-2

EEC No 241-536-7

No 603-094-00-7




- ES : 1,3-bis(2,3-epoxipropoxi)-2,2-dimetilpropano  
 DA : 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropan  
 DE : 1,3-Bis(2,3-epoxypropoxy)-2,2-dimethylpropan  
 EL : 1,3-δισ(2,3-εποξυπροποξυ)-2,2-διμεθυλοπροπάνιο  
 EN : 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane  
 FR : 1,3-bis(2,3-époxypropoxy)-2,2-diméthylpropane  
 IT : 1,3-bis(2,3-epossipropossi)-2,2-dimetilpropano ; neopentil-glicol diglicidil etere  
 NL : 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropan  
 PT : 1,3-bis(2,3-epoxipropoxi)-2,2-dimetilpropano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi ; R 38	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 38-43
	S : (2-)24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2807-30-9

EEC No 220-548-6

No 603-095-00-2



ES: 2-(propiloxi)etanol

DA: 2-(propyloxy)ethanol

DE: 2-(Propyloxy)ethanol; n-Propylglykol

EL: 2-(προπυλοξυ)αιθανόλη

EN: 2-(propyloxy)ethanol

FR: 2-(propyloxy)éthanol; éther monopropylique de l'éthyléneglycol

IT: 2-(propilossi)etanolo

NL: 2-(propyloxy)ethanol

PT: 2-(propiloxi)etanol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

R 10

Xn; R 21

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 10-21-36

S: (2-)24/25-36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 112-34-5

EEC No 203-961-6

No 603-096-00-8



ES: 2-(2-butoxiethoxi)etanol

DA: 2-(2-butoxyethoxy)ethanol

DE: 2-(2-Butoxyethoxy)ethanol; Butylglykol

EL: 2-(2-δουτοξαιθοξυ)αιθανόλη

EN: 2-(2-butoxyethoxy)ethanol

FR: 2-(2-butoxyéthoxy)éthanol; éther monobutylique du diéthylèneglycol

IT: 2-(2-butossietossi)etanolo; butil diglicole

NL: 2-(2-butoxyethoxy)ethanol

PT: 2-(2-butoxiethóxi)etanol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R: 36

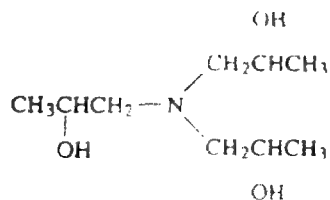
S: (2-)26

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 122-20-3

EEC No 204-528-4

No 603-097-00-3



ES: 1,1',1''-nitriлотрипропан-2-ол

DA: 1,1',1''-nitriлотрипропан-2-ол

DE: 1,1',1''-Nitriлотрипропан-2-ол ; Triisopropanolamin

EL: 1,1',1''-νιτροлотριπροπαν-2-όλη

EN: 1,1',1''-nitriлотрипропан-2-ol

FR: 1,1',1''-nitriлотрипропан-2-ol

IT: 1,1',1''-nitriлотрипропан-2-olo ; triisopropanolamina

NL: 1,1',1''-nitriлотрипропан-2-ol

PT: 1,1',1''-nitriлотрипропан-2-ol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiō, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36
	S : (2-)26

Límites de concentraciōn, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçāo


Cas No 122-99-6

EEC No 204-589-7

No 603-098-00-9



ES : 2-fenoxietanol

DA : 2-phenoxyethanol

DE : 2-Phenoxyethanol

EL : 2-φαινοξαιθανόλη

EN : 2-phenoxyethanol

FR : 2-phénoxyéthanol

IT : 2-fenossietanolo ; fenil glicol

NL : 2-fenoxyethanol

PT : 2-fenoxietanol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22

Xi ; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22-36

S : (2-)26

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 93633-79-5

EEC No 403.440-S

No 603-099-00-4

$$\text{CH}_3\text{NCOH} + \text{HOCH}_2\text{CH}_2\text{OH}$$

( )

11-3 246

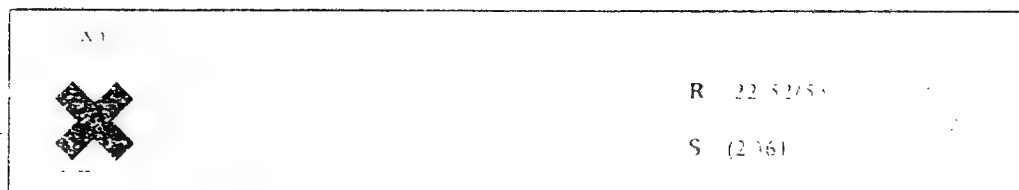
- |    |  |
|----|--|
| ES | 3-(N-metil-N-(4-metilamino-3-nitrofenil)amino)propano-1,2-diol · cloridrato      |
| DA | 3-(N-methyl-N-(4-methylamino-3-nitrophenyl)amino)propan-1,2-diolhydrochlorid     |
| DE | 3-(N-Methyl-N-(4-methylamino-3-nitrophenyl)amino)propan-1,2-diolhydrochlorid     |
| EL | 3-(N-μεθυλο-N-(4-μεθυλαμινο-3-νιτροφαινύλ)αμινο)προπανο-1,2-διόλη υδροχλωρική    |
| EN | 3-(N-methyl-N-(4-methylamino-3-nitrophenyl)amino)propan-1,2-diol · hydrochloride |
| FR | 3-(N-méthyl-N-(4-méthylamino-3-nitrophényl)amino)propan-1,2-diol · chlorhydrate  |
| IT | 3-(N-metil-N-(4-metilammino-3-nitrofenil)ammino)propan-1,2-diolo · cloridrato    |
| NL | 3-(N-methyl-N-(4-methylamino-3-nitrofenyl)amino)propan-1,2-diolhydrochloride     |
| PT | 3-(N-metil-N-(4-metilamino-3-nitrofenil)amino)propano-1,2-diol · cloridrato      |

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classifiation, Classificazione, Indeling, Classificatio*

Xn , R 22

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Etichellung, Etiquetage, Etichettatura, Kinnecken, Rotulagem



*Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte Oria avaykavpawc (Concentration limits)*  
*limite de concentration limite de concentration Konzentrationsgrenze Grenze de concentration*

[illegible]

Cas No 7778-85-0

EEC No 404-630-0

No 603-100



ES metiloxipropano  
 DA metiloxipropan  
 DE Dimethoxypropan  
 EL μεθυλοπροπάνιο  
   dimethoxypropán  
 FR diméthoxypropane  
 IT dimetossiprobano  
 NL dimethoxypropan  
 PT dimetoxipropano

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificatie*

F; R11-19

*Classification, Etikettering, Kennzeichnung, Ετισημασση, Labelling, Etikettering, Etikettering, Kennzeichen, Rotulajon*



R 11-19

S: (2-)9-16-24/25-33

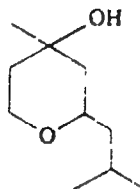
*Limits de concentration, Konzentration-grenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration Limits, límites de concentración, Limite di concentrazione, Concentrationgrenzen, Limites de concentration*




Cas No —

EEC No 405-040-6

No 603-101-00-3



- ES : tetrahydro-2-isobutyl-4-metilpiran-4-ol, mezcla de isómeros (cis y trans)  
 DA : tetrahydro-2-isobutyl-4-methylpyran-4-ol, blanding af isomerer (cis og trans)  
 DE : Tetrahydro-2-isobutyl-4-methylpyran-4-ol, isomerengemisch (cis und trans)  
 EL : τετραϋδρο-2-ισοβουτυλο-4-μεθυλοπυραν-4-όλη, μίγμα ισομερών (cis και trans)  
 EN : tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)  
 FR : tetrahydro-2-isobutyl-4-méthylpyranne-4-ol, mélange d'isomères (cis et trans)  
 IT : tetraido-2-isobutil-4-metilpiran-4-olo, miscela di isomeri (cis e trans)  
 NL : tetrahydro-2-isobutyl-4-methylpyraan-4-ol, mengsel van isomeren (cis en trans)  
 PT : tetrahydro-2-isobutil-4-metilpirano-4-ol, mistura de isómeros (cis e trans)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi ; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 36
	S : (2-)25-26

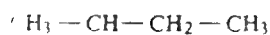
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 106-88-7

EEC No 203-438-2

No 603-102-00-9

()



ES 1,2-epoxibutano  
 DA 1,2-epoxybutan  
 DE 1,2-Epoxybutan  
 EL 1,2-εποξυβουτάνιο  
 EN 1,2-epoxybutane  
 FR 1,2-époxybutane  
 IT 1,2-epossibutano  
 NL 1,2-epoxybutaan  
 PT 1,2-epoxibutano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

F; R 11

Carc. Cat. 3; R 40

Xn; R 20/21/22

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

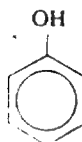
F	Xn	
		R : 11-20/21/22-36/37/38-40
		S : (2-)9-16-29-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 108-95-2

EEC No 203-632-7

No 604-001-00-2



ES: fenol

DA: phenol; fenol

DE: Phenol

EL: φαινόλη

EN: phenol

FR: phénol

IT: fenolo

NL: fenol

PT: fenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

T; R 24/25	C; R 34
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 24/25-34
	S : (1/2-)28-45

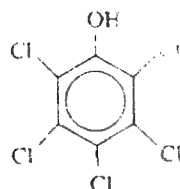
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 5 %	T; R 24/25-34
1 % ≤ C < 5 %	Xn; R 21/22-36/38

Cas No 87-86-5

EEC No 201-778-6

No 604-002-00-8



ES: pentaclorofenol  
 DA: pentachlorphenol  
 DE: Pentachlorphenol  
 EL: πενταχλωροφαινόλη  
 EN: pentachlorophenol  
 FR: pentachlorophénol  
 IT: pentaclorofenolo  
 NL: pentachloorfenol  
 PT: pentaclorofenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 3; R 40	T+; R 26	T; R 24/25	Xi; R 36/37/38	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	N	
		R : 24/25-26-36/37/38-40-50/53
		S : (1/2-)22-36/37-45-52-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No —

No 604-003-00-3

NOTA A

ES: sales del pentaclorofenol

DA: salte af pentachlorphenol

DE: Salze von Pentachlorphenol

EL: άλατα της πενταχλωροφαινόλης

EN: salts of pentachlorophenol

FR: sels de pentachlorophénol

IT: sali del pentaclorofenolo

NL: zouten van pentachloorfenol

PT: sais de pentaclorofenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiō, Classificazione, Indeling, Classificaçāo

Carc. Cat. 3 ; R 40	T+ ; R 26	T ; R 24/25	Xi ; R 36/37/38	N ; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	N	
		R : 24/25-26-36/37/38-40-50/53 S : (1/2-)22-36/37-45-52-60-61

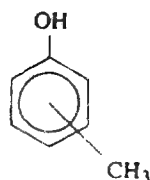
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçāo


Cas No 108-39-4 (m)  
95-48-7 (o)  
106-44-5 (p)  
1319-77-3 (mix)

EEC No 203-577-9 (m)  
202-423-8 (o)  
203-398-6 (p)  
215-293-2 (mix)

No 604-004-00-9

NOTA C




ES: metilfenol ; cresol  
DA: cresol ; methylphenol  
DE: Kresol  
EL: κρεσόλη  
EN: cresol  
FR: cresol  
IT: cresolo  
NL: kresol  
PT: cresol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 24/25      C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 24/25-34 S : (1/2-)36/37/39-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 5 %	T; R 24/25-34
1 % ≤ C < 5 %	Xn; R 21/22-36/38

Cas No 123-31-9

EEC No 204-617-8

No 604-005-00-4



ES : 1,4-dihidroxibenceno ; hidroquinona  
 DA : 1,4-dihydroxybenzen ; hydroquinon  
 DE : 1,4-Dihydroxy-benzol ; Hydrochinon  
 EL : 1,4-διυδροξυβενζόλιο · υδροκινόνη  
 EN : 1,4-dihydroxybenzene ; hydroquinone ; quinol  
 FR : 1,4-dihydroxybenzène ; hydroquinone  
 IT : 1,4-diidrossibenzene ; idrochinone  
 NL : 1,4-dihydroxy-benzeen ; hydrochinon  
 PT : 1,4-diidroxibenzeno ; hidroquinona ; quinol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 20/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20/22
	S : (2-)24/25-39

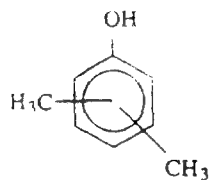
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 1300-71-6(mix.)

EEC No 215-089-3

No 604-006-00-X

NOTA C



ES : xilenol

DA : xilenol

DE : Xylenol

EL : ξυλενόλη

EN : xilenol

FR : xylénol

IT : xilenolo

NL : xilenol


PT : xilenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 24/25

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 24/25-34</p> <p>S : (1/2-)28-45</p> </div> </div>
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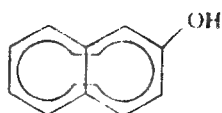
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 135-19-3

EEC No 205-182-7

No 604-007-00-5



ES : 2-naftol ; β-naftol

DA : 2-naphtol ; β-naphtol

DE : 2-Naphthol ; β-Naphthol

EL : 2-ναφθόλη · β-ναφθόλη

EN : 2-naphthol ; β-naphthol

FR : 2-naphtol ; β-naphtol

IT : 2-naftolo ; β-naftolo

NL : 2-naftol ; β-naftol

PT : 2-naftol ; β-naftol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn ; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xn	
	R : 20/22
	S : (2-)24/25

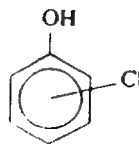
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 108-43-0 (m)  
95-57-8 (o)  
106-48-9 (p)  
25167-80-0 (mix)

EEC No 203-582-6 (m)  
202-433-2 (o)  
203-402-6 (p)  
246-691-4 (mix)

No 604-008-00-0

NOTA C



ES : clorofenol  
DA : chlorphenol  
DE : Chlorophenol  
EL : χλωροφαινόλη  
EN : chlorophenol  
FR : chl.ophénol  
IT : clorofenolo  
NL : chloorfenol  
PT : clorofenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

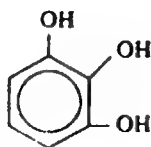
Xn	
	R : 20/21/22
	S : (2-)28

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 87-66-1

EEC No 201-762-9

No 604-009-00-6



ES: 1,2,3-bencenotriol ; pirogalol

DA: 1,2,3-trihydroxybenzen ; pyrogallol

DE: 1,2,3-Trihydroxybenzol ; Pyrogallol

EL: 1,2,3-τριυδροξυβενζόλιο · πυρογαλλόλη

EN: 1,2,3-trihydroxybenzene ; pyrogallol

FR: 1,2,3-benzèneetriol ; pyrogallol

IT: 1,2,3-triidrossibenzene ; pirogallolo

NL: 1,2,3-trihydroxybenzeen ; pyrogallol

PT: 1,2,3-triidroxibenzeno ; pirogalol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20/21/22
	S : (2)

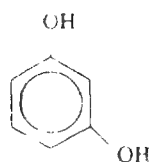
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	Xn ; R 20/21/22

Cas No 108-46-3

EEC No 203-585-2

No 604-010-00-1



ES 1,3-bencenodiol ; resorcinol

DA 1,3-benzendiol , resorcinol

DE 1,3-Dihydroxybenzol , Resorcin

EL 1,3-διυδροξυβενζόλιο-ρεσορκινόλη

EN resorcinol ; 1,3-benzenediol

FR 1,3-benzènediol ; résorcinol

IT 1,3-diidrossibenzene ; resorcina

NL 1,3-benzeendiol ; resorcinol

PT 1,3-diidroxibenzeno ; resorcinol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xn ; R 22	Xi ; R 36/38	N ; R 50
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 22-36/38-50 S : (2-)26-61

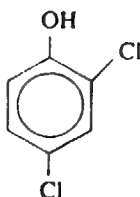
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 20 \%$	Xn ; R 22-36/38
$10 \% \leq C < 20 \%$	Xn , R 22

Cas No 120-83-2

EEC No 204-429-6

No 604-011-00-7



ES: 2,4-diclorofenol  
 DA: 2,4-dichlorphenol  
 DE: 2,4-Dichlorphenol  
 EL: 2,4-διχλωροφαινόλη  
 EN: 2,4-dichlorophenol  
 FR: 2,4-dichlorophénol  
 IT: 2,4-diclorofenolo  
 NL: 2,4-dichloorfenol  
 PT: 2,4-diclorofenol  
 FI: 2,4-dikloorifenoli  
 SV: 2,4-diklorfenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 21/22	C; R 34	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

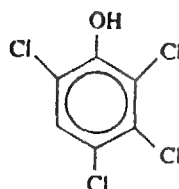
C	N	
		R: 21/22-34-51/53
		S: (1/2-)26-36/37/39-45-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãu, Pitoisumsrajai, Koncentrationsgranser*


Cas No 58-90-2

EEC No 200-402-8

No 604-013-00-8



ES: 2,3,4,6-tetraclorofenol

DA: 2,3,4,6-tetrachlorphenol

DE: 2,3,4,6-Tetrachlorphenol

EL: 2,3,4,6-τετραχλωροφαινόλη

EN: 2,3,4,6-tetrachlorophenol

FR: 2,3,4,6-tétrachlorophénol

IT: 2,3,4,6-tetraclorofenolo

NL: 2,3,4,6-tetrachloorfenol

PT: 2,3,4,6-tetraclorofenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 25

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 25-36/38

S : (1/2-)26-28-37-45

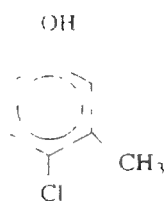
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 20 %	T; R 25-36/38
5 % ≤ C < 20 %	T; R 25
0,5 % ≤ C < 5 %	Xn; R 22

Cas No 59-50-7

EEC No 200-431-6

No 604-014-00-3



ES: clorocresol  
 DA: chlorocresol  
 DE: Chlorkresol; 4-Chlor-3-methylpheno  
 EL: χλωροκρεζόλη  
 EN: chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol  
 FR: chlorocrésol  
 IT: clorocresolo  
 NL: chloorkresol  
 PT: clorocresol  
 FI: kloorikresoli, 4-kloori-3-metyylifenoli  
 SV: klorkresol, 4-klor-3-metylfenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification*  
*Classification, Classificazione, Indeling, Classificaçã, Luokitus, Klassificering*

Xn; R 21/22	Xi; R 41	R 43	N; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling*  
*Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnit, Märkning*

Xn	N	
		R: 21/22-41-43-50
		S: (2-326-36/37/39-61

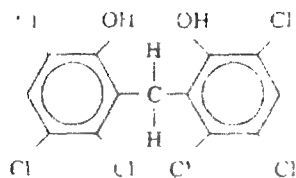
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης*  
*Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen*  
*Limites de concentraçã, Pitoisuu rajat, Konzentrationgrænser*

$C \geq 10\%$	Xn, R 21/22-41-43
$5\% \leq C < 10\%$	Xn, R 21/22-36-43
$1\% \leq C < 5\%$	Xi; R 43

Cas No 70-30-4

EEC No 200-733-8

No 604-015-00-9



- ES 2,2'-metilen-bis(3,4,6-triclorofenol) ; hexaclorofeno  
 DA 2,2'-methylen-bis-(3,4,6-trichlorphenol) ; hexachlorophen  
 DE 2,2'-Methylen-bis-(3,4,6-trichlorphenol) ; Hexachlorophen  
 EL 2,2'-μεθυλενο-δισ-(3,4,6-τριχλωροφαινόλη) ; εξαχλωροφαινόλιο  
 EN 2,2'-methylenebis-(3,4,6-trichlorophenol) ; hexachlorophene  
 FR 2,2'-méthylène-bis(3,4,6-trichlorophénol) ; hexachlorophène  
 IT 2,2'-metilen-bis-(3,4,6-triclorofenolo) ; esaclorofene  
 NL 2,2'-methyleen-bis-(3,4,6-trichloorfenol) ; hexachloroteen  
 PT 2,2'-metileno-bis(3,4,6-triclorofenol) ; hexaclorofeno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

T ; R 24/25	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	N	
		R : 24/25-50/53
		S : (1/2-)20-37-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*

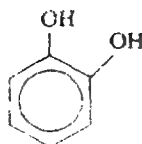
C ≥ 2 %	T ; R 24/25
0,2 % ≤ C < 2 %	Xn ; R 21/22



Cas No 120-80-9

EEC No 204-427-5

No 604-016-00-4



ES : 1,2-dihidroxibenceno ; pirocatecol

DA : dihydroxybenzen ; pyrocatechol

DE : 1,2-Dihydroxybenzol ; Brenzcatechin

EL : πυροκατεχόλη · 1,2-διυδροξυδενζόλιο

EN : 1,2-dihydroxybenzene ; pyrocatechol

FR : 1,2-dihydroxybenzène ; pyrocatechol

IT : 1,2-diidrossibenzene ; pirocatecolo

NL : 1,2-dihydroxybenzeen ; pyrocatechol

PT : 1,2-diidroxibenzeno ; pirocatecol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 21/22

Xi ; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 21/22-36/38

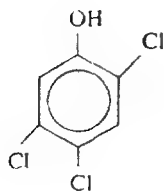
S : (2-)22-26-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 95-95-4

EEC No 202-467-8

No 604-017-00-X



ES : 2,4,5-triclorofenol  
 DA : 2,4,5-trichlorophenol  
 DE : 2,4,5-Trichlorphenol  
 EL : 2,4,5-τριχλωροφαινόλη  
 EN : 2,4,5-trichlorophenol  
 FR : 2,4,5-trichlorophénol  
 IT : 2,4,5-triclorofenolo  
 NL : 2,4,5-trichloorfenol  
 PT : 2,4,5-triclorofenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22	Xi ; R 36/38	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	N	
		R : 22-36/38-50/53
		S : (2-)26-28-60-61

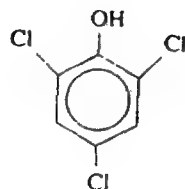
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 20 %	Xn ; R 22-36/38
5 % ≤ C < 20 %	Xi ; R 36/38

Cas No 88-06-2

EEC No 201-795-9

No 604-018-00-5



ES : 2,4,6-triclorofenol

DA : 2,4,6-trichlorphenol

DE : 2,4,6-Trichlorphenol

EL : 2,4,6-τριχλωροφαινόλη

EN : 2,4,6-trichlorophenol

FR : 2,4,6-trichlorophénol

IT : 2,4,6-triclorofenolo

NL : 2,4,6-trichloorfenol

PT : 2,4,6-triclorofenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 3 ; R 40

Xn ; R 22

Xi ; R 36/38

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-36/38-40

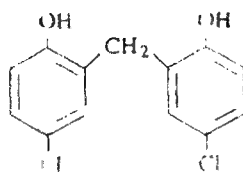
S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 97-23-4

EEC No- 202-567-1

No 604-019-00-0



- ES : diclorofeno (ISO) ; 4,4'-dicloro-2,2'-metilendifenol  
 DA : dichlorophen (ISO) ; 4,4'-dichlor-2,2'-methylandiphenol  
 DE : Dichlorophen (ISO) ; 4,4'-Dichlor-2,2'-methylandiphenol  
 EL : dichlorophen (ISO) ; 4,4'-διχλωρο-2,2'-μεθυλενοδιφαινόλη  
 EN : dichlorophen (ISO) ; 4,4'-dichloro-2,2'-methylenediphenol  
 FR : dichlorophène (ISO) ; 4,4'-dichloro-2,2'-méthylènediphénol  
 IT : diclorofene (ISO) ; 4,4'-dicloro-2,2'-metilendifenolo  
 NL : dichlorofeen (ISO) ; 4,4'-dichloor-2,2'-methyleendifenol  
 PT : diclorofene (ISO) ; 4,4'-dicloro-2,2'-metilenodifenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22	Xi ; R 36
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

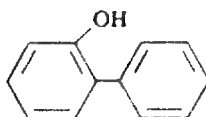
Xn	
	R : 22-36
	S : (2-)26

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 90-43-7

EEC No 201-993-5

No 604-020-00-6



ES : bifenil-2-ol ; 2-hidroxibifenilo

DA : biphenyl-2-ol ; 2-hydroxybiphenyl

DE : Biphenyl-2-ol ; 2-Hydroxybiphenyl

EL : διφαινυλ-2-όλη · 2-υδροξυδιφαινύλιο

EN : biphenyl-2-ol ; 2-hydroxybiphenyl ; 2-phenylphenol (ISO)

FR : biphenyl-2-ol ; 2-hydroxybiphényle

IT : bifenil-2-olo ; 2-idrossibifenile

NL : biphenyl-2-ol ; 2-hydroxybiphenyl

PT : 2-bifenilol ; 2-hidroxibifenilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xi ; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennzeichen, Rotulagem*

Xi



R : 36/38

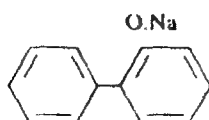
S : (2-)22

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 132-27-4

EEC No 205-055-6

No 604-021-00-1



ES: oxido de sodio y de bifenil-2-ilo

DA: natnumbiphenyl-2-yloxid

DE: Natriumbiphenyl-2-yloxid

EL: διφαινυλ-2-υλικό νάτριο

EN: sodium 2-biphenylate; 2-phenylphenol, sodium salt

FR: biphényl-2-ylate de sodium; biphényl-2-olate de sodium

IT: ossido di sodio e bifenil-2-ile

NL: natnumbiphenyl-2-yloxide

PT: 2-bifenilato de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 38-41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-38-41

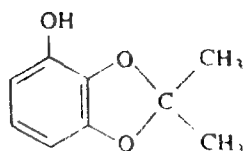
S : (2-)22-26

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 22961-82-6

EEC No 400-900-7

No 604-022-00-7



ES: 2,2-dimetil-1,3-benzodioxol-4-ol

DA: 2,2-dimethyl-1,3-benzodioxol-4-ol

DE: 2,2-Dimethyl-1,3-benzodioxol-4-ol

EL: 2,2-διμεθυλο-1,3-δενζοδιοξολ-4-όλη

EN: 2,2-dimethyl-1,3-benzodioxol-4-ol

FR: 2,2-diméthyl-1,3-benzodioxole-4-ol

IT: 2,2-dimetil-1,3-benzodiossol-4-olo

NL: 2,2-dimethyl-1,3-benzodioxool-4-ol

PT: 2,2-dimetil-1,3-benzodioxol-4-ol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi; R 41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 41

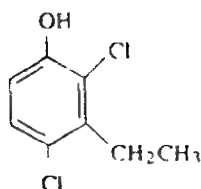
S : (2-)24-26-39

Limites de concentraciön, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçõ


Cas No

EEC No 401-060-4

No 604-023-00-2



ES : 2,4-dicloro-3-etilfenol

DA : 2,4-dichlor-3-ethylphenol

DE : 2,4-Dichlor-3-ethylphenol

EL : 3-αιθυλο-2,4-διχλωροφαινόλη

EN : 2,4-dichloro-3-ethylphenol

FR : 2,4-dichloro-3-éthylphénol

IT : 2,4-dicloro-3-etilfenolo

NL : 2,4-dichloor-3-ethylfenol

PT : 2,4-dicloro-3-etilfenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

C ; R 34

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	N	
		R : 34-50/53
		S : (1/2-)26-36/39-45-60-61

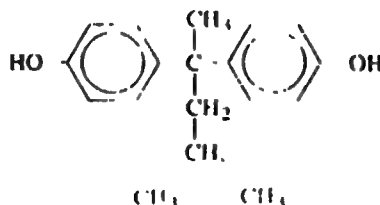
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 6807-17-6

EEC No 401-720-1

No 604-024-00-8



ES : 4,4'-isobutiletilidendifenol  
 DA : 4,4'-isobutylethylidendiphenol  
 DE : 4,4'-Isobutylethylidendiphenol  
 EL : 4,4'-ισοβουτυλαιθυλιδενοδιφαινόλη  
 EN : 4,4'-isobutylethylidendiphenol  
 FR : 4,4'-isobutyléthylidènediphénol  
 IT : 4,4'-isobutiletilidendifenolo  
 NL : 4,4'-isobutylethylidendifenoel  
 PT : 4,4'-isobutiletilidenodifenol

*Clasificación, Klassificering, Einstufung, Ταξινόγηση, Classification, Classifikation, Classificazione, Indeling, Classificacão*

Xi ; R 36

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

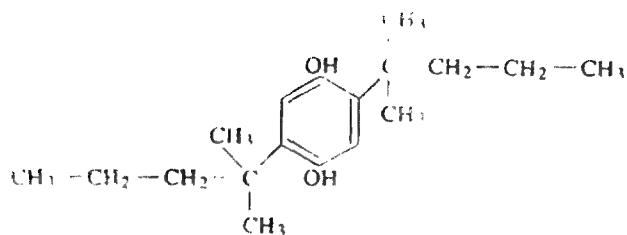
Xi	N	
		R : 36-50/53
		S : (2-)26-60-61

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No

EEC No 400-220-0

No 604-025-00-3



- ES 2,5-bis(1,1-dimetilbutil)hidroquinona  
 DA 2,5-bis(1,1-dimethylbutyl)hydroquinon  
 DE 2,5-Bis(1,1-dimethylbutyl)hydrochinon  
 EL 2,5-δισ(1,1-διμεθυλοβουτυλο)υδροκινόνη  
 EN 2,5-bis(1,1-dimethylbutyl)hydroquinone  
 FR 2,5-bis(1,1-diméthylbutyl)hydroquinone  
 IT 2,5-bis(1,1-dimetilbutil)idrochinone  
 NL 2,5-bis(1,1-dimethylbutyl)hydrochinon  
 PT 2,5-bis(1,1-dimetilbutil)hidroquinona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

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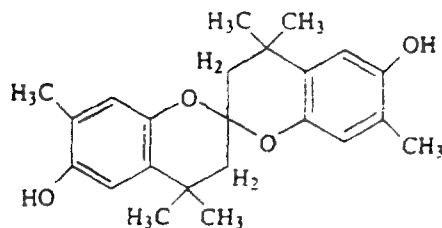
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

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EEC No 400-270-3

No 604-026-00-9



ES: 2,2'-espirobi(6-hidroxi-4,4,7-trimetilcromano)

DA: 2,2'-spirobi(6-hydroxy-4,4,7-trimethylchroman)

DE: 2,2'-Spirobi(6-hydroxy-4,4,7-trimethylchroman)

EL: 2,2'-σπειροδι(6-υδροξυ-4,4,7-τριμεθυλοχρωμάνιο)

EN: 2,2'-spirobi(6-hydroxy-4,4,7-trimethylchromane)

FR: 2,2'-spirobi(6-hydroxy-4,4,7-triméthylchromanne)

IT: 2,2'-spirobi(6-idrossi-4,4,7-trimetilcromano)

NL: 2,2'-spirobi(6-hydroxy-4,4,7-trimethylchromaan)

PT: 2,2'-espirobi(6-hidroxi-4,4,7-trimetilcromano)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

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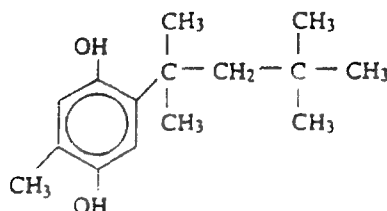
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

—

EEC No 400-530-6

No 604-027-00-4



- ES : 2-metil-5-(1,1,3,3-tetrametilbutil)hidroquinona  
 DA : 2-methyl-5-(1,1,3,3-tetramethylbutyl)hydroquinon  
 DE : 2-Methyl-5-(1,1,3,3-tetramethylbutyl)hydrochinon  
 EL : 2-μεθυλο-5-(1,1,3,3-τετραμεθυλοδουτυλ)υδροκινόνη  
 EN : 2-methyl-5-(1,1,3,3-tetramethylbutyl)hydroquinone  
 FR : 2-méthyl-5-(1,1,3,3-tétraméthylbutyl)hydroquinone  
 IT : 2-metil-5-(1,1,3,3-tetrametilbutil)idrochinone  
 NL : 2-methyl-5-(1,1,3,3-tetramethylbutyl)hydrochinon  
 PT : 2-metil-5-(1,1,3,3-tetrametilbutil)hidroquinona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi ; R 41

R 43

N ; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	N	
		R : 41-43-51/53
		S : (2-)24/25-26-37-61

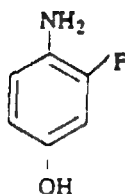
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 399-95-1

EEC No 402-230-0

No 604-028-00-X

NOTA E



ES: 4-amino-3-fluorofenol

DA: 4-amino-3-fluorphenol

DE: 4-Amino-3-fluorphenol

EL: 4-αμινό-3-φθοροφαινόλη

EN: 4-amino-3-fluorophenol

FR: 4-amino-3-fluorophénol

IT: 4-ammino-3-fluorofenolo

NL: 4-amino-3-fluorfenol

PT: 4-amino-3-fluorfenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

Xn; R 22

R 43

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

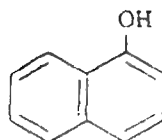
T	N	
		R : 45-22-43-51/53
		S : 53-45-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90-15-3

EEC No 201-969-4

No 604-029-00-5



ES : 1-nattol

DA : 1-naphtol

DE : 1-Naphtol

EL : 1-ναφθόλη

EN : 1-naphtol

FR : 1-naphtol

IT : naftolo

NL : nattol


PT : naftol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn ; R 21/22

Xi ; R 37/38-41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

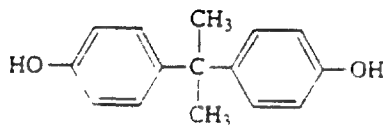
<p>Xn</p> 	<p>R : 21/22-37/38-41</p> <p>S : (2-)22-26-37/39</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 80-05-7

EEC No 201-245-8

No 604-030-00-0



ES : 4,4'-isopropilidendifenol

DA : 4,4'-isopropylidendiphenol

DE : 4,4'-Isopropylidendiphenol

EL : 4,4'-ισοπροπυλιδενοδιφαινόλη

EN : 4,4'-isopropylidenediphenol

FR : 4,4'-isopropylidenediphénol ; bisphénol A

IT : 4,4'-isopropilidendifenolo

NL : 4,4'-isopropylideendifenol

PT : 4,4'-isopropilidenodifenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

Xi : R 36/37/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/37/38-43

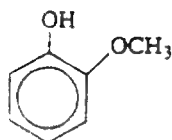
S : (2-)24-26-37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 90-05-1

EEC No 201-964-7

No 604-031-00-6



ES: guayacol

DA: guaiacol; 2-methoxyphenol

DE: Guajakol; 2-Methoxyphenol

EL: γουαϊακόλη

EN: guaiacol

FR: guaiacol; 2-méthoxyphénol

IT: guaiacolo; 2-metossifenoio

NL: guajacol

PT: guaiacol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 22-36/38

S: (2-)26

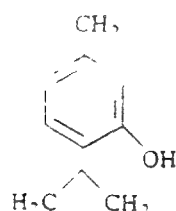
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 89-83-8

EEC No 201-944-8

No 604-032-00-1



ES: timol

DA: thymol

DE: Thymol

EL: θυμόλη

EN: thymol

FR: thymol

IT: timolo; 5-metil-2-(1-metiletil)fenolo

NL: thymol

PT: timol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Xn; R 22 C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

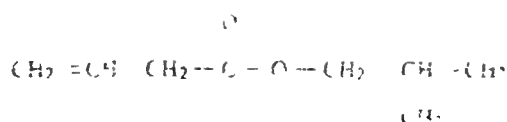
C	
	R : 22-34
	S : (1/2-)26-28-36/37/39

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 24342-63-8

EEC No 401-170-2

No 604 033-00-7



ES but-3-enoato de isobutilo  
 DA isobutylbut-3-enoat  
 DE Isobutylbut-3-enoat  
 EL βουτ-3-ενικό ισοβουτύλιο  
 EN isobutyl but-3-enoate  
 FR but-3-enoate d isobutyle  
 IT but-3-enoato di isobutile  
 NL isobutylbut-3-enoaat  
 PT but-3-enoato de isobutilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

R 10

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 10

S : (2)

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas. No 24197-34-0

EEC No 403-330-7

No 604-034-00-2



ES 4,4'-thiodi-o-cresol  
 DA 4,4'-thiodi-o-cresol  
 DE 4,4'-Thiodi-o-kresol  
 FL 4,4'-thiodi-o-kresol  
 FR 4,4'-thiodi-o-cresol  
 GR 4,4'-thiodi-o-cresol  
 IT 4,4'-thiodi-o-cresolo  
 NL 4,4'-thiodi-o-cresol  
 PT 4,4'-thiodi-o-cresol

Classification: Κλάση κινδύνου Τοξικότητα, Classification, Classificazione, Indeling, Classificação

Xi; R 41

N; R 50-53

Etiquetado: Επισήμανση, Κεντρικά στοιχεία, Etichettatura, Etikettering, Etsikettatura, Kenmerken, Rutulagem

Xi	N	
		
		R : 41-50/53
		S : (2-)26 39-60-61

Limits of concentration: Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No

—

EEC No 404-160-6

No 604-035-00-8


- ES: 4-nonilfenol, productos de reacción con formaldehído y dodecano-1-tiol  
 DA: 4-nonylphenol, reaktionsprodukter med formaldehyd og dodecan-1-thiol  
 DE: 4-Nonylphenol, reaktionsprodukte mit Formaldehyd und Dodecan-1-thiol  
 EL: 4-εννεύλοφαινόλη, προϊόντα αντιδράσης με φορμαλδεϋδη και δωδεκανο-1-θειόλη  
 EN: 4-nonylphenol, reaction products with formaldehyde and dodecane-1-thiol  
 FR: 4-nonylphénol, produits de réaction avec le formaldehyde et le dodécane-1-thiol  
 IT: 4-nonilfenolo, prodotti di reazione con formaldeide e dodecan-1-tiolo  
 NL: 4-nonylphenol, reaktieprodukten met formaldehyd en dodecaan-1-thiol  
 PT: 4-nonilfenol, produtos de reacção com formaldeído e dodecano-1-tiol

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classificazione, Classificação, Classificazione, Inblich, Classificação*

R 43

R 53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etikettatura, Kennzeichen, Rotulagem*

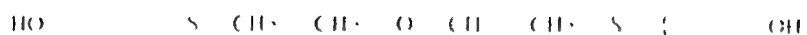
X <sub>1</sub>	
	R 43-53
	S 1 (2) 24-37-61

*Límites de concentración, Konzentrationen, Konzentrationen, Concentrationen, Όρια συγκέντρωσης, Limites de concentration, Limiti di concentrazione, Concentrazioni, Limites de concentração*


Cas No 90884-29-0

EEC No 404-590-4

No 604-036-00-3



- ES 4,4'-oxibis(etilentio)difenol  
 DA 4,4'-oxybis(ethylenethio)diphenol  
 DE 4,4'-Oxybis(ethylenethio)diphenol  
 EL 4,4'-οξυβισ(αιθυλιθιο)διφαινόλη  
 EN 4,4'-oxybis(ethylenethio)diphenol  
 FR 4,4'-oxybis(éthylénethio)diphénol  
 IT 4,4'-ossibis(etilentio)difenolo  
 NL 4,4'-oxybis(ethyleenthio)difenol  
 PT 4,4'-oxibis(etileno)dicfenol

Classification Classification Classification Classification Classification Classification Classification Classification

R 43

N, R 51-53

Etiquetado Etikettering Beskrivning Etikettering Etikettering Etikettering Etikettering Etikettering Etikettering

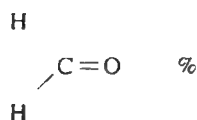
X <sub>1</sub>	N	
		R 43-51/53 S: (2-)24-37-61

Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzen Oria avyktirgredi Concentration limits  
 Limites de concentratióe Limite di concentratióe Concentratiegrenzen, Limites de concentraçã


Cas No 50-00-0

EEC No 200-001-8

No 605-001-00-5

NOTA B  
NOTA D

ES: formaldehído ... %

DA: formaldehyd ... %

DE: Formaldehyd ... %

EL: φορμαλδεϋδη ... %

EN: formaldehyde . %

FR: formaldéhyde ... %

IT: formaldeide . %

NL: formaldehyde . %

PT: formaldeído ... %


FI: formaldehydi %

SV: formaldehyd . %

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3, R 40	T, R 23/24/25	C, R 34	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etichetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T	R. 23/24/25-34-40-43
	S: (1/2-)26-36/37/39-45-51

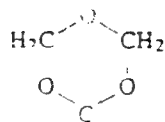
*Límites de concentración, Koncentrationsgränser, Konzentrationsgrenzuerte, Όρια συέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao, Piirajuurajat, Koncentrationsgränser*

C ≥ 25 %	T, R 23/24/25-34-40-43
5 % ≤ C < 25 %	Xn, R 20/21/22-36/37/38-40-43
1 % ≤ C < 5 %	Xn, R 40-43
0,2 % ≤ C < 1 %	Xn, R 43

Cas No 110-88-3

EEC No 203-812-5

No 605-002-00-0



ES: 1,3,5-trioxano; trioximetileno  
 DA: 1,3,5-trioxan; trioxymethylen  
 DE: 1,3,5-Trioxan; Trioxymethylen  
 EL: 1,3,5-τριοξάνιο · τριοξυμεθυλένιο  
 EN: 1,3,5-trioxan; trioxymethylene  
 FR: 1,3,5-trioxanne; trioxyméthylène  
 IT: 1,3,5-triossano; triossimetilene  
 NL: 1,3,5-trioxaan; trioxymethyleen  
 PT: 1,3,5-trioxano; trioximetileno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22 S : (2-)24/25

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 75-07-0

EEC No 200-836-8

No 605-003-00-6



ES: acetaldehído; etanal

DA: acetaldehyd; ethanal

DE: Acetaldehyd; Ethanal

EL: ακεταλδεϋδη· αιθανάλη

EN: acetaldehyde; ethanal

FR: acetaldéhyde; aldéhyde acétique; éthanal

IT: acetaldeide; etanale

NL: acetaldehyde; ethanal

PT: acetaldeído; aldeído acético; etanal



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F+; R 12

Carc. Cat. 3; R 40

Xi; R 36/37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerkén, Rotulagem*

F+	Xn	
		
		R : 12-36/37-40
		S : (2-)16-33-36/37

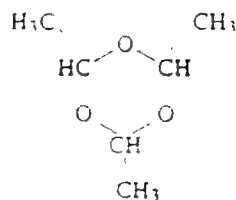
*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo*




Cas No 123-63-7

EEC No 204-639-8

No 605-004-00-1



ES: 2,4,6-trimetil-1,3,5-trioxano; paraidehido

DA: 2,4,6-trimethyl-1,3,5-trioxan; paraldehyd

DE: 2,4,6-Trimethyl-1,3,5-trioxan; Paraidehyd

EL: 2,4,6-τριμεθυλο-1,3,5-τριοξάνιο; παραλδεϋδη

EN: 2,4,6-trimethyl-1,3,5-trioxan; paraldehyde

FR: 2,4,6-triméthyl-1,3,5-trioxanne; paraldéhyde

IT: paraldeide

NL: paraldehyde

PT: 2,4,6-trimetil-1,3,5-trioxano; paraideído

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F



R: 11

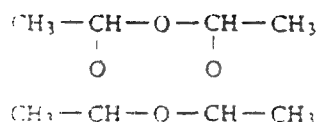
S: (2-)9-16-29-33

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 108-62-3

EEC No 203-600-2

No 605-005-00-7




- ES 2,4,6,8-tetrametil-1,3,5,7-tetraoxaciclooctano : metaldehido  
 EN 2,4,6,8-tetramethyl-1,3,5,7-tetraoxacycloctan : metaldehyd  
 DE 2,4,6,8-Tetramethyl-1,3,5,7-tetraoxacycloctan : Metaldehyd  
 EL 2,4,6,8-τετραμεθυλο-1,3,5,7-τετραοξακυκλοοκτάνιο : μεταλδεϋδη  
 EN 2,4,6,8-tetramethyl-1,3,5,7-tetraoxacyclooctane : metaldehyde  
 FR 2,4,6,8-tétraméthyl-1,3,5,7-tétraoxacyclooctane : métaaldéhyde  
 IT 2,4,6,8-tetrametil-1,3,5,7-tetracicloottano : metaldeide  
 NL 2,4,6,8-tetramethyl-1,3,5,7-tetraoxacyclooctaan : metaldehyde  
 PT 2,4,6,8-tetrametil-1,3,5,7-tetraoxaciclooctano : metaldeído

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 10-22
	S : (2-)13-25-46

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 123-72-8

EEC No 204-646-6

No 605-006-00-2



ES: butiraldehido

DA: butanal; butyraldehyd

DE: Butyraldehyd; Butanal

EL: βουτυρική αλδεϋδη · βουτανάλη

EN: butyraldehyde

FR: aldéhyde butyrique

IT: aldeide butirrica; butirraldeide


NL: butyraldehyde

PT: butiraldeído; aldeído butírico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

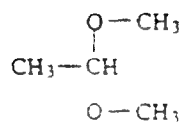
<p>F</p> 	<p>R : 11</p> <p>S : (2)-9-29-33</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 534-15-6

EEC No 208-589-8

No 605-007-00-8



ES: 1,1-dimetoxietano; dimetilacetal

DA: 1,1-dimethoxyethan; acetaldehyddimethylacetal; dimethylacetal

DE: 1,1-Dimethoxy-ethan; Dimethylacetal

EL: 1,1-διμεθυξαιθάνιο · διμεθυλοακετάλη

EN: 1,1-dimethoxyethane; dimethyl acetal

FR: 1,1-diméthoxyéthane; acétal méthylique

IT: dimetilacetale

NL: 1,1-dimethoxyethaan; dimethylacetaal

PT: 1,1-dimetoxietano; dimetilacetal

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F



R : 11

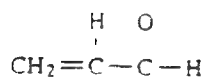
S : (2-)-9-16-33

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 107-02-8

EEC No 203-453-4

No 605-008-00-3



ES: aldehido acrílico; acroleína

DA: acrylaldehyd; acrolein

DE: Acrylaldehyd; Acrolein

EL: ακρολδεΐνη

EN: acrylaldehyde; acrolein

FR: acrylaldéhyde; acroléine

IT: acrilaldeide; acroleina

NL: acrylaldehyde; acroleine

PT: acrilaldeído; acroleína

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

F: R 11

T+: R 26

T: R 25

C: R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kennmerken, Rotulagem

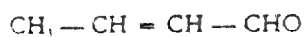
F	T+	
		R: 11-25-26-34
		S: (1/2-)/3/9/14-26-36/37/39-38-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 123-73-9  
4170-30-3

EEC No 204-647-1  
224-030-0

No 605-009-00-9



ES 2 butenal; crotonaldehído

DA 2 butenal; crotonaldehyd

DE 2 Butenal; Crotonaldehyd

EL 2-δουτενάλη· κροτωνική αλδεϋδη

FN 2 butenal; crotonaldehvde

FR 2-buténal; aldéhyde crotonique

IT 2-butenal; crotonaldeide



NL 2-butenal; crotonaldehvde

PT 2 butenal; crotonaldeido

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

F; R 11	T; R 23	Xi; R 36/37/38
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

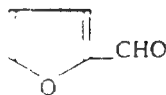
F	T	
		
		R: 11-23-36/37/38
		S: (1/2)-29-33-45

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 98-01-1

EEC No 202-627-7

No 605-010-00-4



ES: 2-furaldehído; furfural

DA: 2-furylmethanal; furfural; 2-furaldehyd

DE: 2-Furyl-methanal; Furfural

EL: 2-φουραλδεϋδη · φουρφουράλη · φουρφουραλδεϋδη

EN: 2-furaldehyde; furfural; furfuraldehyde

FR: 2-furaldéhyde; furfural

IT: aldeide 2-furilica; furfuolo

NL: furfural; 2-furaldehyde

PT: 2-furaldeído; furfural

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 23/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 23/25
	S : (1/2-)24/25-45

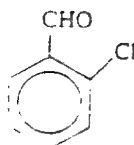
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 5 %	T; R 23/25
1 % ≤ C < 5 %	Xn; R 20/22

Cas No 89-98-5

EEC No 201-956-3

No 605-011-00-X



ES = clorobenzaldehído ; o-clorobenzaldehído

DA = o-chlorbenzaldehyd

DE = o-Chlorbenzaldehyd

EL = ο-χλωροβενζαλδεϋδη ; ο-χλωροβενζαλδεϋδη

EN = o-chlorobenzaldehyde ; o-chlorobenzaldehyde

FR = o-chlorobenzaldéhyde ; aldéhyde o-chlorobenzoïque

IT = o-clorobenzaldeide ; o-clorobenzaldeide

NL = o-chloorbenzaldehyde ; o-chloorbenzaldehyde

PT = o-clorobenzaldeído ; o-clorobenzaldeído

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C ; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

	<p>R : 34</p> <p>S : (1/2-)26-45</p>
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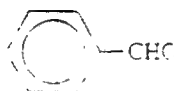
Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 100-52-7

EEC No 202-860-4

No 605-012-00-5



ES: benzaldehido

DA: benzaldehyd

DE: Benzaldehyd

EL: βενζαλδεϋδη

EN: benzaldehyde

FR: benzaldéhyde; aldéhyde benzoïque

IT: benzaldeide; aldeide benzoica

NL: benzaldehyde

PT: benzaldeído; aldeído benzóico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

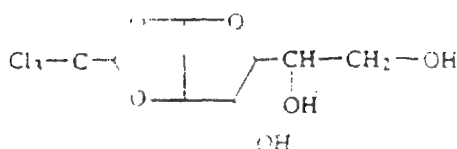
<p>Xn</p> 	<p>R : 22</p> <p>S : (2-)24</p>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 15879-93-3

EEC No 240-016-7

No 605-013-00-0




- ES Chloralosa (DCI); (R)-1,2-O-(2,2,2-tricloroetiliden)-α-D-glucofuranosa; glucocloralosa; anhidroglucocloral
- DA chloralose (INN); (R)-1,2-O-(2,2,2-trichlorethyliden)-α-D-glucofuranose; glucochloralose; anhydroglucochloral
- DE Chloralose (INN); (R)-1,2-O-(2,2,2-Trichlorethyliden)-α-D-glucofuranose; Glucochloralose; Anhydroglucochloral
- EL chloralose (INN); (R)-1,2-O-(2,2,2-τριχλωροαιθυλιδενο)-α-D-γλυκοφουρανόζη; χλωραγόλη
- EN chloralose (INN); (R)-1,2-O-(2,2,2-trichloroethylidene)-α-D-glucofuranose; glucochloralose; anhydroglucochloral
- FR chloralose (DCI); (R)-1,2-O-(2,2,2-trichloroethylidène)-α-D-glucofuranose; glucochloralose; anhydroglucochloral
- IT chloralosio (DCI); (R)-1,2-O-(2,2,2-tricloroetiliden)-α-D-glucofuranosio; glucocloralosio; anidroglucocloralio
- NL chloralose (INN); (R)-1,2-O-(2,2,2-trichloorethylideen)-α-D-glucofuranose; glucochloralose; anhydroglucochloral
- PT chloralose (DCI); (R)-1,2-O-(2,2,2-tricloroetilideno)-α-D-glucofuranose; glucocloralose; anidroglucocloral

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

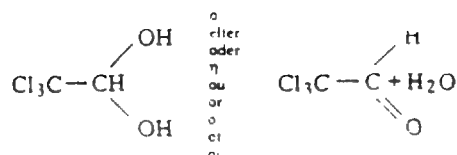
Xn	
	R : 20/22
	S : (2-)16-24/25-28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 302-17-0

EEC No 206-117-5

No 605-014-00-6



ES: 2,2,2-tricloro-1,1-etanodiol; hidrato de cloral

DA: chloralhydrat

DE: Chloralhydrat; Trichloracetaldehyd-monohydrat

EL: ενυδρη τριχλωροακετόνη· υδρίτης χλωράλης

EN: chloral hydrate; 2,2,2-trichloroethane-1,1-diol

FR: 2,2,2-trichloro-1,1-éthanediol; hydrate de chloral; chloral hydrate

IT: cloralio idrato

NL: chloralhydraat


PT: hidrato de cloral; 2,2,2-tricloro-1,1-etanodiol

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

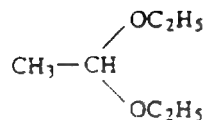
T	
	R : 25-36/38
	S : (1/2)-25-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 105-57-7

EEC No 203-310-6

No 605-015-00-1



ES: 1,1-dietoxietano; acetal

DA: 1,1-diethoxyethan; acetaldehyddiethylacetal; acetal

DE: 1,1-Diethoxy-ethan; Acetal

EL: 1,1-διαίθοξυαιθάνιο ακεταλ

EN: 1,1-diethoxyethane; acetal

FR: 1,1-diéthoxyéthane; acétal

IT: 1,1-dietossi-etano; acetale

NL: 1,1-diethoxy-ethaan; acetaal

PT: 1,1-dietoxietano; acetal

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

F; R 11

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xi	
		
		R: 11-36/38
		S: (2-)9-16-33

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

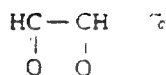
C ≥ 10 %	Xi; R 36/38

Cas No 107-22-2

EEC No 203-474-9

No 605-016-00-7

NOTA B



ES: etano-1,2-diona; glioxal ... %

DA: glyoxal ... %; ethandial ... %

DE: Glyoxal ... %

EL: γλυοξάλη ... %· αιθανοδιάλη ... %

EN: ethane-1,2-dione ... %; glyoxal ... %

FR: glyoxal ... %

IT: glicosale ... %

NL: glyoxaal ... %

PT: glioxal ... %

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificação, Classificazione, Indeling, Classificação

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36/38 S : (2+2)26-28

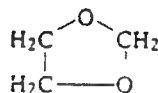
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	Xi; R 36/38

Cas No 646-06-0

EEC No 211-463-5

No 605-017-00-2



ES: 1,3-dioxolano

DA: 1,3-dioxolan

DE: 1,3-Dioxolan

EL: 1,3-διοξολάνη

EN: 1,3-dioxolane

FR: 1,3-dioxolane

IT: 1,3-diossolano

NL: 1,3-dioxolan

PT: 1,3-dioxolano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

F



R: 11

S: (2-)16

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 123-38-6

EEC No 204-623-0

No 605-018-00-8



ES: propanal; aldehído propiónico

DA: propanal; propionaldehyd

DE: Propanal; Propionaldehyd

EL: προπανάλη· προπιονική αλδεϋδη

EN: propanal; propionaldehyde

FR: propanal; aldéhyde propionique

IT: propanale; aldeide propionica

NL: propanal; propionaldehyde

PT: propanal; aldeído propiónico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

F; R 11

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

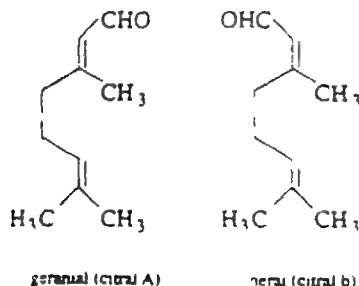
F	Xi	
		R : 11-36/37/38
		S : (2-)9-16-29

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 5392-40-5

EEC No 226-394-6

No 605-019-00-3



ES: citral

DA: citral

DE: Citral

EL: κίτρολη

EN: citral

FR: citral

IT: citrale; 3,7-dimetil-2,6-ottadienale

NL: citral

PT: citral

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi; R 38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xi



R : 38-43

S : (2-)24/25-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

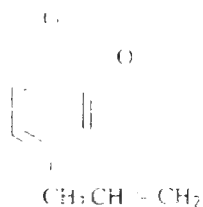



Cas No 94-59-7

EEC No 202-345-4

No 605-020-00-9

NOTA E



- ES: 5-alil-1,3-benzodioxol  
 DA: 5-allyl-1,3-benzodioxol  
 DE: 5-Allyl-1,3-benzodioxol; Safrol  
 EL: 5-αλλυλο-1,3-δενζοδιοξόλη  
 EN: 5-allyl-1,3-benzodioxole; safrole  
 FR: 5-allyl-1,3-benzodioxole; safrole  
 IT: 5-allil-1,3-benzodiossolo; safrolo  
 NL: 5-allyl-1,3-benzodioxool; safrool  
 PT: 5-alil-1,3-benzodioxole  
 FI: 5-allyyli-1,3-bentsodioksoli; safroli  
 SV: 5-allyl-1,3-benzodioxol; 5-(2-propenyl)-1,3-benzodioxol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45

Mut. Cat. 3; R 40

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T



R: 45 22 40

S: 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusrajat, Koncentrationsgrænser*


Cas No 91673-30-2

EEC No 294-145-9

No 605-021-00-4

- ES formaldehido, productos de reacción con butilfenol
- DA formaldehyd, reaktionsprodukter med butylphenol
- DE Formaldehyd, Reaktionsprodukte mit Butylphenol
- EL φορμαλδεϋδης, προϊόντα αντίδρασης με δωδεκαφαινόλη
- EN Formaldehyde, reaction products with butylphenol
- FR formaldehyde, produits de réaction avec le butylphénol
- IT formaldeide, prodotti di reazione con butilfenolo
- FI formaldehydi, reaktioproductit met butylifenoli
- PT formaldeído, produtos da reacção com butilfenol
- CS formaldehydi, reakční produkty butylifenolu kyselá
- SV formaldehyd, reaktionsprodukt med butylfen

*Classification, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etichetare, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*



R 43

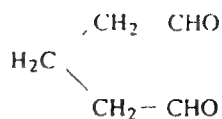
S: (24-37)

*Limites de concentration, Koncentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, concentration limits, Limites de concentration, Limiti di concentrazione, Concentrationsgrenzen, Limites de concentraçao, Piiriusuvajat, Koncentrationsgränser*


Cas No 111-30-8

EEC No 203-856-5

No 605-022-00-X





ES	glutaral
DA	glutaral, glutaraldehyd
DE	Glutaral, Glutaraldehyd
EL	γλουταραλδεϋδη,
EN	glutaral, glutaraldehyde, 1,5-pentanedial
FR	glutaral
IT	glutarale, gluraraldeide, 1,5-pentandiale
NL	glutaaraldehyd
PT	glutaral
FI	glutaraldehydi
SV	glutaraldehyd, pentandial

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T, R 23/25	C, R 34	R 42/43	N, R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T	N	
		
		R: 23/25-34-42/43-50
		S: (1/2-)26-36/37/39-45-61

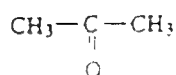
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã, Pitoisuusrajat, Konzentrationgrænser*

C ≥ 50 %	T, R 23/25 34 42/43
25 % ≤ C < 50 %	T, R 22-23 34-42/43
10 % ≤ C < 25 %	C, R 20/22 34-42/43
2 % ≤ C < 10 %	Xn, R 20/22 37/38 41 42/43
1 % ≤ C < 2 %	Xn, R 36/37/38 42/43
0,5 % ≤ C < 1 %	Xi, R 36/37/38-43

Cas No 67-64-1

EEC No 200-662-2

No 606-001-00-8



ES: propanona; acetona

DA: acetone; propanon

DE: Aceton

EL: ακετόνη

EN: acetone

FR: acetone, diméthylcétone

IT: acetone

NL: aceton

PT: acetona; dimetilcetona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

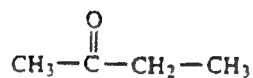
F	
	R : 11
	S : (2-)9-16-23-33

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 78-93-3

EEC No 201-159-0

No 606-002-00-3



ES. butanona ; metiletilcetona

DA. butanon ; methylethylketon

DE. Butanon ; Ethylmethyleketon

EL. βουτανονη μεθυλοαιθυλοκετονη

EN. butanone , ethyl methyl ketone , methyl ethyl ketone

FR. butanone , methylethylcetone

IT. butanone ; metiletilchetone

NL. butanon , etnylmethylketon

PT. butanona , metiletilcetona

Classification Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

F ; R 11

Xi ; R 36/37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

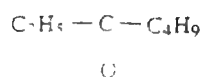
F	Xi	
		R : 11-36/37
		S : (2)-9-16-25-33

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 106-35-4

EEC No 203-388-I

No 606-003-00-9



ES: 3-heptanona; etilbutilcetona  
 DA: 3-heptanon; ethylbutylketon  
 DE: Heptan-3-on; Ethylbutylketon  
 EL: 3-ιπτανόνη· δουτυλοαιθυλοκετονη  
 EN: heptan-3-one; butyl ethyl ketone  
 FR: 3-heptanone; butyléthylcétone  
 IT: eptan-3-one; butiletilchetone  
 NL: 3-heptanon; butylethylketon  
 PT: 3-heptanona; butiletilcetona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10	Xn; R 20	Xi; R 36
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

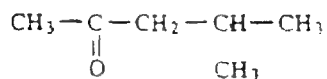
Xn	
	R : 10-20-36 S : (2-)24

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 108-10-1

EEC No 203-550-1

No 606-004-00-4




- ES: 4-metil-2-pentanona; metilisobutilcetona  
 DA: 4-methyl-2-pentanon; methylisobutylketon  
 DE: 4-Methyl-pentan-2-on; Methylisobutylketon  
 EL: 4-μεθυλο-2-πεντανόνη · μεθυλισοβουτυλοκετόνη  
 EN: 4-methylpentan-2-one; methyl isobutyl ketone  
 FR: 4-méthyl-2-pentanone; méthylisobutylicétone  
 IT: 4-metil-pentan-2-one; metilisobutilchetone  
 NL: 4-methyl-2-pentanon; methylisobutylketon  
 PT: 4-metil-2-pentanona; metilisobutilcetona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

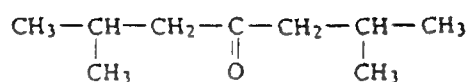
F	
	R : 11
	S : (2-)-9-16-23-33

Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 108-83-8

EEC No 203-620-1

No 606-005-00-X



- ES. 2,6-dimetil-4-heptanona ; diisobutylcetona  
 DA : 2,6-dimethyl-4-heptanon ; diisobutylketon  
 DE 2,6-Dimethyl-heptan-4-on ; Diisobutylketon  
 EL 2,6-διμεθυλο-4-επτανόνη · δι-ισοβουτυλοκετόνη  
 EN 2,6-dimethylheptan-4-one ; di-isobutyl ketone  
 FR 2,6-dimethyl-4-heptanone ; diisobutylcétone  
 IT. 2,6-dimetil-epian-4-one ; diisobutylchetone  
 NL 2,6-dimethyl-4-heptanon ; diisobutylketon  
 PT 2,6-dimetil-4-heptanona ; diisobutylcetona

Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classificação, Classificazione, Indeling, Classificação

R 10

Xi ; R 37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 10-37

S : (2-)24

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao

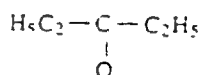
C ≥ 10 %	Xi ; R 37



Cas No 96-22-0

EEC No 202-490-3

No 606-006-00-5




- ES. 3-pentanona ; dietilcetona  
 DA 3-pentanon ; diethylketon  
 DE Pentan-3-on , Diethylketon  
 EL 3-πεντανονη · διαιθυλοκετονη  
 EN pentan-3-one , diethyl ketone  
 FR 3-pentanone ; diethylcetone  
 IT 3-pentanone ; dietilchetone  
 NL 3-pentanon , diethylketon  
 PT 3-pentanona ; dietilcetona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

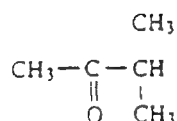
F	
	R : 11
	S : (2-)9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 563-80-4

EEC No 209-264-3

No 606-007-00-0




- ES: 3-metil-2-butanona ; metilisopropilcetona  
 DA: 3-methyl-2-butanon ; methylisopropylketon  
 DE: 3-Methylbutan-2-on ; Methylisopropylketon  
 EL: 3-μεθυλο-2-βουτανόνη · μεθυλισοπροπυλοκετόνη  
 EN: 3-methylbutan-2-one ; methyl isopropyl ketone  
 FR: 3-methyl-2-butanone ; methylisopropylcétone  
 IT: 3-metil-2-butanone ; metilisopropilchetone  
 NL: methylisopropylketon  
 PT: 3-metil-2-butanona ; metilisopropilcetona

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

F; R11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

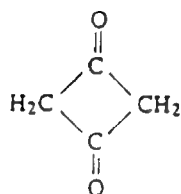
F	
	R: 11
	S: (2-)9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 15506-53-3

EEC No —

No 606-008-00-6



ES: ciclobutano-1,3-diona  
 DA: 1,3-cyclobutandion  
 DE: Cyclobutan-1,3-dion  
 EL: 1,3-κυκλοβουτανοδιόνη  
 EN: cyclobutane-1,3-dione  
 FR: 1,3-cyclobutanedione  
 IT: ciclobutan-1,3-dione  
 NL: cyclobutaandion  
 PT: 1,3-ciclobutanodiona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

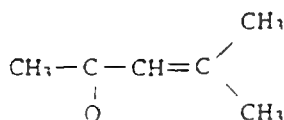
F  	<div style="text-align: right;">R: 11</div> <div style="text-align: right;">S: (2)-9-16-33</div>
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*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 141-79-7

EEC No 205-502-5

No 606-009-00-1



- ES: --metil-3-penten-2-ona; óxido de mesitilo  
 DA: 4-methyl-3-penten-2-on; mesitvloxid  
 DE: 4-Methyl-pent-3-en-2-on; Mesitvloxid  
 EL: --μεθυλο-3-πεντεν-2-όνη· μεσιτυλοξείδιο  
 EN: --methylpent-3-en-2-one; mesitvi oxide  
 FR: --methyl-3-pentén-2-one; oxvde de mesitvle  
 IT: 4-metilpent-3-en-2-one; ossido di mesitile  
 NL: --methyl-3-penten-2-on; mesitvloxide  
 PT: --metil-3-penten-2-ona; óxido de mesitilo

Classificaci6n, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificaç6o

R 10

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 10-20/21/22 S : (2-)25

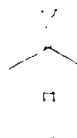
L6mites de concentraci6n, Koncentrationsgr6nser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraç6o

C ≥ 5 %	Xn; R 20/21/22

Cas No 108-94-1

EEC No 203-631-1

No 606-010-00-7



ES: ciclohexanona

DA: cyclohexanon

DE: Cyclohexanon

EL: κυκλοεξανόνη

EN: cyclohexanone

FR: cyclohexanone

IT: cicloesaneone

NL: cyclohexanon

PT: cicloexanona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

R 10

Xn; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R: 10-20 S: (2-)25

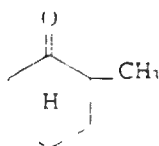
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	Xn; R 20

Cas No 583-60-8

EEC No 209-513-6

No 606-011-00-2



ES: 2-metilciclohexanona  
 DA: 2-methylcyclohexanon  
 DE: 2-Methyl-cyclohexanon  
 EL: 2-μεθυλοκυκλοεξανόνη  
 EN: 2-methylcyclohexanone  
 FR: 2-méthylcyclohexanone  
 IT: 2-metilcicloesano  
 NL: methylcyclohexanon  
 PT: 2-metilcicloexanona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xn; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R: 10-20 S: (2-)25

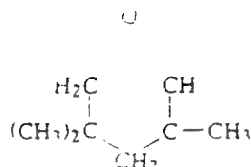
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao

C ≥ 25 %	Xn; R 20

Cas No 78-59-1

EEC No 201-126-0

No 606-012-00-8



- ES: 3,5,5-trimetil-2-ciclohexen-1-ona; isoforona  
 DA: 3,5,5-trimethyl-2-cyclohexen-1-on; isophoron  
 DE: 3,5,5-Trimethyl-2-cyclohexen-(1)-on; Isophoron  
 EL: 3,5,5-τριμεθυλο-2-κυκλοεξεν-1-όνη; ισοφορόνη  
 EN: 3,5,5-trimethylcyclohex-2-enone; isophorone  
 FR: 3,5,5-triméthyl-2-cyclohexen-1-one; isophorone  
 IT: 3,5,5-trimetil-2-cicloesen-(1)-one; isoforone  
 NL: 3,5,5-trimethyl-2-cyclohexen-(1)-on; isoforon  
 PT: 3,5,5-trimetil-2-cicloexen-1-ona; isoforona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 36/37/38
	S : (2-)26

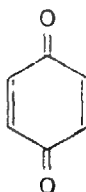
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xi; R 36/37/38

Cas No 106-51-4

EEC No 203-405-2

No 606-013-00-3



ES: p-benzoquinona; quinona

DA: para-benzoquinon; quinon

DE: p-Benzochinon; Chinon

EL: p-δενζοκινόνη· κινόνη

EN: p-benzoquinone; quinone

FR: p-benzoquinone; quinone

IT: p-benzochinone; chinone

NL: chinon

PT: p-benzoquinona; quinona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/25

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p>	<p>R : 23/25-36/37/38</p> <p>S : (1/2-)26-28-45</p>
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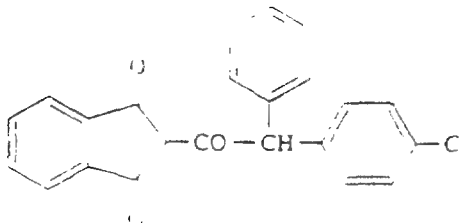
Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 3691-35-8

EEC No 223-003-0

No 606-014-00-9



- ES: clorofacinona (ISO); 2-(alfa-(4-clorofenil)fenilacetil)indano-1,3-diona  
 DA: chlorophacinon (ISO); 2-(alfa-(4-chlorophenyl)-phenylacetil)-indan-1,3-dion  
 DE: Chlorophacinon (ISO); 2-(alpha-(4-Chlorphenyl) phenylacetil) indan-1,3-dion  
 EL: chlorophacinone (ISO); 2-(α-α-(4-χλωροφαινυλο)φαινυλακετυλ)ινδανο-1,3-διόνη  
 EN: chlorophacinone (ISO); 2-(2-(4-chlorophenyl)-2-phenylacetyl) indan-1,3-dione  
 FR: chlorophacinone (ISO); 2-(2-(4-chlorophényl)-2-phénylacetyl)indane-1,3-dione  
 IT: clorofacinone (ISO); 2-(alfa-(4-clorofenil) fenilacetil) indan-1,3-dione  
 NL: chlorofacinon (ISO); 2-[alpha-(4-chloorfenyl) fenylacetil]indan-1,3-dion  
 PT: clorofacinona (ISO); 2-[alfa-(4-clorofenil) fenilacetil]indano-1,3-diona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T+; R 27/28

T; R 23-48/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

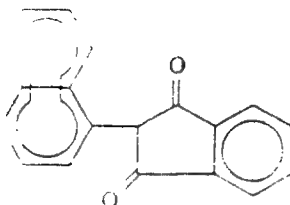
T+	
	R : 23-27/28-48/24/25
	S : (1/2-)36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1786-03-4

EEC No —

No 606-015-00-4



- ES 2-(1-naftil)indano-1,3-diona ; naftilindandiona  
 DA : naphthylindandion ; 2-(1-naphthyl)indan-1,3-dion  
 DE : naphthylindandion ; 2-(1-Naphthyl)-indan-1,3-dion  
 EL : ναφθυλινταντιόν 2-(1-ναφθυλο)-1,3-ινδανοδιόνη  
 EN : naphthylindandione ; 2-(1-naphthyl)indan-1,3-dione  
 FR : naphthylindanedione ; 2-(1-naphthyl)-1,3-indanedione  
 IT : naftilindandione ; 2-(1-naftil)-indan-1,3-dione  
 NL : nattylandaandion ; 2-(1-nattyll)-indaan-1,3-dion  
 PT : naftilindanodiona ; 2-(1-naftil)-1,3-indanodiona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T; R 25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

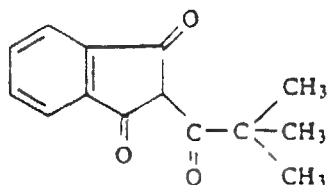
<p>T</p>	<p>R : 25</p> <p>S : (1/2-)13-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 83-26-1

EEC No 201-462-8

No 606-016-00-X



ES: pindona; 2-pivaloil-indano-1,3-diona  
 DA: pindon; 2-pivaloyl-indan-1,3-dion  
 DE: Pindone; 2-Pivaloyl-indan-1,3-dion  
 EL: pindone; 2-τριμεθυλοακετυλο-1,3-ινδανοδιόνη  
 EN: pindone; 2-pivaloylindan-1,3-dione  
 FR: pivaldione; 2-pivaloylindane-1,3-dione  
 IT: pindone; 2-trimetil-acetil-indan-1,3-dione  
 NL: pindone; 2-pivaloylindaan-1,3-dion  
 PT: pindona, pivaldiona; 2-pivaloil-1,3-indanodiona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

T; R 25-48/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 25-48/25</p> <p>S : (1/2-)37-45</p> </div> </div>
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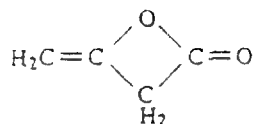
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 674-82-8

EEC No 211-617-1

No 606-017-00-5

NOTA D



ES: 4-metilen-2-oxetanona; diceteno

DA: acetylketen; diketen

DE: 4-Methylen-2-oxetanon; Diketen

EL: δΙΚΕΤΕΝΙΟ

EN: diketene; diketen

FR: 4-méthylène-2-oxetannone; dicetène

IT: dichetene

NL: diketeen

PT: 4-metileno-2-oxetanona; diceteno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xn; R 20

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 10-20

S : (2-)-3

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 117-80-6

EEC No 204-210-5

No 606-018-00-0

(1)



ES: diclona (ISO) ; 2,3-dicloro-1,4-naftoquinona

DA: dichlon (ISO) ; 2,3-dichlor-1,4-naphthoquinon

DE: diclon (ISO) ; 2,3-Dichlor-1,4-naphthochinon

EL: dichlone (ISO) ; 2,3-διχλωρο-1,4-ναφθοκινόν

EN: dichlone (ISO) ; 2,3-dichloro-1,4-naphthoquin

FR: dichlone (ISO) ; 2,3-dichloro-1,4-naphthoquinone

IT: dicione (ISO) ; 2,3-dicloro-1,4-naftochinone

NL: dichlon (ISO) ; 2,3-dichlor-1,4-naftochinon

PT: diclona (ISO) ; 2,3-dicloro-1,4-naftoquinona

Classification, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificazione, Indeling, Classificação

Xn ; R 22

Xi ; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

No



R 22-36/38

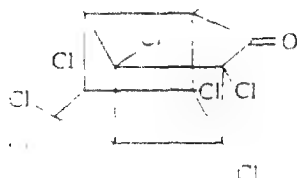
S 2-126

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 143-50-0

EEC No 205-601-3

No 606-019-00-6



- ES: clordecon (ISO); decacloropentaciclo (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) decan-4-ona  
 DA: chlordacon (ISO); decachlorpentacyclo (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) decan-4-on  
 DE: chlordacon (ISO); Decachlor-pentacyclo (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) decan-4-on  
 EL: chlordacon (ISO); δεκαχλωροπεντακυκλο (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) δεκαν-4-όνη  
 EN: chlordacon (ISO); decachlorpentacyclo (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) decan-4-one  
 FR: chlordéacon (ISO); décachlorpentacyclo (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) décane-4-one  
 IT: clordecone (ISO); decacloropentaciclo (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) decan-4-one  
 NL: chloordecon (ISO); decachloorpentacyclo (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) decaan-4-on  
 PT: clordecona (ISO); decacloropentaciclo (5,2,1,0<sup>24</sup>,0<sup>32</sup>,0<sup>34</sup>) decano-4-ona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T, R 24/25

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

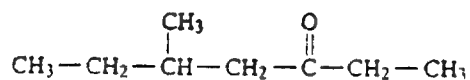
<p>T</p> 	<p>R : 24/25-40</p> <p>S : (1/2-)22-36/37-45</p>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 541-85-5

EEC No 208-793-7

No 606-020-00-1



ES: 5-metil-3-heptanona

DA: 5-methyl-3-heptanon

DE: 5-Methyl-3-heptanon

EL: 5-μεθυλο-3-επτανόνη

EN: 5-methylheptan-3-one

FR: 5-methyl-3-heptanone

IT: 5-metil-3-eptanone

NL: 5-methyl-3-heptanon

PT: 5-metil-3-heptanona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

R 10

Xi; R 36/37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xi



R: 10-36/37

S: (2-)23

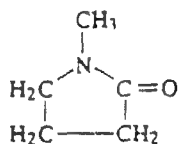
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	Xi; R 36/37

Cas No 872-50-4

EEC No 212-828-1

No 606-021-00-7



ES: N-metil-2-pirrolidona

DA: N-methyl-2-pyrrolidon

DE: N-Methyl-2-pyrrolidon

EL: Ν-μέθυλο-2-πυρολιδόνη

EN: N-methyl-2-pyrrolidone

FR: N-méthyl-2-pyrrolidone

IT: N-metil 2 pirrolidone

NL: N-methyl-2-pyrrolidon

PT: N-metil-2-pirrolidona

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R: 36/38
	S: (2-)41

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

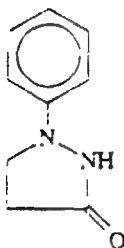
C ≥ 10 %	Xi; R 36/38



Cas No 92-43-3

EEC No 202-155-1

No 606-022-00-2



ES: 1-fenil-3-pirazolidona

DA: 1-phenyl-3-pyrazolidon

DE: 1-Phenyl-3-pyrazolidon

EL: 1-φαινυλο-3-πυραζολιδόνη

EN: 1-phenyl-3-pyrazolidone

FR: 1-phényl-3-pyrazolidone

IT: 1-fenile-3-pirazolidone

NL: 1-fenyl-3-pyrazolidon

PT: 1-fenil-3-pirazolidona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

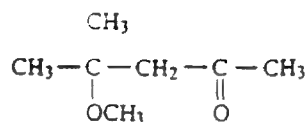
Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 107-70-0

EEC No 203-512-4

No 606-023-00-8



- ES : 4-metil-4-metoxi-2-pentanona  
 DA : 4-methoxy-4-methylpentan-2-on ; diacetone methylether  
 DE : 4-Methoxy-4-methyl-2-pentanon ; Diacetonealkoholmethylether  
 EL : 4-μεθοξύ-4-μεθυλ-2-πεντανόνη  
 EN : 4-methoxy-4-methylpentan-2-one  
 FR : 4-méthoxy-4-méthyl-2-pentanone  
 IT : 4-metossi-4-metil-2-pentanone  
 NL : 4-methoxy-4-methyl-2-pentanon  
 PT : 4-metoxi-4-metil-2-pentanona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 10

*Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 10

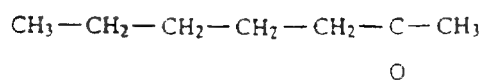
S : (2-)23

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 110-43-0

EEC No 203-767-1

No 606-024-00-3



ES: 2 heptanona; amilmetilcetona

DA: 2-heptanon

DE: 2-Heptanon

EL: 2-επτανόνη

EN: heptan-2-one

FR: 2 heptanone; méthyl-n-amylcétone

IT: 2-eptanone

NL: 2 heptanon

PT: 2-heptanona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

R 10

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 10-22

S: (2-)23

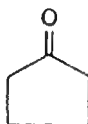
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	Xn; R 22

Cas No 120-92-3

EEC No 204-435-9

No 606-025-00-9



ES: ciclopentanona

DA: cyclopentanon

DE: Cyclopentanon

EL: κυκλοπεντανόνη

EN: cyclopentanone

FR: cyclopentanone

IT: ciclopentanone

NL: cyclopentanon

PT: ciclopentanona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

R 10

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 10-36/38

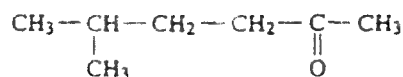
S : (2-)23

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 110-12-3

EEC No 203-737-8

No 606-026-00-4



ES: 5-metil-2-hexanona; isoamilmetilcetona

DA: 5-methyl-2-hexanon

DE: 5-Methyl-2-hexanon

EL: 5-μεθυλο-2-εξανόνη

EN: 5-methylhexan-2-one; methylisoamyl ketone

FR: 5-méthyl-2-hexanone; méthylisoamylcétone

IT: 5-metil-2-esanone

NL: 5-methyl-2-hexanon

PT: 5-metil-2-hexanona; metilisoamilcetona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

R 10

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

R : 10

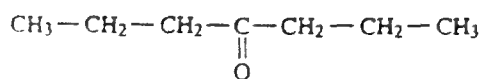
S : (2-)23

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 123-19-3

EEC No 204-608-9

No 606-027-00-X



ES: 4-heptanona; dipropilcetona

DA: 4-heptanon; dipropylketon

DE: 4-Heptanon; Dipropylketon

EL: 4-επτανόνη· διπροπυλοκετόνη

EN: heptan-4-one; di-n-propyl ketone

FR: 4-heptanone; dipropylcétone

IT: 4-eptanone; dipropilchetone

NL: 4-heptanon; dipropylketon

PT: 4-heptanona; dipropilcetona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

R 10

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 10

S : (2-)23

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 565-80-0

EEC No 209-294-7

No 606-028-00-5



- ES: 2,4-dimetil-pentanona ; diisopropilcetona  
 DA: 2,4-dimethyl-3-pentanone ; diisopropylketon  
 DE: 2,4-Dimethyl-3-pentanone ; Diisopropylketon  
 EL: 2,4-διμεθυλο-3-πεντανόνη ; διισοπροπυλοκετόνη  
 EN: 2,4-dimethylpentan-3-one ; di-isopropyl ketone  
 FR: 2,4-diméthyl-3-pentanone ; diisopropylcétone  
 IT: 2,4-dimetil-3-pentanone  
 NL: 2,4-dimethyl-3-pentanone ; diisopropylketon  
 PT: 2,4-dimetil-3-pentanona ; diisopropilcetona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

F ; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

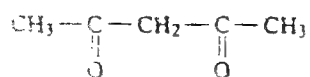
F 	R : 11 S : (2-)16-23
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 123-54-6

EEC No 204-634-0

No 606-029-00-0



ES : 2,4-pentanodiona

DA : 2,4-pentandion

DE : 2,4-Pentandion

EL : πεντανο-2,4-διόνη · ακετυλακετόνη

EN : pentane-2,4-dione ; acetylacetone

FR : 2,4-pentanedione

IT : 2,4-pentandione

NL : 2,4-pentaandion

PT : 2,4-pentanodiona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 10-22

S : (2-)21-23-24/25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

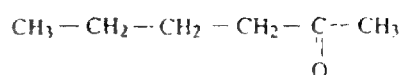
C ≥ 25 %	Xn ; R 22



Cas No 591-78-6

EEC No 209-731-1

No 606-030-00-6



ES : 2-hexanona ; metil-n-butilcetona

DA : 2-hexanon ; methyl-n-butylketon

DE : 2-Hexanon ; Methyl-h-butylketon

EL : 2-εξανόνη· μεθυλο-ν-δουτυλοκετόνη

EN : hexan-2-one ; butyl methyl ketone ; methyl-n-butyl ketone

FR : 2-hexanone ; méthyl-n-butylcétone

IT : 2-esanone ; metil-n-butilchetone



NL : 2-hexanon ; methyl-n-butylketon

PT : 2-hexanona ; metil-n-butilcetona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F ; R 11    T ; R 48/23

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	T	
		R : 11-48/23
		S : (1/2)-9-16-29-45-51

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

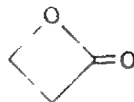
C ≥ 10 %	T ; R 48/23
1 % ≤ C < 10 %	Xn ; R 48/20

Cas No 57-57-8

EEC No 200-340-1

No 606-031-00-1

NOTA E



ES: 3-propanolido; 1,3-propiolactona

DA: 3-propanolid; 1,3-propiolacton

DE: 3-Propanolid; 1,3-Propiolacton

EL: 3-1,3-προπιολακτόνη

EN: 3-propanolide; 1,3-propiolactone

FR: 3-propanolide; 1,3-propiolactone

IT: 3-propanolide; 1,3-propiolattone

NL: 3-propanolide; 1,3-propiolacton

PT: 3-propanolida; 1,3-propiolactona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

T+; R 26

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R: 45-26-36/38

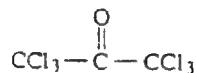
S: 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 116-16-5

EEC No 204-129-5

No 606-032-00-7



ES: hexacloroacetona

DA: hexachloracetone

DE: Hexachloraceton

EL: εξαχλωροακετόνη

EN: hexachloroacetone

FR: hexachloroacétone

IT: esacloroacetone


NL: hexachlooraceton

PT: hexacloroacetona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

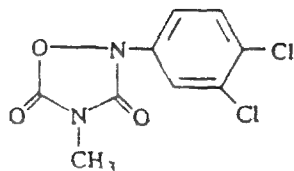
<p>Xn</p> 	<p>R : 22</p> <p>S : (2-)24/25</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 20354-26-1

EEC No 243-761-6

No 606-033-00-2



ES : 2-(3,4-diclorofenil)-metil-1,2,4-oxadiazolid inadiona

DA : 2-(3,4-dichlorophenyl)-4-methyl-1,2,4-oxadiazolidindion

DE : 2-(3,4-Dichlorphenyl)-4-methyl-1,2,4-oxadiazolidindion

EL : 2-(3,4-διχλωροφαινυλο)-4-μεθυλο-1,2,4-οξαδιαζολιδινοδιόνη

EN : 2-(3,4-dichlorophenyl)-4-methyl-1,2,4-oxadiazolidine-3,5-dione ; methazole

FR : 2-(3,4-dichlorophényl)-4-méthyl-1,2,4-oxadiazolidine-3,5-dione ; méthazole

IT : 2-(3,4-diclorofenil)-4-metil-1,2,4-ossadiazolidindione

NL : 2-(3,4-dichloorfenyl)-4-methyl-1,2,4-oxadiazolidinedion

PT : 2-(3,4-diclorofenil)-4-metil-1,2,4-oxadiazolidinadiona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 21/22

Xi ; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 21/22-36/38

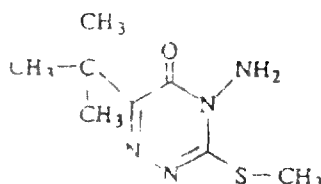
S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 21087-64-9

EEC No 244-209-7

No 606-034-00-8



- ES: metribuzin (ISO); 4-amino-6-terc-butil-3-metiltio-1,2,4-triazin-5-ona  
 DA: metribuzin (ISO); 4-amino-6-tert-butyl-3-methylthio-1,2,4-triazin-5-on  
 DE: Metribuzin (ISO); 4-Amino-6-tert-butyl-3-methylthio-1,2,4-triazin-5-on  
 EL: metribuzin (ISO); 4-αμινό-6-τερτ-βουτυλο-3-μεθυλθειο-1,2,4-τριαζιν-5-όνη  
 EN: metribuzin (ISO); 4-amino-6-tert-butyl-3-methylthio-1,2,4-triazin-5(4H)-one  
 FR: metribuzine (ISO); 4-amino-6-tert-butyl-3-méthylthio-1,2,4-triazine-5(4H)-one  
 IT: metribuzin (ISO); 4-ammino-6-terz-butil-3-metiltio-1,2,4-triazin-5-one  
 NL: metribuzine (ISO); 4-amino-6-tert-butyl-3-methylthio-1,2,4-triazine-5-on  
 PT: metribuzina (ISO); 4-amino-6-terc-butil-3-metiltio-1,2,4-triazin-5-ona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

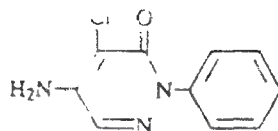
Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1698-60-8

EEC No 216-920-2

No 606-035-00-3



ES: 5-amino-4-cloro-2-fenilpiridazin-3-ona; pirazona; cloridazon

DA: 5-amino-4-chlor-2-phenylpyridazin-3-on; pyrazon; chloridazon

DE: 5-Amino-4-chlor-2-phenylpyridazin-3-on; Pyrazon; Chloridazon

EL: 5-αμινό-4-χλωρο-2-φαινυλοπυριδαζιν-3-όνη · πυραζόνη · chloridazon

EN: 5-amino-4-chloro-2-phenylpyridazin-3(2H)-one; pyrazon; chloridazon

FR: 5-amino-4-chloro-2-phénylpyridazine-3(2H)-one; pyrazon; chloridazone

IT: 5-ammino-4-cloro-2-fenilpiridazin-3-one; pirazone; cloridazone

NL: 5-amino-4-chloor-2-fenylpyridazine-3-on; pyrazon; chloridazon

PT: 5-amino-4-cloro-2-fenilpiridazin-3-ona; pirazona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43

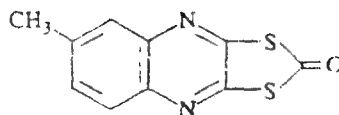
S : (2-)24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 2439-01-2

EEC No 219-455-3

No 606-036-00-9



ES: chinometionato (ISO); 6-metil-1,3-ditiolo-(4,5-b)quinoxalin-2-ona

DA: 6-methyl-1,3-dithiolo(4,5-b)quinoxalin-2-on

DE: 6-Methyl-1,3-dithiolo(4,5-b)chinoxalin-2-on

EL: 6-μεθυλο-1,3-διθειολο(4,5-β)-κινόξαλιν-2-όνη

EN: 6-methyl-1,3-dithiolo(4,5-b)quinoxalin-2-one; quinomethionate

FR: 6-méthyl-1,3-dithiolo[4,5-b]quinoxaline-2-one; chinométhionate

IT: 6-metil-1,3-ditiolo(4,5-b)chinossalin-2-one

NL: 6-methyl-1,3-dithiolo(4,5-b)chinoxaline-2-on

PT: chinometionato (ISO); 6-metil-1,3-ditiolo(4,5-b)quinoxalin-2-ona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi; R 36

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36-43

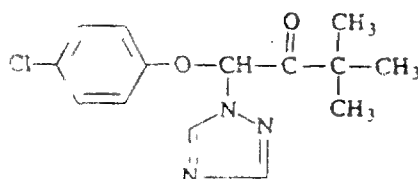
S : (2-)24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 43121-43-3

EC No 256-103-8

No 606-037-00-4




- ES: triadimefon (ISO); 1-(4-clorofenoxi)-3,3-dimetil-1-(1,2,4-triazol-1-il)-butanona  
 DA: triadimefon (ISO); 1-(4-chlorophenoxy)-3,3-dimethyl-1-(1,2,4-triazol-1-yl)-butanon  
 DE: Triadimefon (ISO); 1-(4-Chlorphenoxy)-3,3-dimethyl-1-(1,2,4-triazol-1-yl) butanon  
 EL: triadimefon (ISO); (4-χλωροφαινοξύλ)-3,3-διμεθυλο-1-(1,2,4-τριαζολ-1-υλ)δουτανόνη  
 EN: triadimefon (ISO); 1-(4-chlorophenoxy)-3,3-dimethyl-1-(1,2,4-triazol-1-yl) butanone  
 FR: triadimefone (ISO); 1-(4-chlorophénoxy)-3,3-diméthyl-1-(1,2,4-triazole-1-yl)butanone  
 IT: triadimefon (ISO); 1-(4-clorofenossi)-3,3-dimetil-1-(1,2,4-triazol-1-il) butanone  
 NL: triadimefon (ISO); 1-(4-chloorfenoxy)-3,3-dimethyl-1-(1,2,4-triazol-1-yl) butanon  
 PT: triadimefão (ISO); 1-(4-clorofenoxi)-3,3-dimetil-1-(1,2,4-triazol-1-il) butanona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2)

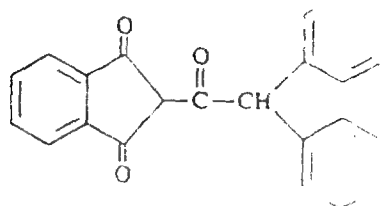
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã




Cas No 82-66-6

EEC No 201-434-5

No 606-038-00-X



ES: difacinona (ISO); 2-difenilacetilindano-1,3-diona; difenadiona (DCI)

DA: diphacinon (ISO); 2-diphenylacetylindan-1,3-dion

DE: Diphacinon (ISO); 2-Diphenylacetylindan-1,3-dion

EL: diphacinone (ISO); 2-διφαινυλακετυλινδανο-1,3-διόνη

EN: diphacinone (ISO); 2-diphenylacetylindan-1,3-dione

FR: diphacinone (ISO); 2-diphénylacétylindane-1,3-dione

IT: difacinone (ISO); 2-difenilacetilindan-1,3-dione

NL: difacinon (ISO); 2-difenylacetylindaan-1,3-dion

PT: difacinona (ISO); 2-difenilacetilindano-1,3-diona; difendiona (DCI)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+; R 28

T; R 48/23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R: 28-48/23/24/25

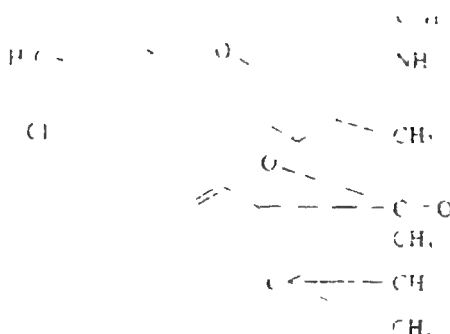
S (1/2)-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

EEC No 400-680-2

No 606-039-00-5



- ES 5(o 6)-terc-butyl 2' cloro-6'-etilamino-3' 7'-dimetilespiro(isobenzofuran-1(1H)9'-xanteno)-3-ona
- DA 5(eller 6) tert butyl 2' chlor 6' ethylamino 3' 7'-dimethylspiro(isobenzofuran-1(1H)9'-xanthen)-3-on
- DE 5(oder 6) Terr butyl-2' chlor 6'-ethylamino-3',7'-dimethylspiro(isobenzofuran 1(1H),9'-xanthen)-3-on
- EL 6'-αιθυλαμινο 5(η 6)-τερτ-βουτυλο 3' 7'-διμεθυλ-2'-χλωροσπиро(ισοβενζοφουραν-1(1H),9'-ξανθενο)-3-όνη
- EN 5(or 6)-tert-butyl-2'-chloro-6'-ethylamino-3' 7'-dimethylspiro(isobenzofuran-1(1H)9'-xanthene)-3-one
- FR 5(ou 6)-tert butyl 2' chloro 6' ethylammino 3' 7' dimethylspiro(isobenzoturane-1(1H)9'-xanthène)-3-one
- IT 5(o 6)-terz-butyl 2'-cloro 6'-etilammino-3' 7' dimetilspiro(isobenzofuran-1(1H).9'-xanten)-3-one
- NL 5(of 6)-tert butyl-2' chloro-6'-ethylamino-3' 7'-dimethylspiro(isobenzofuran-1(1H)9'-xantheen)-3-on
- PT 5(ou 6)-terc butyl 2'-cloro-6'-etilamino-3' 7'-dimetilespiro(isobenzoturano-1(1H)9'-xanteno)-3-ona

Classificacion, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 20	N ; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

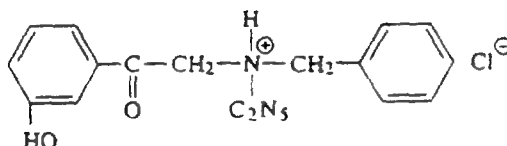
Xn	N	
		R : 20-50/53 S : (2-) 60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 55845-90-4

EEC No 401-840-4

No 606-040-00-0



ES: (N-bencil-N-etil)amino-3'-hidroxiacetofenona, clorhidrato

DA: (N-benzyl-N-ethyl)amino-3'-hydroxyacetophenonhydrochlorid

DE: (N-Benzyl-N-ethyl)amino-3'-hydroxyacetophenonhydrochlorid

EL: (N-αιθυλ-N-βενζυλ)αμινο-3'-υδροξυακετοφαινόνη υδροχλωρικό

EN: (N-benzyl-N-ethyl)amino-3'-hydroxyacetophenone hydrochloride

FB: (N-benzyl-N-éthyl)amino-3'-hydroxyacétophénone, chlorhydrate

IT: (N-benzil-N-etil)ammino-3'-idrossiacetofenone, cloridrato

NL: (N-benzyl-N-ethyl)amino-3'-hydroxyacetofenonhydrochloride

PT: (N-benzil-N-etil)amino-3'-hidroxiacetofenona, cloridrato

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 41

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

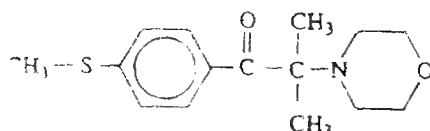
Xi	N	
		R : 41-51/53
		S : (2-)26-39-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 71868-10-5

EEC No 400-600-6

No 606-041-00-6



- ES : 2-metil-1-(4-metiltiofenil)-2-morfolinopropan-1-ona  
 DA : 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-on  
 DE : 2-Methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-on  
 EL : 2-μεθυλο-1-(4-μεθυλοθειοφαινυλο)-2-μορφολινοπροπαν-1-όνη  
 EN : 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one  
 FR : 2-méthyl-1-(4-méthylthiophényl)-2-morpholinopropane-1-one  
 IT : 2-metil-1-(4-metiltiofenil)-2-morfolinopropan-1-one  
 NL : 2-methyl-1-(4-methylthiofenyl)-2-morfolinopropan-1-on  
 PT : 2-metil-1-(4-metiltiofenil)-2-morfolinopropano-1-ona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22	N ; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

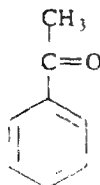
Xn	N	
		R : 22-51/53 S : (2-)22-61

Limites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 98-86-2

EEC No 202-708-7

No 606-042-00-1



ES: acetofenona

DA: acetophenon

DE: Acetophenon

EL: ακετοφαινόνη

EN: acetophenone

FR: acetophénone

IT: acetofenone; fenilmetilchetone

NL: acetofenon

PT: acetofenona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 22-36

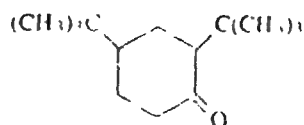
S: (2-)26

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


**Cas No 13019-04-0**

EEC No 405-340-7

No 606-043-00-7



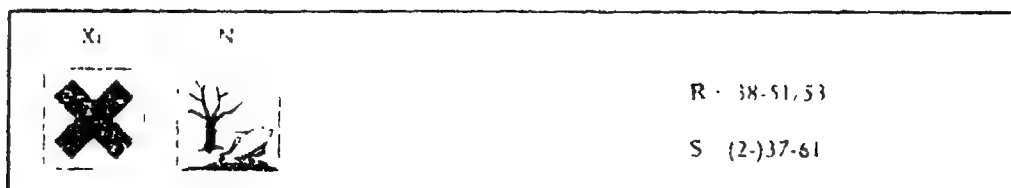
ES	2,4-di-tert-butylcyclohexanona
DA	2,4-di-tert butylcyclohexanon
DE	2,4-Di-tert-butylcyclohexanon
EL	2,4-δι-τερτ-βουτυλοκυκλοξείζανον η
EN	2,4-di-tert-butylcyclohexanone
FR	2,4-di-tert-butylcyclohexanone
IT	2,4-di-terz-butylcycloesانونe
NL	2,4-di-tert-butylcyclohexanon
PT	2,4-di-tert-butylcyclohexanona

Classification: *Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificatio*

X1; R 38

N : R 51-53

*Παquetado* *Etikettierung*, *Kennzeichen* *Επισήμανση* *Labelling*, *Etiquetage*, *Etichettatura*, *Kennzeichen*, *Retulagem*



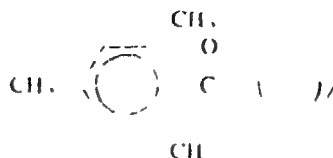
*Processe de concentration, concentration et concentrationnisme* 6, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842,

[illegible]

Cas No 954-16-5

EEC No 403-150-9

No 606-044-00-2



ES	2,4,6-trimetilbenzofenona
DA	2,4,6-trimethylbenzophenon
DE	2,4,6-Trimethylbenzophenon
EL	2,4,6-τριμεθυλοδενζοφαινονη
EN	2,4,6-trimethylbenzophenone
FR	2,4,6-triméthylbenzophenone
IT	2,4,6-trimetilbenzofenone
NL	2,4,6-trimethylbenzofenon
PT	2,4,6-trimetilbenzofenona

Classification Klassifizierung Einstufung Ταξινόμηση Classification, Classification, Classificazione, Indeling, Classificação

Xn, R 22*	Xi, R 36	N; R 50-53
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Etiquetado, Etikettering Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura Kenmerken, Rotulagem

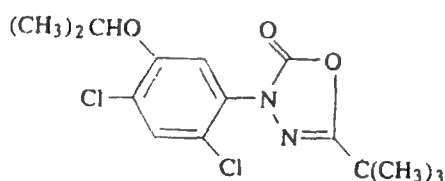
Xn	N	
		R : 22-36-50/53
		S : (2-)26-60

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti de concentratie, Concentratiegrenzen, Limites de concentraçào


Cas No 19666-30-9

EEC No 243-215-7

No 606-045-00-8



- ES: 5-(1,1-dimetiletil)-3-[2,4-dicloro-5-(1-metiletoxi)fenil]-5-1,3,4-oxadiazol-2(3H)-ona  
 DA: 3-[2,4-dichlor-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)-1,3,4-oxdiazol-2(3H)-on  
 DE: 3-[2,4-Dichlor-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-on, Oxadiazon  
 EL: 3-[2,4-διχλωρο-5-(1-μεθυλαιθοξυ)φαινυλο]-5-(1,1-διμεθυλαιθλ)-1,3,4-οξαδιαζολ-2(3H)-όνη  
 EN: 3-[2,4-dichloro-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one, oxadiazon  
 FR: 3-[2,4-dichloro-5-(1-méthylethoxy)phényl]-5-(1,1-diméthyléthyl) 1,3,4-oxadiazole-2(3H)-one; oxadiazon  
 IT: 5-(1,1-dimetiletil)-3-[2,4-dicloro-5-(1 metiletossi)fenil]-5-1,3,4-ossadiazol-2(3H)-one  
 NL: 3-[2,4-dichloor-5-(1-methylethoxy)fenyl]-5-(1,1-dimethylethyl)-1,3,4-oxadiazool-2(3H)-on  
 PT: 5-(1,1-dimetiletil)-3-[2,4-dicloro-5-(1-metiletoxi)fenil]-5-1,3,4-oxadiazole-2(3H)-ona  
 FI: 3-[2,4-dikloori-5-(1-metyylietoksi)fenyyli]-5-(1,1 dimetyylietyyli) 1,3,4-oksadiatsoli-2(3H)-oni, oksadiatsoni  
 SV: 3-[2,4-dikloro-5-(1-metyletoxi)fenyl]-5-(1,1-dimetyletyl)-1,3,4-oxadiazol-2(3H)-on, oxadiazon (ISO)

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

N, R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

N



R: 50/53

S: 60-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*




Cas No 64-18-6

EEC No 200-579-1

No 607-001-00-0

NOTA B

HCOOH ... %

ES: ácido fórmico ... %

DA: myresyre ... %

DE: Ameisensäure ... %

EL: μυρμηκικό οξύ ... %

EN: formic acid ... %

FR: acide formique ... %

IT: acido formico ... %

NL: mierenzuur ... %

PT: ácido fórmico ... %

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 35

S : (1/2-)23-26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao

$C \geq 90 \%$	C; R 35
$10 \% \leq C < 90 \%$	C; R 34
$2 \% \leq C < 10 \%$	Xi; R 36/38

Cas No 64-19-7

EEC No 200-580-7

No 607-002-00-6

NOTA B

 $\text{CH}_3\text{COOH}$  ... %

ES: ácido acético ... %

DA: eddikesyre ... %

DE: Essigsäure ... %

EL: οξικό οξύ ... %

EN: acetic acid ... %

FR: acide acétique ... %

IT: acido acetico ... %

NL: azijnzuur ... %

PT: acido acético .. %

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 10

C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R : 10-35

S : (1/2-)23-26-45

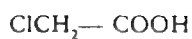
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*

$C \geq 90 \%$	C; R 35
$25 \% \leq C < 90 \%$	C; R 34
$10 \% \leq C < 25 \%$	Xi; R 36/38

Cas No 79-11-8

EEC No 201-178-4

No 607-003-00-1



ES : ácido cloroacético

DA : chloreddikesyre

DE : Chloressigsäure

EL : χλωροξικό οξύ

EN : chloroacetic acid

FR : acide chloroacétique

IT : acido cloroacetico

NL : chloorazijnzuur

PT : ácido cloroacético

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T ; R 25	C ; R 34	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

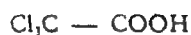
T	N	
		R : 25-34-50
		S : (1/2-)23-37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 76-03-9

EEC No 200-927-2

No 607-004-00-7



ES: ácido tricloroacético

DA: trichloreddikesyre

DE: Trichloressigsäure

EL: τριχλωροξικό οξύ

EN: trichloroacetic acid

FR: acide trichloroacétique

IT: acido tricloroacetico


NL: trichloorazijnzuur; TCA

PT: ácido tricloroacético

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	<p>R : 35</p> <p>S : (1/2-)24/25-26-45</p>

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	C; R 35
5 % ≤ C < 10 %	C; R 34
1 % ≤ C < 5 %	Xi; R 36/38

Cas No 650-51-1

EEC No 211-479-2

No 607-005-00-2

Cl<sub>3</sub>C — COONa

ES: tricloroacetato de sodio, TCA

DA: TCA; natriumtrichloracetat

DE: TCA; Natrium-trichloracetat

EL: TCA; τριχλωροξικό νάτριο

EN: TCA; sodium trichloroacetate

FR: TCA; trichloroacétate de sodium

IT: TCA; tricloroacetato di sodio


NL: TCA; natriumtrichloroacetat

PT: TCA; tricloroacetato de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R: 22
	S: (2-)24-25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentraçào


Cas No 144-62-7

EEC No 205-634-3

No 607-006-00-8

COOH

COOH

ES: ácido oxálico

DA: oxalsyre

DE: Oxalsäure

EL: οξαλικό οξύ

EN: oxalic acid

FR: acide oxalique

IT: ácido ossalico


NL: oxaalzuur

PT: ácido oxálico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>Xn</p> 	<p>R : 21/22</p> <p>S : (2-)24/25</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 5 %	Xn; R 21/22

Cas No

EEC No

No 607-007-00-3

NOTA A

ES: sales de ácido oxálico

DA: oxalsvrens salte

DE: Salze von Oxalsäure

EL: άλατα οξαλικού οξέος

EN: salts of oxalic acid

FR: sels de l'acide oxalique

IT: sali dell'acido ossalico

NL: zouten van oxaalzuur

PT: sais do ácido oxálico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 21/22

S: (2-)24/25

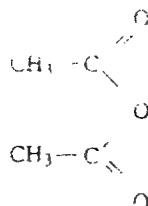
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ < %	Xn; R 21/22

Cas No 108-24-7

EEC No 203-564-8

No 607-008-00-9



ES : anhídrido acético

DA : eddikesyreanhydrid

DE : Essigsäureanhydrid ; Acetanhydrid

EL : οξικός ανυδρίτης

EN : acetic anhydride

FR : anhydride acétique

IT : anidride acetica

NL : azijnzuuranhydride

PT : anidrido acetico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

R 10

C ; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem



R : 10-34

S : (1/2-)26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

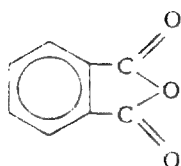
C ≥ 20 %	C ; R 34
8 % ≤ C < 20 %	Xi ; R 36/38



Cas No 85-44-9

EEC No 201-607-5

No 607-009-00-4



ES: anhídrido ftálico

DA: phtalsyreanhydrid

DE: Phthalsäureanhydrid

EL: φθαλικός ανυδρίτης

EN: phthalic anhydride

FR: anhydride phthalique

IT: anidride ftalica

NL: fthaalzuuranhydride

PT: anidrido ftálico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R: 36/37/38

S: (2)

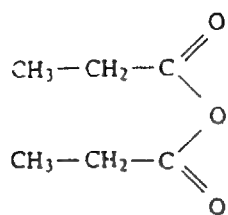
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 5 %	Xi; R 36/37/38

Cas No 123-62-6

EEC No 204-638-2

No 607-010-00-X



ES: anhídrido propiónico

DA: propionsyreanhydrid

DE: Propionsäureanhydrid

EL: προπιονικός ανυδρίτης

EN: propionic anhydride

FR: anhydride propionique

IT: anidride propionica

NL: propionzuuranhydride

PT: anidrido propiónico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	R : 34
	S : (1/2-)26-45

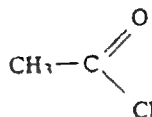
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	C, R 34
10 % ≤ C < 25 %	Xi; R 36/38

Cas No 75-36-5

EEC No 200-865-6

No 607-011-00-5



ES: cloruro de acetilo

DA: acetylchlorid

DE: Acetylchlorid

EL: ακετυλοχλωρίδιο

EN: acetyl chloride

FR: chlorure d'acétyle

IT: cloruro di acetile; acetile cloruro

NL: acetylchloride

PT: cloreto de acetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

F; R 11

R 14

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

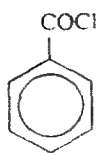
F	C	
		
		R: 11-14-34
		S: (1/2)-9-16-26-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 98-88-4

EEC No 202-710-8

No 607-012-00-0



ES: cloruro de benzoilo

DA: benzoylchlorid

DE: Benzoylchlorid

EL: βενζουλοχλωρίδιο

EN: benzoyl chloride

FR: chlorure de benzoyle

IT: cloruro di benzoile; benzoile cloruro

NL: benzoylchloride

PT: cloreto de benzóilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

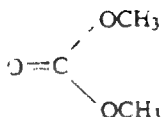
C	
	R : 34
	S : (1/2-)26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas. No 616-38-6

EEC No 210-478-4

No 607-013-00-6



ES: carbonato de dimetilo

DA: dimethylcarbonat

DE: Dimethylcarbonat

EL: ανθρακικός διμεθυλαστέρας

EN: dimethyl carbonate

FR: carbonate de diméthyle

IT: dimetil-carbonato

NL: dimethylcarbonaat

PT: carbonato de dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

F; R11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rosuiagem

F	
	R: 11
	S: (2-)9-16

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 107-31-3

EEC No 203-481-7

No 607-014-00-I



ES: formiato de metilo  
 DA: methylformiat  
 DE: Methylformiat  
 EL: μυρμηκικός μεθυλεστέρας  
 EN: methyl formate  
 FR: formiate de méthyle  
 IT: formiato di metile; metil-formiato  
 NL: methylformiaat  
 PT: formato de metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

F+ ; R 12

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F+	
	R : 12
	S : (2-)9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 109-94-4

EEC No 203-721-0

No 607-015-00-7



ES: formiato de etilo

DA: ethylformiat

DE: Ethylformiat

EL: μυρμηκικός αιθυλεστέρας

EN: ethyl formate

FR: formiate d'éthyle

IT: formiato di etile; etile formiato


NL: ethylformiaat

PT: formato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

F; R11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

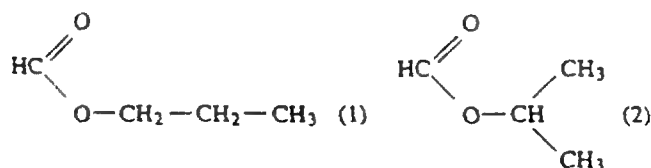
F	
	R: 1
	S: (2)9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 110-74-7 [1]  
625-55-8 [2]

EEC No 203-798-0 [1]  
210-901-2 [2]

No 607-016-00-2



NOTA C

- ES: formiato de n-propilo [1], formiato de isopropilo [2]  
 DA: propylformiat [1], isopropylformiat [2]  
 DE: Propylformiat [1], Isopropylformiat [2]  
 EL: μυρμηκικός προπυλεστέρας [1], μυρμηκικός ισοπροπυλεστέρας [2]  
 EN: propyl formate [1], isopropyl formate [2]  
 FR: formiate de n-propyle [1], formiate d'isopropyle [2]  
 IT: formiato di propile; propile formiato [1], formiato di isopropile; isopropile formiato [2]  
 NL: propylformiaat [1], isopropylformiaat [2]  
 PT: formato de propilo; propilformato [1], formato de isopropilo; isopropilformato [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R: 11
	S: (2)-9-16-33

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 592-84-7 (n)  
589-40-2 (sec)  
762-75-4 (tert.)

EEC No 209-772-5 (n)  
212-105-0 (tert)

No 607-017-00-8

NOTA C

HCOOC,H,

ES: formiato de butilo  
DA: butylformiat  
DE: Butylformiat  
EL: μυρμηκικός βουτυλεστέρας  
EN: butyl formate  
FR: formiate de butyle  
IT: formiato di butile; butile formiato  
NL: butylformiaat  
PT: formato de butilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R : 11
	S : (2-)9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 638-49-3

EEC No 211-340-6

No 607-018-00-3

NOTA C



ES: formiato de pentilo; formiato de amilo

DA: pentylformiat; amylformiat

DE: Amylformiat

EL: μυρμηκικός αμυλεστέρας

EN: amyl formate

FR: formiate de pentyle; formiate d'amyle

IT: formiato di amile; amile formiato

NL: amylformiaat

PT: formato de amilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

R 10

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 10

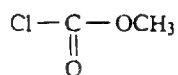
S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 79-22-1

EEC No 201-187-3

No 607-019-00-9



ES: cloroformiato de metilo

DA: methylchlorformiat

DE: Methyl-chlorformiat

EL: χλωρομυρμηκικός μεθυλεστέρας

EN: methyl chloroformate

FR: chloroformiate de méthyle

IT: cloroformiato di metile; metile cloroformiato

NL: methylchlorformiaat

PT: cloroformato de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

T; R 23

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

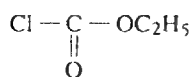
F	T	
		
		R : 11-23-36/37/38
		S : (1/2)-9-16-33-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 541-41-3

EEC No 208 / 78

No 607-020-00-4





ES: cloroformiato de etilo  
 DA: ethylchlorformiat  
 DE: Ethylchlorformiat; Chlorameisensäureethylester  
 EL: χλωρομυρμηκικό αιθύλιο  
 EN: ethyl chloroformate  
 FR: chloroformiate d'éthyle  
 IT: cloroformiato di etile  
 NL: ethylchloroformiaat  
 PT: cloroformato de etilo  
 FI: etyyliklooriformiaatti  
 SV: etylklorformiat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	T+, R 26	Xn; R 22	C; R 34
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

F	T+	
		
		R: 11-22-26-34
		S: (1/2)-9-16-26-28-33-36/37/39-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrazionsgrenzen, Limites de concentraçào, Pitoisusrajat, Konzentrationsgränser*


Cas No 79-20-9

EEC No 201-185-2

No 607-021-00-X



ES: acetato de metilo

DA: methylacetat

DE: Methylacetat

EL: οξικός μεθυλεστέρας

EN: methyl acetate

FR: acétate de méthyle

IT: acetato di metile; metile acetato

NL: methylacetaat

PT: acetato de metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R : 11
	S : (2-)16-23-29-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 141-78-6

EEC No 205-500-4

No 607-022-00-5



ES: acetato de etilo

DA: ethylacetat

DE: Ethylacetat

EL: οξικός αιθυλεστέρας

EN: ethyl acetate

FR: acetate d'éthyle

IT: acetato di etile; etile acetato

NL: ethylacetaat

PT: acetato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

F: R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>F</p> 	<p>R: 11</p> <p>S: (2-)16-23-29-33</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 108-05-4

EEC No 203-545-4

No 607-023-00-0

NOTA D



ES: acetato de vinilo

DA: vinylacetat

DE: Vinylacetat

EL: οξικός δινυλεστέρας

EN: vinyl acetate

FR: acetate de vinyle

IT: acetato di vinile; vinile acetato

NL: vinylacetaat

PT: acetato de vinilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R: 11
	S: (2-)16-23-29-33

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*






Cas No 123-86-4

EEC No 204-658-1

No 607-025-00-1



ES: acetato de butilo

DA: *n*-butylacetatDE: *n*-ButylacetatEL: οξικός *n*-βουτυλεστέραςEN: *n*-butyl acetateFR: acetate de *n*-butyleIT: acetato di *n*-butile; *n*-butile acetatoNL: *n*-butylacetaatPT: acetato de *n*-butilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

R 10

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 10

S : (2)

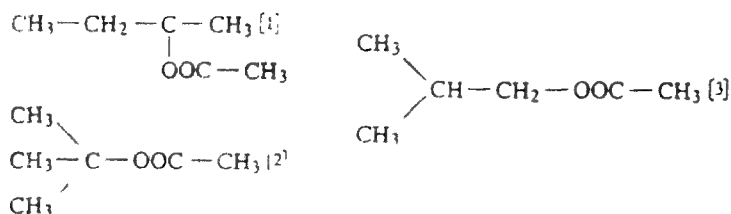
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 105-46-4 [1]  
540-88-5 [2]  
110-19-0 [3]

EEC No 203-300-1 [1]  
208-760-7 [2]  
203-745-1 [3]

No 607-026-00-7

NOTA C



ES: acetato de sec-butilo [1], acetato de ter-butilo [2], acetato de isobutilo [3]

DA: *sec*-butylacetat [1], *tert*-butylacetat [2], isobutylacetat [3]

DE: *sec*-Butylacetat [1], *tert*-Butylacetat [2], Isobutylacetat [3]

EL: οξικός δευτεροταγής-βουτυλεστέρας [1], οξικός τριτοταγής-βουτυλεστέρας [2], οξικός ισοβουτυλεστέρας [3]

EN: *sec*-butyl acetate [1], *tert*-butyl acetate [2], isobutyl acetate [3]

FR: acetate de *sec*-butyle [1], acétate de *tert*-butyle [2], acétate d'isobutyle [3]

IT: acetato di *sec*-butile [1], acetato di *terz*-butile [2], acetato d'isobutile [3]


NL: *sec*-butylacetaat [1], *tert*-butylacetaat [2], isobutylacetaat [3]

PT: acetato de *sec*-butilo [1], acetato de *terc*-butilo [2], acetato de isobutilo [3]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R : 11
	S : (2-)16-23-29-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 554-12-1

EEC No 209-060-4

No 607-027-00-2



ES: propionato de metilo

DA: methylpropionat

DE: Methylpropionat

EL: προπιονικός μεθυλεστέρας

EN: methyl propionate

FR: propionate de méthyle

IT: propionato di metile; metile propionato

NL: methylpropionaat

PT: propionato de metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

F; R 11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R : 11
	S : (2-)16-23-29-33

*Límites de concentración, Konzentrationsgrænzer, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 105-37-3

EEC No 203-291-4

No 607-028-00-8



ES: propionato de etilo

DA: ethylpropionat

DE: Ethylpropionat

EL: προπιονικός αιθυλεστέρας

EN: ethyl propionate

FR: propionate d'éthyle

IT: propionato di etile; etile propionato


NL: ethylpropionaat

PT: propionato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R11

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	
	R: 11
	S: (2-)16-23-29-33

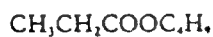
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 590-01-2 (n)  
591-34-4 (sec)  
20487-40-5 (tert)  
540-42-1(iso)

EEC No 209-669-5 (n)  
208-746-0 (iso)

No 607-029-00-3

NOTA C



ES: propionato de butilo  
DA: butylpropionat  
DE: Butylpropionat  
EL: προπιονικός βουτυλεστέρας  
EN: butyl propionate  
FR: propionate de butyle  
IT: propionato di butile; butile propionato  
NL: butylpropionaat  
PT: propionato de butilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

R 10

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 10

S : (2)

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 106-36-5

EEC No 203-389-7

No 607-030-00-9



ES: propionato de propilo

DA: propylpropionat

DE: Propylpropionat

EL: προπιονικός προπυλεστέρας

EN: propyl propionate

FR: propionate de n-propyle

IT: propionato di n-propile; n-propile propionato

NL: n-propylpropionaat

PT: propionato de n-propilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

R 10

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 10

S : (2)

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 109-21-7

EEC No 203-656-8

No 607-031-00-4

NOTA C



ES: butirato de butilo

DA: butylbutyrat

DE: Butylbutyrat

EL: βουτυρικός βουτυλεστέρας

EN: butyl butyrate

FR: butyrate de butyle

IT: butirrato di butile; butile butirrato

NL: butylbutyraat

PT: butirato de butilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

R 10

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

R : 10

S : (2)

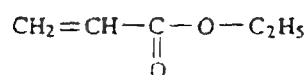
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 140-88-5

EEC No 205-438-8

No 607-032-00-X

NOTA D



ES: acrilato de etilo

DA: ethylacrylat

DE: Ethylacrylat

EL: ακρυλικός αιθυλεστέρας

EN: ethyl acrylate

FR: acrylate d'éthyle

IT: acrilato di etile; etile acrilato

NL: ethylacrylaat

PT: acrilato de etilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

F; R 11	Xn; R 20/21/22	Xi; R 36/37/38	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xn	
		R : 11-20/21/22-36/37/38-43
		S : (2-)-9-16-33-36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

conc. ≥ 25 %	Xn; R 20/21/22-36/37/38-43
5 % ≤ conc. < 25 %	Xi; R 36/37/38-43
1 % ≤ conc. < 5 %	Xi; R 43

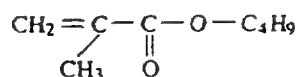


Cas No 97-88-1

EEC No 202-615-1

No 607-033-00-5

NOTA D



ES: metacrilato de butilo

DA: butylmethacrylat

DE: n-Butyl-methacrylat

EL: μεθακρυλικός n-βουτυλεστέρας

EN: n-butyl methacrylate

FR: methacrylate de n-butyle

IT: n-butilmetacrilato

NL: n-butylmethacrylaat

PT: metacrilato de n-butilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xi; R 36/37/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 10-36/37/38-43

S : (2)

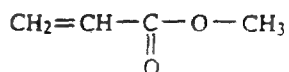
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 96-33-3

EEC No 202-500-6

No 607-034-00-0

NOTA D



ES: acrilato de metilo

DA: methylacrylat

DE: Methylacrylat

EL: ακρυλικός μεθυλεστέρας

EN: methyl acrylate

FR: acrylate de méthyle

IT: acrilato di metile; metile acrilato

NL: methylacrylaat

PT: acrilato de metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F; R 11

Xn; R 20/22

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		
		R : 11-20/22-36/37/38
		S : (2)-9-16-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*

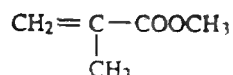
C ≥ 10 %	Xn; R 20/22-36/37/38
5 % ≤ C < 10 %	Xi; R 36/37/38

Cas No 80-62-6

EEC No 201-297-1

No 607-035-00-6

NOTA D



ES: metacrilato de metilo

DA: methylmethacrylat

DE: Methyl-methacrylat

EL: μεθακρυλικός μεθυλεστέρας

EN: methyl methacrylate

FR: methacrylate de méthyle

IT: metacrilato di metile; metil-metacrilato

NL: methylmethacrylaat

PT: metacrilato de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

F; R 11

Xi; R 36/37/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xi	
		R : 11-36/37/38-43
		S : (2-)9-16-29-33

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

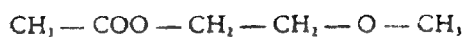
C ≥ 20 %	Xi; R 36/37/38-43
1 % ≤ C < 20 %	Xi; R 43

Cas. No 110-49-6

EEC No 203-772-9

No 607-036-00-1

NOTA E



ES: acetato de 2-metoxietilo; acetato de metilglicol

DA: 2-methoxyethylacetat; methylglykolacetat

DE: 2-Methoxy-ethylacetat; Methylglykolacetat

EL: οξικός 2-μεθοξυαιθυλεστέρας· οξικός εστέρας της μεθυλογλυκόλης

EN: 2-methoxyethyl acetate; methylglycol acetate

FR: acetate de 2-méthoxyéthyle; acétate de méthylglycol; acétate d'éther monométhylique d'éthylène-glycol

IT: 2-metossietil-acetato; acetato di etilenglicolmonometilere; acetato di metilglicol

NL: glycolmonomethyletheracetaat; methylglycolacetaat


PT: acetato de 2-metoxietilo; acetato de metilglicol; acetato do éter monometílico do etilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 2; R 60-61

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 60-61-20/21/22
	S : 53-45

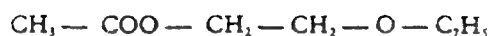
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 111-15-9

EEC No 203-839-2

No 607-037-00-7

NOTA E



ES: acetato de 2-etoxietilo; acetato de etilglicol

DA: 2-ethoxyethylacetat; ethylglycolacetat

DE: 2-Ethoxy-ethylacetat; Ethylglycolacetat

EL: οξικός 2-αιθοξυ-αιθυλεστέρας· οξικός εστέρας της αιθυλογλυκόλης

EN: 2-ethoxyethyl acetate; ethylglycol acetate

FR: acétate de 2-éthoxyéthyle; acétate d'éthylglycol; acétate d'éther monoéthylique d'éthylène-glycol

IT: 2-etossietil acetato; acetato di etilglicol; acetato di etilenglicolmonoetilere

NL: 2-ethoxyethylacetaat; ethylglycolacetaat

PT: acetato de 2-etoxietilo; acetato de etilglicol; acetato de éter monoetilico de etilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 2; R 60-61

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R: 60-61-20/21/22

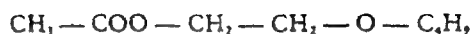
S: 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 112-07-2

EEC No 203-933-3

No 607-038-00-2



ES: acetato de 2-butoxietilo; acetato de butilglicol

DA: 2-butoxyethylacetat; butylglycolacetat

DE: 2-Butoxy-ethylacetat; Butylglycolacetat

EL: οξικός 2-βουτοξυ-αιθυλεστέρας· οξικός εστέρας της βουτυλογλυκόλης

EN: 2-butoxyethyl acetate; butylglycol acetate

FR: acetate de 2-butoxyéthyle; acétate de butylglycol; acétate d'éther monobutylique d'éthylène-glycol

IT: 2-butossietil acetato; acetato di butilglicol; acetato di etilenglicolmonobutiletere


NL: 2-butoxy-ethylacetaat; butylglycolacetaat

PT: acetato de 2-butoxietilo; acetato de butilglicol; acetato de éter monobutílico de etilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn 	R : 20/21 S : (2-)24
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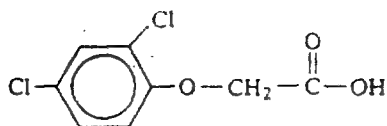
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	Xn; R 20/21

Cas No 94-75-7

EEC No 202-361-1

No 607-039-00-8



ES: 2,4-D (ISO); ácido 2,4-diclorofenoxiacético

DA: 2,4-D (ISO); 2,4-dichlorophenoxyeddikesyre

DE: 2,4-D (ISO); 2,4-Dichlorphenoxyessigsäure

EL: 2,4-D (ISO); 2,4-διχλωροφαινοξυοξικό οξύ

EN: 2,4-D (ISO); 2,4-dichlorophenoxyacetic acid

FR: 2,4-D (ISO); acide 2,4-dichlorophénoxyacétique

IT: 2,4-D (ISO); acido 2,4-diclorofenossiacetico

NL: 2,4-D (ISO); 2,4-dichloorfenoxyazijnzuur

PT: 2,4-D (ISO); ácido 2,4-diclorofenoxiacético

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36/37/38

Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22-36/37/38
	S : (2-)36/37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 607-040-00-3

NOTA A

ES: sales y ésteres del 2,4-D

DA: salte og estere af 2,4-D

DE: Salze und Ester der 2,4-D

EL: άλατα και εστέρες του 2,4-D

EN: salts and esters of 2,4-D

FR: sels et esters de 2,4-D

IT: sali ed esteri del 2,4-D

NL: zouten en esters van 2,4-D

PT: sais e ésteres de 2,4-D

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 20/21/22

S : (2-)13

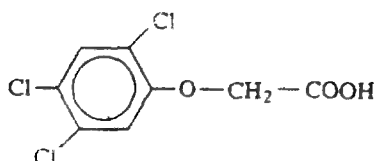
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 93-76-5

EEC No 202-273-3

No 607-041-00-9



ES : 2,4,5-T (ISO) ; ácido 2,4,5-triclorofenoxiacético  
 DA : 2,4,5-T (ISO) ; 2,4,5-trichlorphenoxyeddikesyre  
 DE : 2,4,5-T (ISO) ; 2,4,5-Trichlorphenoxyessigsäure  
 EL : 2,4,5-T (ISO) ; 2,4,5-τριχλωροφαινοξυοξικό οξύ  
 EN : 2,4,5-T (ISO) ; 2,4,5-trichlorophenoxyacetic acid  
 FR : 2,4,5-T (ISO) ; acide 2,4,5-trichlorophénoxyacétique  
 IT : 2,4,5-T (ISO) ; acido 2,4,5-triclorofenossiacetico  
 NL : 2,4,5-T (ISO) ; 2,4,5-trichloorfenoxyazijnzuur  
 PT : 2,4,5-T (ISO) ; ácido 2,4,5-triclorofenoxiacético

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

Xi ; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22-36/37/38
	S : (2-)24

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No —

No 607-042-00-4

NOTA A

ES sales y ésteres del 2,4,5-T

AF salte og estere af 2,4,5-T

DE salze und Ester der 2,4,5-T

EL αλατα και εστέρες του 2,4,5-T

EN salts and esters of 2,4,5-T

FR sels et esters de 2,4,5-T

IT sali ed esteri del 2,4,5-T

NL zouten en esters van 2,4,5-T

PT sais e ésteres de 2,4,5-T

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-36/37/38

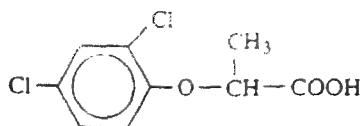
S : (2-)24

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 120-36-5

EEC No 204-390-5

No 607-045-00-0



- ES: diclorprop (ISO); ácido 2-(2,4-diclorofenoxi)propiónico  
 DA: dichlorprop (ISO); 2-(2,4-dichlorphenoxy) propionsyre  
 DE: dichlorprop (ISO); 2-(2,4-Dichlorphenoxy) propionsäure  
 EL: dichlorprop (ISO); 2-(2,4-διχλωροφαινοξύ)προπιονικό οξύ  
 EN: dichlorprop (ISO); 2-(2,4-dichlorophenoxy) propionic acid  
 FR: dichlorprop (ISO); acide 2-(2,4-dichlorophénoxy)propionique; 2,4-DP  
 IT: diclorprop (ISO); acido 2-(2,4-diclorofenossi)propionico  
 NL: dichloorprop (ISO); 2-(2,4-dichloorfenoxy)propionzuur  
 PT: diclorprope (ISO); ácido 2-,2,4-diclorofenoxi)propiónico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 21/22

Xi; R 38-41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="333 1442 373 1471">Xn</div> <div data-bbox="301 1489 411 1597"> </div> <div data-bbox="954 1498 1142 1529">R: 21/22-38-41</div> <div data-bbox="954 1554 1139 1588">S: (2-)26-36/37</div>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No —

No 607-046-00-6

NOTA A

ES: sales de diclorprop

DA: salte af dichlorprop

DE: Salze von Dichlorprop

EL: άλατα του dichlorprop

EN: salts of dichlorprop

FR: sels de dichlorprop (2,4-DP)

IT: sali di diclorprop

NL: zouten van dichloorprop

PT: sais de diclorprope (2-4-DP)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiō, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20/21/22

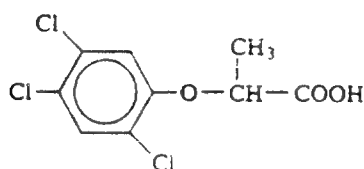
S : (2-)13

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçāo


Cas No 93-72-1

EEC No 202-271-2

No 607-047-00-1



ES: fenoprop (ISO); ácido 2-(2,4,5-triclorofenoxi)propionico

DA: fenoprop (ISO); 2-(2,4,5-trichlorophenoxy) propionsyre

DE: fenoprop (ISO); 2-(2,4,5-Trichlorphenoxy) propionsäure

EL: fenoprop (ISO); 2-(2,4,5-τριχλωροφαινοξύ)προπιονικό οξύ

EN: fenoprop (ISO); 2-(2,4,5-trichlorophenoxy) propionic acid

FR: fénoprop (ISO); acide 2-(2,4,5-trichlorophénoxy) propionique; 2,4,5-TP

IT: fēnoprop (ISO); acido 2-(2,4,5-triclorfenossi) propionico

NL: fenoprop (ISO); 2-(2,4,5-trichloorfenoxy) propionzuur

PT: fenoprop (ISO); ácido 2-(2,4,5-triclorofenoxi)propiónico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<div data-bbox="331 1442 368 1467" data-label="Text">Xn</div> <div data-bbox="304 1489 408 1592" data-label="Image"> </div>	R : 22-38
	S : (2-)37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 607-048-00-7

NOTA A

ES: sales de fenoprop

DA: salte af fenoprop

DE: Salze von Fenoprop

EL: άλατα του fenoprop

EN: salts of fenoprop

FR: sels de fénoprop (2,4,5-TP)

IT: sali di fenoprop

NL: zouten van fenoprop

PT: sais de fenoprope

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20/21/22

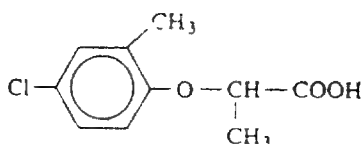
S : (2-)13

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 93-65-2

EEC No 202-264-4

No 607-049-00-2



ES: mecoprop (ISO); ácido 2-(4-cloro-o-toliloxi) propiónico; ácido 2-(4-cloro-2-metilfenoxi)propiónico

DA: mecoprop (ISO); 2-(4-chlor-o-tolyloxy) propionsyre

DE: Mecoprop (ISO); 2-(4-Chlor-o-tolyloxy) propionsäure

EL: mecoprop (ISO) · 2-(4-χλωρο-ο-τολυλοξυ)προπιονικό οξύ

EN: mecoprop (ISO); 2-(4-chloro-o-tolyloxy) propionic acid

FR: mecoprop (ISO); acide 2-(4-chloro-o-tolyloxy)propionique

IT: mecoprop (ISO); acido 2-(4-cloro-o-tolilossi) propionico

NL: mecoprop (ISO); 2-(4-chloor-o-tolyloxy)propionzuur

PT: mecoprope (ISO); ácido 2-(4-cloro-o-toliloxi)propiónico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 38-41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn 	R : 22-38-41 S : (2-)26-37/39
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 607-050-00-8


NOTA A

ES: sales de mecoprop  
 DA: salte af mechlorprop  
 DE: Salze von Mecoprop  
 EL: άλατα του mecoprop  
 EN: salts of mecoprop  
 FR: sels de mécoprop  
 IT: sali di mecoprop  
 NL: zouten van mecoprop  
 PT: sais de mecoprope

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R · 20/21/22 S : (2-)13

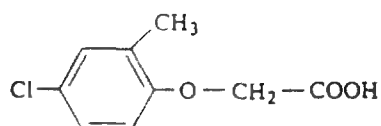
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 94-74-6

EEC No 202-360-6

No 607-051-00-3



ES: MCPA (ISO); ácido 4-cloro-o-toliloxiacético; ácido 4-cloro-2-metilfenoxiacético

DA: MCPA (ISO); 4-chlor-o-tolyloxyeddikesyre

DE: MCPA (ISO); 4-Chlor-o-tolyloxyessigsäure

EL: MCPA (ISO); 4-χλωρο-ο-τολυλοξυοξικό

EN: MCPA (ISO); 4-chloro-o-tolyloxyacetic acid

FR: 2,4-MCPA (ISO); acide 4-chloro-o-tolyloxyacétique

IT: MCPA (ISO); acido 4-cloro-o-tolilossiacetico

NL: MCPA (ISO); 4-chloor-o-tolyloxyazijnzuur

PT: MCPA (ISO); ácido 4-cloro-o-toliloxiacético

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 38-41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22-38-41
	S : (2-)26-37-39

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No

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EEC No

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No 607-052-00-9

NOTA A

ES: sales y ésteres de MCPA

DA: salte og estere af MCPA

DE: Salze und Ester von MCPA

EL: άλατα και εστέρες του MCPA

EN: salts and esters of MCPA

FR: sels et esters de 2,4-MCPA

IT: sali ed esteri di MCPA

NL: zouten en esters van MCPA

PT: sais e esterres de MCPA

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 20/21/22

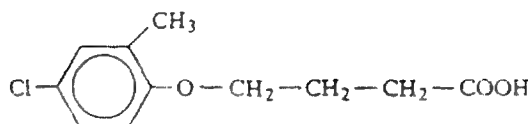
S : (2-)13

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 94-81-5

EEC No 202-365-3

No 607-053-00-4



ES: MCPB (ISO); ácido 4-(4-cloro-o-toliloxi) butírico

DA: MCPB (ISO); 4-(4-chlor-o-tolyloxy) smørsyre

DE: MCPB (ISO); 4-(4-Chlor-o-tolyloxy) buttersäure

EL: MCPB (ISO); 4-(4-χλωρο-ο-τολυλοξυ)βουτυρικό οξύ

EN: MCPB (ISO); 4-(4-chloro-o-tolyloxy) butyric acid

FR: 2,4-MCPB (ISO); acide 4-(4-chloro-o-tolyloxy)butyrique

IT: MCPB (ISO); acido 4-(4-cloro-o-tolilossi) butirrico

NL: MCPB (ISO); 4-(4-chloor-o-tolyloxy)boterzuur

PT: MCPB (ISO); ácido 4-(4-cloro-o-toliloxi) butírico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2-)24/25

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No —

No 607-054-00-X

NOTA A

ES: sales y ésteres de MCPB

DA: salte og estere af MCPB

DE: Salze und Ester von MCPB

EL: άλατα και εστέρες του MCPB

EN: salts and esters of MCPB

FR: sels et esters de 2,4-MCPB

IT: sali ed esteri di MCPB

NL: zouten en esters van MCPB

PT: sais e esterres de MCPB

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22

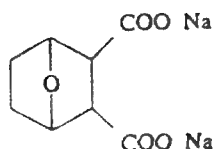
S : (2-)24/25

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 129-67-9

EEC No 204-959-8

No 607-055-00-5



ES: endotal-sódico (ISO) ; 7-oxabicyclo(2,2,1)heptan-2,3-dicarboxilato de disódico 3,6-epoxiciclohexano-1,2-dicarboxilato de disódico

DA: endothalnatrium\* (ISO) ; dinatrium-7-oxabicyclo(2,2,1)heptan-2,3-dicarboxylat

DE: endothalnatrium (ISO) ; Dinatrium-7-oxabicyclo(2,2,1)heptan-2,3-dicarboxylat

EL: endothal-sodium (ISO) ; 7-οξαδικυκλο(2.2.1)επτανο-2,3-δικαρβοξυλικό δινάτριο

EN: endothal-sodium (ISO) ; disodium 7-oxabicyclo(2,2,1)heptane-2,3-dicarboxylate

FR: endothal-sodium (ISO) ; 7-oxabicyclo(2,2,1)heptane-2,3-dicarboxylate de disodium

IT: endotal-sodio (ISO) ; 7-ossabicyclo(2,2,1)eptan-2,3-dicarbossilato di disodio

NL: endothalnatrium (ISO) ; dinatrium-7-oxabicyclo(2,2,1)heptaan-2,3-dicarboxylaar

PT: endotal-sódio (ISO) ; 7-oxabicyclo(2,2,1)heptano-2,3-dicarboxilato de dissódio


*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T ; R 25

Xn ; R 21

Xi ; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

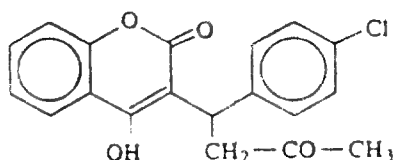
<p>T</p> 	<p>R : 21-25-36/37/38</p> <p>S : (1/2-)36/37/39-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 81-82-3

EEC No 201-378-1

No 607-057-00-6



- ES: cumacolor (ISO); 3-(1-(4-clorofenil)-3-oxobutil)-4-hidroxicumarina  
 DA: coumachlor (ISO); 3-(1-(4-chlorphenyl)-3-oxobutyl)-4-hydroxycoumarin  
 DE: coumachlor (ISO); 3-(1-(4-Chlorphenyl)-3-oxobutyl)-4-hydroxycoumarin  
 EL: coumachlor (ISO) · 3-(1-(4-χλωροφαινυλο)-3-οξοδουτυλο)-4-υδροξυκουμαρίνη  
 EN: coumachlor (ISO); 3-(1-(4-chlorophenyl)-3-oxobutyl)-4-hydroxycoumarin  
 FR: coumachlore (ISO); 3-(1-(4-chlorophényl)-3-oxobutyl)-4-hydroxycoumarine  
 IT: cūmacolor (ISO); 3-(1-(4-clorofenil)-3-ossobutil)-4-idrossicumarina  
 NL: cumachloor (ISO); 3-(1-(4-chloorfenyl)-3-oxobutyl)-4-hydroxycoumarine  
 PT: cumaclor (ISO); 3-(1-(4-clorofenil)-3-oxobutil)-4-hidroxicumarino

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Xn; R 48/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

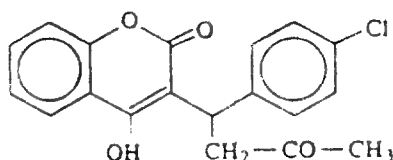
Xn	
	R : 48/22
	S : (2-)37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 81-82-3

EEC No 201-378-1

No 607-057-00-6



- ES: coumacloro (ISO); 3-(1-(4-clorofenil)-3-oxobutil)-4-hidroxicumarina  
 DA: coumachlor (ISO); 3-(1-(4-chlorphenyl)-3-oxobutyl)-4-hydroxycoumarin  
 DE: coumachlor (ISO); 3-(1-(4-Chlorphenyl)-3-oxobutyl)-4-hydroxycoumarin  
 EL: coumachlor (ISO) · 3-(1-(4-χλωροφαινυλο)-3-οξοβουτυλο)-4-υδροξυκουμαρίνη  
 EN: coumachlor (ISO); 3-(1-(4-chlorophenyl)-3-oxobutyl)-4-hydroxycoumarin  
 FR: coumachlore (ISO); 3-(1-(4-chlorophényl)-3-oxobutyl)-4-hydroxycoumarine  
 IT: cūmacloro (ISO); 3-(1-(4-clorofenil)-3-ossobutil)-4-idrossicumarina  
 NL: cumachloor (ISO); 3-(1-(4-chloorfenyl)-3-oxobutyl)-4-hydroxycoumarine  
 PT: cumaclor (ISO); 3-(1-(4-clorofenil)-3-oxobutil)-4-hidroxicumarino

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 48/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

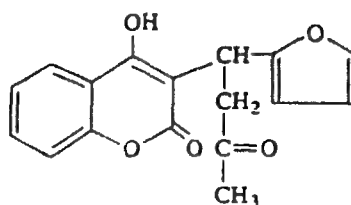
Xn	
	R : 48/22
	S : (2-)37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo*


Cas No 117-52-2

EEC No 204-195-5

No 607-058-00-1



- ES: cumafurilo; 3-[1-(2-furil)-3-oxo-butil]-4-hidroxicumanna  
 DA: coumafuryl; 4-hydroxy-3-[3-oxo-1-(2-furyl)-butyl]-coumarin  
 DE: Cumafuryl; 4-Hydroxy-2-[3-oxo-1-(2-furyl)butyl]-coumarin  
 EL: coumafuryl; 4-υδροξυ-3-[3-οξο-1-(2φουρυλο)βουτυλο]κουμαρίνη  
 EN: fumarin; 4-hydroxy-3-[3-oxo-1-(2-furyl)butyl]coumarin  
 FR: coumafuryl; 3-[1-(2-furyl)-3-oxobutyl]-4-hydroxycoumarine  
 IT: cumafuril; 4-idrossi-3-[3-oxo-1-(2-furil)butil]cumanna  
 NL: coumafuryl; 3-[1-(2-furyl)-3-oxobutyl]-4-hydroxycoumarine  
 PT: cumafuril; 3-[1-(2-furil)-3-oxobutyl]-4-hidroxicumanna

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25-48/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 25-48/25</p> <p>S : (1/2-)37-45</p>
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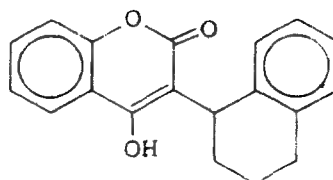
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 5836-29-3

EEC No 227-424-0

No 607-059-00-7



- ES : cumatetralilo (ISO) ; 4-hidroxi-3-(1,2,3,4-tetrahidro-1-naftil)cumarina  
 DA : coumatetralyl (ISO) ; 4-hydroxy-3-(1,2,3,4-tetrahydro-1-naphthyl)coumarin  
 DE : coumatetralyl (ISO) ; 4-Hydroxy-3-(1,2,3,4-tetrahydro-1-naphthyl)cumacin  
 EL : coumatetralyl (ISO) ; 4-υδροξυ-3-(1,2,3,4-τετραυδρο-1-ναφθυλο)κουμαρίνη  
 EN : coumatetralyl (ISO) ; 4-hydroxy-3-(1,2,3,4-tetrahydro-1-naphthyl)coumarin  
 FR : coumatetralyl (ISO) ; 4-hydroxy-3-(1,2,3,4-tétrahydro-1-naphthyl)coumarine  
 IT : cumatetralil (ISO) ; 4-idrossi-3-(1,2,3,4-tetraidro-1-naftil)cumarina  
 NL : coumatetralyl (ISO) ; 4-hydroxy-3-(1,2,3,4-tetrahydro-1-naftyl)cumarine  
 PT : cumatetralilo (ISO) ; 4-hidroxi-3-(1,2,3,4-tetrahidro-1-naftil)cumarino

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

T+ ; R 27/28

T ; R 48/24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

T+



R : 27/28-48/24/25

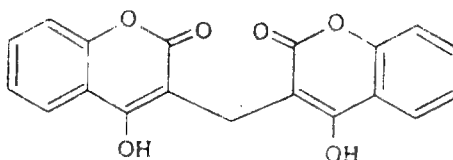
S : (1/2-)36/37-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 66-76-2

EEC No 200-632-9

No 607-060-00-2



- ES: dicumarina; 3,3'-metileno-bis(4-hidroxicumarina)  
 DA: dicoumarin; 3,3'-methylen-bis(4-hydroxycoumarin)  
 DE: Dicoumarin; 3,3'-Methylen-bis(4-hydroxy-coumarin)  
 EL: dicoumarin; 3,3'-μεθυλενο-δισ(4-υδροξυκουμαρίνη)  
 EN: dicoumarin; 3,3'-methylene bis(4-hydroxycoumarin)  
 FR: dicoumarine; 3,3'-méthylène-bis(4-hydroxycoumarine)  
 IT: dicumarina; 3,3'-metilen-bis(4-idrossi-cumarina)  
 NL: dicoumarine; 3,3'-methyleen-bis(4-hydroxycoumarine)  
 PT: dicumarinol; 3,3'-metileno-bis(4-hidroxicumarina)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 48/25

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 22-48/25
	S : (1/2-)37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 79-10-7

EEC No 201-177-9

No 607-061-00-8

NOTA D



ES: ácido acrílico

DA: acrylsyre

DE: Acrylsäure

EL: ακρυλικό οξύ

EN: acrylic acid

FR: acide acrylique

IT: acido acrilico

NL: acrylzuur

PT: ácido acrílico

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 10

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R : 10-34

S : (1/2-)26-36-45

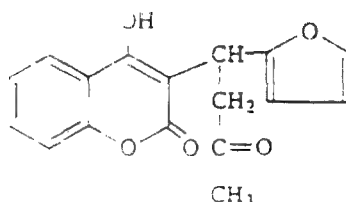
*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	C; R 34
2 % ≤ C < 25 %	Xi; R 36/38

Cas No 117-52-2

EEC No 204-195-5

No 607-058-00-1



- ES coumatumal ; 3-[1-(2-furil)-3-oxo-butil]-4-hidroxicumarina  
 DA coumafuryl ; 4-hydroxy-3-[3-oxo-1-(2-furyl)-butyl]-coumarin  
 DE Cumafuryl ; 4-Hydroxy-2-[3-oxo-1-(2-furyl)butyl]-coumarin  
 EL coumafuryl 4-υδροξυ-3-[3-οξο-1-(2φουρυλο)βουτυλο]κουμαρίνη  
 EN fumarin ; 4-hydroxy-3-[3-oxo-1-(2-furyl)butyl]coumarin  
 FR coumafuryl ; 3-[1-(2-furyl)-3-oxobutyl]-4-hydroxycoumarine  
 IT cumafuril ; 4-idrossi-3-[3-oxo-1-(2-furil)butil]cumarina  
 NL coumafuryl ; 3-[1-(2-furyl)-3-oxobutyl]-4-hydroxycoumarine  
 PT cumatunil ; 3-[1-(2-furil)-3-oxobutyl]-4-hidroxicumarina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T ; R 25-48/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

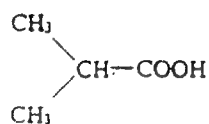
T	
	R : 25-48/25
	S : (1/2-)37-45

Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 79-31-2

EEC No 201-195-7

No 607-063-00-9



ES: ácido isobutírico

DA: isomørsyre; methylpropansyre

DE: Isobuttersäure

EL: ισοβουτυρικό οξύ

EN: isobutyric acid

FR: acide isobutyrique

IT: acido isobutirico


NL: isoboterzuur

PT: ácido isobutírico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 21/22 S : (2)

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 66-76 2



- ES dicumarina, 3,3'-metileno-bis(4-hidroxicumarina)  
 DA dicoumarin, 3,3'-methylen-bis(4 hydroxycoumarin)  
 DE Dicumarin; 3,3'-Methylen-bis(4-hydroxy-cumarin)  
 EL dicoumarin 3,3'-μεθυλενο-δις(4-υδροξυκουμαριν)  
 EN dicoumarin; 3,3'-methylene bis(4-hydroxycoumarin)  
 FR dicoumarine, 3,3'-methylene-bis(4-hydroxycoumarine)  
 IT dicumarina, 3,3'-metilen-bis(4-idrossi-cumarina)  
 NL dicoumarine; 3,3'-methyleen-bis(4-hydroxycoumarine)  
 PT dicumarinol, 3,3'-metileno-bis(4-hidroxicumarina)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling

T, R 48/25

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 22-48/25

S : (1/2)-37-45

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 79-08-3

EEC No 201-175-8

No 607-065-00-X



ES: ácido bromoacético

DA: bromeddikesyre

DE: Bromessigsäure

EL: βρωμοξικό οξύ

EN: bromoacetic acid

FR: acide bromoacétique

IT: acido bromoacetico

NL: broomazijnzuur

PT: ácido bromoacético

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificação, Classificazione, Indeling, Classificação*

T: R 23/24/25 | C: R 35

*Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	C	
		R: 23/24/25-35
		S: (1/2-)36/37/39-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 79-43-6

EEC No 201-207-0

No 607-066-00-5



ES: ácido dicloroacético

DA: dichloreddikesyre

DE: Dichloressigsäure

EL: διχλωροξικό οξύ

EN: dichloroacetic acid

FR: acide dichloroacétique

IT: acido dicloroacetico

NL: dichloorazijnzuur

PT: ácido dicloroacético

*Classificacion, Klasificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	R: 35 S: (1,2)-26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 79-36-7

EEC No 201-009-9

No 607-067-00-0




ES: cloruro de dicloroacetilo  
 DA: dicloroacetychlorid  
 DE: Dichloroacetylchlorid  
 EL: διχλωροακετυλοχλωρίδιο  
 EN: dichloroacetyl chloride  
 FR: chlorure de dichloroacétyle  
 IT: cloruro di dicloroacetile  
 NL: dicloroacetylchloride  
 PT: cloreto de dicloroacetilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C: R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

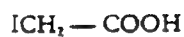
C	
	R : 35
	S : (1/2)-9-26-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 64-69-7

EEC No 200-590-1

No 607-068-00-6



ES: ácido yodoacético

DA: iodeddikesyre

DE: Jodessigsäure

EL: ιωδοξικό οξύ

EN: iodoacetic acid

FR: acide iodoacétique

IT: acido iodoacetico

NL: joodazijnzuur

PT: ácido iodoacético

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	C	
		R : 25-35
		S : (1/2-)22-36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas. No 105-36-2

EEC No 203-290-9

No 607-069-00-1



ES: bromoacetato de etilo

DA: ethylbromacetat

DE: Ethyl-bromacetat

EL: βρωμοξικός αιθυλεστερας

EN: ethyl bromoacetate

FR: bromoacetate d'éthyle

IT: bromoacetato di etile; etile bromoacetato


NL: ethylbroomacetaat

PT: bromoacetato de etilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+ : R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 26/27/28 S : (1/2-)7/9-26-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 105-39-5

EEC No 203-294-0

No 607-070-00-7



ES: cloroacetato de etilo

DA: ethylchloracetat

DE: Ethyl-chloracetat

EL: χλωροξεϊκος αιθυλεστερας

EN: ethyl chloroacetate

FR: chloroacetate d'éthyle

IT: cloroacetato di etile; etile cloroacetato

NL: ethylchloroacetaat

PT: cloroacetato de etilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T: R 23/24/25 N: R 50

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		R: 23/24/25-50
		S: (1/2-)7/9-45-61

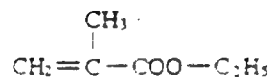
Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 97-63-2

EEC No 202-597-5

No 607-071-00-2

NOTA D



ES: metacrilato de etilo

DA: ethylmethacrylat

DE: Ethyl-methacrylat

EL: μεθακρυλικός αιθυλεστερας

EN: ethyl methacrylate

FR: methacrylate d'éthyle

IT: etil-metacrilato; metacrilato di etile

NL: ethylmethacrylaat

PT: metacrilato de etilo

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indéline, Classificação*

F: R 11

Xi: R 36/37/38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xi	
		R : 11-36/37/38-43
		S : (2)-9-16-29-33

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 818-61-1

EEC No 212-454-9

No 607-072-00-8

NOTA D



ES: acrilato de 2-hidroxietilo

DA: 2-hydroxyethylacrylat

DE: 2 Hydroxy-ethyl-acrylat

EL: ακρυλικός 2-υδροξυαιθυλεστέρας

EN: 2-hydroxyethyl acrylate

FR: acrylate de 2-hydroxyéthyle

IT: acrilato di 2-idrossietile; 2-idrossietil-acrilato

NL: 2 hydroxyethylacrylaat

PT: acrilato de 2-hidroxietilo


Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T; R 24

C; R 34

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 24-34-43
	S : (1/2-)26-36/39-45

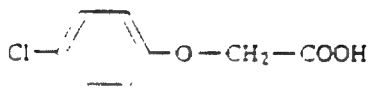
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	T; R 24-34-43
5 % ≤ C < 10 %	T; R 24-36/38-43
2 % ≤ C < 5 %	T; R 24-43
0,2 % ≤ C < 2 %	Xn; R 21-43

Cas No 122-88-3

EEC No 204-581-3

No 607-073-00-3



ES: --CPA; ácido 4-clorofenoxiacético

DA: --CPA

DE: --CPA

EL: --CPA; χλωροφαινοξυοξικό οξύ

EN: --CPA

FR: --CPA; acide 4-chlorophénoxyacétique

IT: --CPA


NL: --CPA

PT: --CPA

Classification, Klassificering, Einstufung, Ταξινόηση, Classificatiō, Classificatiō, Classificatiō, Indeline, Classificatiō

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

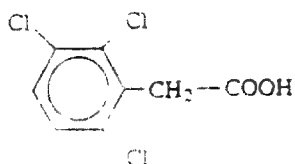
Xn	
	R : 22 S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 85-34-7

EEC No 201-599-3

No 607-074-00-9



ES: chlortenac (ISO); ácido 2,3,6-triclorofenilacético

DA: chlortenac (ISO); 2,3,6-trichlorophenyieddikesyre

DE: chlortenac (ISO); 2,3,6-Trichlorophenylessigsäure

EL: chlortenac (ISO); 2,3,6-τριχλωροφαινυλοξικό οξύ

EN: chlortenac (ISO); 2,3,6-trichlorophenylacetic acid

FR: chlorténac (ISO); acide 2,3,6-trichlorophénylacétique

IT: chlortenac (ISO); acido 2,3,6-triclorofenilacetico

NL: chloortenac (ISO); 2,3,6-trichloortenyiazijnzuur

PT: chlortenac (ISO); ácido 2,3,6-triclorofenilacético

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2-)36

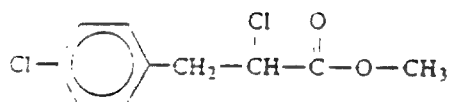
Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 14437-17-3

EEC No 238-413-5

No 607-075-00-4



- ES: enlorienprop-metilo (ISO); 2-cloro-3-(4-cloroteni) propionato de metilo.  
 DA: enlorienprop-methyl (ISO); methyl-2-chlor-3-(4-chlorophenyl) propionat  
 DE: enlorienprop-methyl (ISO); Methyli-2-chlor-3-(4-chlorophenyl) propionat  
 EL: enlorienprop-methyl (ISO); 2-χλωρο-3-(4-χλωροφαινυλο)προπιονικός μεθυλέστερας  
 EN: enlorienprop-methyl (ISO); methyl 2-chloro-3-(4-chlorophenyl)propionate  
 FR: enlorienprop-methyl (ISO); 2-chloro-3-(4-chlorophényl)propionate de méthyle  
 IT: enlorienprop-metil (ISO); 2-cloro-3-(4-cloroteni)propionato di metile  
 NL: enloorienprop-methyl (ISO); methyl-2-chloor-3-(4-chloorfenyl)propionaat  
 PT: enlorienprop-metilo (ISO); 2-cloro-3-(4-cloroteni) propionato de metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn: R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

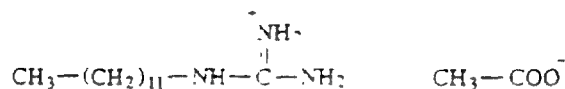
Xn	
	R: 21/22 S: (2-)36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 2439-10-3

EEC No 219-459-5

No 607-076-00-X




- ES: dodina (ISO); acetato de dodecilguanidinio  
 DA: dodin (ISO); dodecylguanidiniumacetat  
 DE: dodin (ISO); Dodecylguanidiniumacetat  
 EL: dodine (ISO); οξικό δωδεκυλογουανιδίνιο  
 EN: dodine (ISO); dodecylguanidinium acetate  
 FR: dodine (ISO); acétate de dodécylguanidinium; doguadine  
 IT: dodina (ISO); acetato di dodecilguanidinio  
 NL: dodine (ISO); dodecylguanidinium acetaat  
 PT: dodina (ISO); acetato de dodecilguanidinio

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

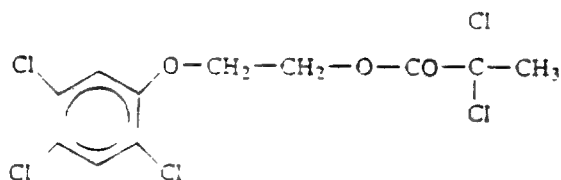
Xn	
	R : 22-36/38 S : (2-)26

Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 136-25-4

EEC No —

No 607-077-00-5



- ES: erbon (ISO); 2,2-dicloropropionato de 2-(2,4,5-triclorofenoxi)etilo  
 DA: erbon (ISO); 2-(2,4,5-trichlorphenoxy) ethyl-2,2-dichlorpropionat  
 DE: erbon (ISO); 2-(2,4,5-Trichlorphenoxy) ethyl-2,2-dichlorpropionat  
 EL: erbon (ISO); 2,2-διχλωροπροπιονικός 2-(2,4,5-τριχλωροφαινοξύ)αιθυλεστερας  
 EN: erbon (ISO); 2-(2,4,5-trichlorphenoxy) ethyl 2,2-dichloropropionate  
 FR: erbon (ISO); 2,2-dichloropropionate de 2-(2,4,5-trichlorophénoxy) éthyle  
 IT: erbon (ISO); 2,2-dicloropropionato di 2-(2,4,5-triclorofenossi) etile  
 NL: erbon (ISO); 2-(2,4,5-trichloortfenoxy) ethyl-2,2-dichloorpropionaat  
 PT: erbon (ISO); 2,2-dicloropropionato de 2-(2,4,5-triclorofenoxi)etilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

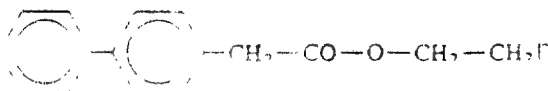
Xn	
	R : 22
	S : (2)

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 4301-50-2

EEC No —

No 607-078-00-0



ES: fluenetil (ISO); bifenil-4-ilacetato de 2-fluoroetilo

DA: fluenetil (ISO); 2-fluorethylbiphenyl-4-ylacetat

DE: fluenetil (ISO); 2-Fluorethylbiphenyl-4-ylacetat

EL: fluenetil (ISO) · διφαινυλ-4-υλοξικός 2-φθοροαιθυλεστέρας

EN: fluenetil (ISO); 2-fluoroethyl biphenyl-4-ylacetate

FR: fluenétil (ISO); biphényl-4-ylacétate de 2-fluoroéthyle

IT: fluenetil (ISO); bifenil-4-ilacetato di 2-fluoroetile


NL: fluenetil (ISO); 2-fluorethylbiphenyl-4-ylacetaat

PT: fluenetil (ISO); bifenil-4-ilacetato de 2-fluoroetilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

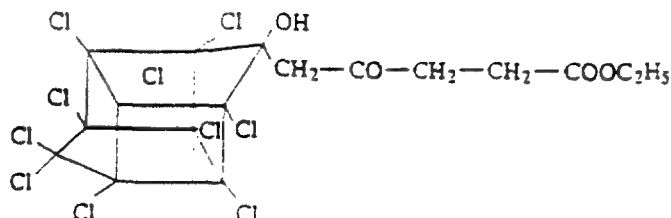
T+	
	R : 27/28
	S : (1/2-)28-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 4234-79-1

EEC No —

No 607-079-00-6

ES: kelevano (ISO); 5-(1,2,3,5,6,7,8,9,10,10-decacloro-4-idrossipentaciclo(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>)dec-4-il)-4-ossovalerato de etiloDA: kelevan (ISO); ethyl-5-(1,2,3,5,6,7,8,9,10,10-decachlor-4-hydroxypentacyclo(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>)dec-4-yl)-4-oxovaleratDE: kelevan (ISO); Äthyl-5-(1,2,3,5,6,7,8,9,10,10-decachlor-4-hydroxypentacyclo(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>)dec-4-yl)-4-oxovaleratEL: kelevan (ISO); 5-(1,2,3,5,6,7,8,9,10,10-δεκαχλωρο-4-υδροξυπεντακυκλο(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>) δεκα-4-υλ)-4-οξοβαλερανικός αιθυλεστέραςEN: kelevan (ISO); ethyl 5-(1,2,3,5,6,7,8,9,10,10-decachloro-4-hydroxypentacyclo(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>)dec-4-yl)-4-oxovalerateFR: kélevane (ISO); 5-(1,2,3,5,6,7,8,9,10,10-décachloro-4-hydroxypentacyclo(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>)dec-4-yl)-4-oxovalérate d'éthyleIT: kelevano (ISO); 5-(1,2,3,5,6,7,8,9,10,10-decacloro-4-idrossipentaciclo(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>)dec-4-il)-4-ossovalerato di etileNL: kelevaan (ISO); ethyl-5-(1,2,3,5,6,7,8,9,10,10-decachloor-4-hydroxypentacyclo(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>)dec-4-yl)-4-oxovaleraatPT: celevano (ISO); 5-(1,2,3,5,6,7,8,9,10,10-decacloro-4-hidroxi-pentaciclo(5,2,1,0<sup>2,4</sup>,0<sup>3,9</sup>,0<sup>5,8</sup>)dec-4-il)-4-oxovalerato de etilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	
	R : 22-24
	S : (1/2-)36/37-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas' No 79-04-9

EEC No 201-171-6

No 607-080-00-1



ES: cloruro de cloroacetilo; monocloroacetilo

DA: chloracetylchlorid

DE: Chloracetylchlorid

EL: χλωροακετυλοχλωρίδιο

EN: chloroacetyl chloride

FR: chlorure de chloroacétyle

IT: cloruro di cloroacetile; cloroacetilcloruro

NL: chlooracetylchloride


PT: cloreto de cloroacetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

C; R 34

Xi; R 37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>C</p> 	<p>R : 34-37</p> <p>S : (1/2-)9-26-45</p>
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 144-49-0

EEC No 205-631-7

No 607-081-00-7



ES: ácido fluoroacético; ácido monofluoroacético

DA: monofluoreddikesyre; fluoreddikesyre

DE: Monofluoressigsäure

EL: μονοφθορικό οξύ

EN: fluoroacetic acid

FR: acide fluoroacétique

IT: acido monofluoroacetico


NL: monofluorazijnzuur

PT: ácido fluoroacético

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ : R 28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 28
	S : (1/2-)20-22-26-45

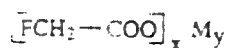
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentraçiegrenzen, Limites de concentração


Cas No —

EEC No —

No 607-082-00-2

NOTA A



ES: fluoroacetatos solubles; monofluoroacetatos solubles

DA: monofluoroacetater, opløselige

DE: Monofluoroacetate, lösliche

EL: διαλυτά φθοροξικά άλατα

EN: fluoroacetates, soluble

FR: fluoroacétates solubles

IT: monofluoroacetati solubili

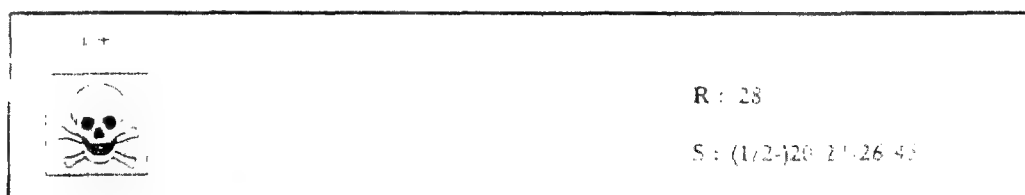
NL: monofluoroacetaten, oplosbare

PT: fluoroacetatos soluveis

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificaçāo:

T+; R 28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



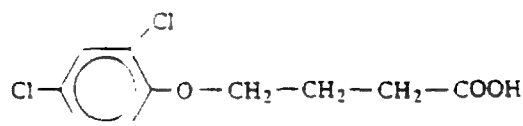
Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration -  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçāo




Cas No 94-82-6

EEC No 202-366-9

No 607-083-00-8



ES: ácido 4-(2,4-diclorofenoxi)butírico; 2,4-DB

DA: 4-(2,4-dichlorphenoxy) smørsyre

DE: 4-(2,4-Dichlorphenoxy) buttersäure

EL: 4-(2,4-διχλωροφαινοξύ)δουτυρικό οξύ; 2,4-DB

EN: 4-(2,4-dichlorophenoxy) butyric acid; 2,4-DB

FR: acide 4-(2,4-dichlorophenoxy) butyrique; 2,4-DB

IT: ácido 4-(2,4-diclorofenossi)butirico

NL: 4-(2,4-dichloorfenoxv) boterzuur

PT: ácido 4-(2,4-diclorofenoxi)butírico; 2,4-DI

Classification, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificação, Inaeiung, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 21/22
	S : (2-)36/37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 607-084-00-3

NOTA A

ES: sales de 2,4-DB

DA: salte af 4-(2,4-dichlorphenoxy)-smørsyre

DE: Salze von 2,4-DB

EL: αλατα του 2,4-DB

EN: salts of 2,4-DB

FR: sels de 2,4-DB

IT: sali di 2,4-DB

NL: zouten van 2,4-DB

PT: sais de 2,4-DB

Classication, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Ετικευση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 20/21/22

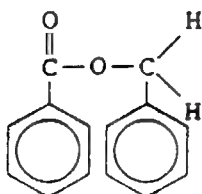
S: (2-)13

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 120-51-4

EEC No 204-402-9

No 607-085-00-9



ES: benzoato de bencilo

DA: benzylbenzoat

DE: benzylbenzoat

EL: βενζοϊκός βενζυλεστέρας

EN: benzyl benzoate

FR: benzoate de benzyle

IT: benzile benzoato

NL: benzylbenzoaat

PT: benzoato de benzilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

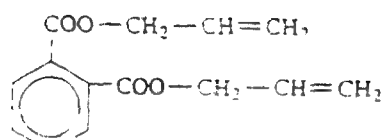
Xn	
	R : 22
	S : (2-)25

*Límites de concentración, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 131-17-9

EEC No 205-016-3

No 607-086-00-4



ES: ftalato de dialilo

DA: diallylphthalat

DE: Diallylphthalat

EL: φθαλικός διαλλυλεστέρας

EN: diallyl phthalate

FR: phthalate de diallyle

IT: diallile ftalato


NL: diallylftalaat

PT: ftalato de dialilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2-)24/25

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

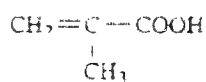
C ≥ 25 %	Xn; R 22

Cas No 79-41-4

EEC No 201-204-4

No 607-088-00-5

NOTA D



ES: ácido 2-metilpropenoico; ácido metacrílico

DA: methacrylsyre; 2-methylpropensyre

DE: Methacrylsäure

EL: μεθακρυλικό οξύ · 2-μεθυλοπροπενικό οξύ

EN: methacrylic acid; 2-methylpropenoic acid

FR: acide méthacrylique

IT: acido metacrílico; ácido 2-metil propenoico


NL: methacrylzuur

PT: ácido metacrílico; ácido 2-metilpropenoico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>C</p> 	<p>R 34</p> <p>S: (1/2)-15-26-43</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

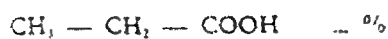
C ≥ 25 %	C; R 34
2 % ≤ C < 25 %	Xi; R 36/38

Cas No 79-09-4

EEC No 201-176-3

No 607-089-00-0

NOTA B



ES: ácido propiónico ... %

DA: propionsyre ... %

DE: Propionsäure ... %

EL: προπιονικό οξύ ... %

EN: propionic acid ... %

FR: acide propionique ... %

IT: acido propionico ... %


NL: propionzuur ... %

PT: ácido propiónico ... %

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

C	
	R : 34 S : (1/2-)23-36-45

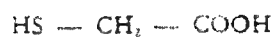
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	C; R 34
10 % ≤ C < 25 %	Xi; R 36/37/38

Cas No 68-11-1

EEC No 200-677-4

No 607-090-00-6



ES: ácido tioglicólico; ácido mercaptoacético

DA: mercaptoeddikesyre; thioglycolsyre

DE: Thioglykolsäure

EL: θειογλυκολικό οξύ

EN: thioglycolic acid

FR: acide mercaptoacétique; acide thioglycolique

IT: acido tioglicolico

NL: thioglycoizuur

PT: ácido mercaptoacético; ácido tioglicólico

Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T; R 23/24/25

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 10 \%$	T; R 23/24/25-34
$5 \% \leq C < 10 \%$	T; R 23/24/25-36/38
$2 \% \leq C < 5 \%$	T; R 23/24/25
$0,2 \% \leq C < 2 \%$	Xn, R 20/21/22

Cas No 76-05-1

EEC No 200-929-3

No 607-091-00-1

NOTA B

 $\text{CF}_3 - \text{COOH} \quad \dots \%$ 

ES: ácido trifluoroacético ... %

DA: trifluoreddikesyre ... %

DE: Trifluoressigsäure ... %

EL: τριφθοροξικό οξύ ... %

EN: trifluoroacetic acid ... %

FR: acide trifluoroacétique ... %

IT: ácido trifluoroacetico ... %

NL: trifluorazijnzuur ... %

PT: ácido trifluoroacético ... %

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn; R 20

C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C



R : 20-35

S : (1/2)-9-26-27-28-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

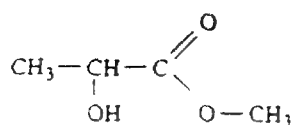
$C \geq 10 \%$	C; R 20-35
$5 \% \leq C < 10 \%$	C; R 34
$1 \% \leq C < 5 \%$	Xi; R 36/38



Cas No 547-64-8

EEC No 208-930-0

No 607-092-00-7



ES: lactato de metilo

DA: methylactat

DE: Methylaktar

EL: γαλακτικός μεθυλεστέρας

EN: methyl lactate

FR: lactate de méthyle

IT: metile lattato

NL: methylactaat

PT: lactato de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

R 10

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichèttatura, Kenmerken, Rotulagem

R : 10

S : (2-)23

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 79-03-8

EEC No 201-170-0

No 607-093-00-2



ES: cloruro de propionilo

DA: propionylchlorid

DE: Propionylchlorid

EL: προπιονυλοχλωρίδιο

EN: propionyl chloride

FR: chlorure de propionyle

IT: propionile cloruro

NL: propionylchloride

PT: cloreto de propionilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F; R 11

R 14

C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	C	
		
		R : 11-14-34
		S : (1/2-)9-16-26-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

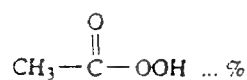

Cas No 79-21-0

EEC No 201-186-8

No 607-094-00-8

NOTA B

NOTA D



ES: ácido peracético ... %

DA: peroxyeddikesyre ... % ; pereddikesyre ... %

DE: Peroxyessigsäure ... % ; Peressigsäure ... %

EL: υπεροξικό οξύ ... %

EN: peracetic acid ... %

FR: acide peracétique ... %

IT: \_ácido peracetico .. %



NL: perazijnzuur ... %

PT: ácido peracético ... %

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Inaeling, Classificação

R 10	O ; R 7	Xn ; R 20/21/22	C ; R 35
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		
		R : 7-10-20/21/22-35
		S : (1/2-)3/7-14-36/37/39-45

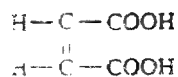
Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração

C ≥ 10 %	C ; R 20/21/22-35
5 % ≤ C < 10 %	C ; R 34
1 % ≤ C < 5 %	Xi ; R 36/37/38

Cas No 110-16-7

EEC No 203-742-5

No 607-095-00-3



ES: ácido maleico

DA: maleinsyre

DE: Maleinsäure

EL: μηλεϊνικό οξύ

EN: maleic acid

FR: acide maléique

IT: ácido maleico


NL: maleïnezuur

PT: ácido maleico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn; R 22 Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

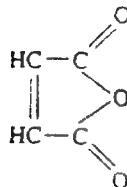
Xn	
	R : 22-36/37/38 S : (2-)26-28-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 108-31-6

EEC No 203-571-6

No 607-096-00-9



ES: anhídrido maleico

DA: maleinsyreanhydrid

DE: Maleinsäureanhydrid

EL: μηλεϊνικός ανυδρίτης

EN: maleic anhydride

FR: anhydride maléique

IT: anidride maleica

NL: maleïnezuuranhydride

PT: anidrido maleico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22	Xi; R 36/37/38	R 42
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22-36/37/38-42 S : (2-)22-28-39

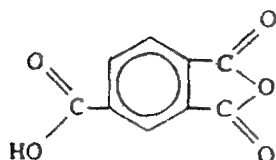
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	Xn; R 22-36/37/38-42
10 % ≤ C < 25 %	Xn; R 36/37/38-42
1 % ≤ C < 10 %	Xn; R 42

Cas No 552-30-7

EEC No 209-008-0

No 607-097-00-4



ES: 1,2-anhídrido 1,2,4-bencenotricarboxílico; anhídrido trimelítico

DA: 1,2,4-benzentricarboxylsyte-1,2-anhydrid; trimellitsyreanhydrid

DE: Trimellitsäureanhydrid; 1,2,4-Benzoltricarbonsäureanhydrid

EL: 1,2-ανυδρίτης του 1,2,4-δενζολοτρικαρβοξυλικού οξέος· τριμελλιτικός ανυδρίτης

EN: benzene-1,2,4-tricarboxylic-1,2-anhydride; trimellitic anhydride

FR: 1,2-anhydride 1,2,4-benzènetricarboxylique; anhydride trimellitique

IT: anidride dell'acido 1,2,4-benzen tricarbossilico; anidride trimellitica

NL: 1,2,4-benzeentricarbonzuuranhydride; trimellietzuuranhydride

PT: 1,2-anidrido 1,2,4-benzenotricarboxílico; anidrido trimelítico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

R 42

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 36/37/38-42

S : (2-)22-28

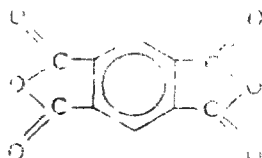
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

C ≥ 10 %	Xn; R 36/37/38-42
0,3% ≤ C < 10 %	Xn; R 42

Cas No 89-32-7

EEC No 201-898-9

No 607-098-00-X



ES: dianhídrido 1,2:4,5-bencenotetracarboxílico; dianhídrido piromelítico

DA: 1,2,4,5-benzentetracarboxylsyredianhydrid; pyromellitsyredianhydrid

DE: Pyromellitsäuredianhydrid; 1,2,4,5-Benzoltetracarbonsäuredianhydrid

EL: διανυδρίτης του 1,2,4,5-θενζολοτετρακαρβοξυλικού οξέος - πυρομελλίτικός διανυδρίτης

EN: benzene-1,2:4,5-tetracarboxylic dianhydride; pyromellitic dianhydride

FR: dianhydride 1,2,4,5-benzénététracarboxylique; dianhydride pyromellitique

IT: dianidride dell'acido 1,2,4,5-benzen tetracarbossilico; dianidride piromellitica

NL: 1,2,4,5-benzeentetracarbonszuurdianhydride; pyromellietzuurdianhydride

PT: dianidrido 1,2,4,5-benzenotetracarboxílico; dianidrido piromelítico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xi



R: 36/37/38

S: (2)-25

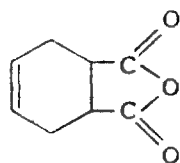
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 1 %	Xi; R 36/37/38

Cas. No 85-43-8

EEC No 201-605-4

No 607-099-00-5



ES: anhidrido 4-ciclohexeno-1,2-dicarboxílico; anhidrido tetrahidroftálico

DA: 4-cyclohexen-1,2-dicarboxylsyreanhydrid; tetrahydrophthalsyreanhydrid

DE: Tetrahydrophthalsäureanhydrid

EL: ανυδρίτης του 4-κυκλοεξενο-1,2-δικαρβοξυλικού οξέος · ανυδρίτης του τετραύδροφθαλικού οξέος

EN: cyclohex-4-ene-1,2-dicarboxylic anhydride; tetrahydrophthalic anhydride

FR: anhydride 4-cyclohexène-1,2-dicarboxylique; anhydride tétrahydrophthalique

IT: anidride tetraidroftalica; anidride 4-cicloesen-1,2-dicarbossilica

NL: 4-cyclohexeen-1,2-dicarbonzuuranhydride; tetrahydroftaalzuuranhydride

PT: anidrido 4 cicloexeno-1,2-dicarboxílico; anidrido tetrahidroftálico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/37

S : (2-)25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

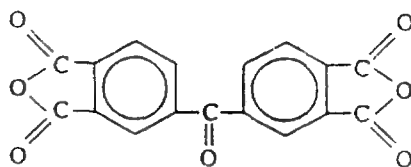
C ≥ 1 %	Xi; R 36/37



Cas No 2421-28-5

EEC No 219-348-1

No 607-100-00-9



ES : dianhídrido 3,3',4,4'-benzofenonatetracarboxílico

DA : 3,3',4,4'-benzophenontetracarboxylsyredianhydrid

DE : 3,3',4,4'-Benzophenontetracarbonsäuredianhydrid ; 4,4'-Carbonyldiphthalsäureanhydrid

EL : διανυδρίτης του 3,4,3',4'-δενζοφαινοτετρακαρβοξυλικού οξέος · διανυδρίτης του 4,4'-καρβονυλοδιφθαλικού οξέος

EN : benzophenone-3,3',4,4'-tetracarboxylic dianhydride ; 4,4'-carbonyldi(phthalic anhydride)

FR : dianhydride 3,4,3',4'-benzophénonetétracarboxylique ; dianhydride 4,4'-carbonyldiphthalique

IT : dianidride 3,3',4,4'-benzofenontetracarbossilica

NL : 3,3',4,4'-benzofenontetracarbonzuurdianhydride

PT : dianidrido 3,4,3',4'-benzofenonatetracarboxílico ; dianidrido 4,4'-carbonildiftálico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi ; R 36/37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/37

S : (2-)25

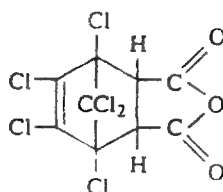
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 1 %	Xi ; R 36/37

Cas No 115-27-5

EEC No 204-077-3

No 607-101-00-4



ES: anhídrido 1,4,5,6,7,7-hexaclorobiciclo [2,2,1]-5-hepten-2,3-dicarboxílico; anhídrido cloréndico

DA: 1,4,5,6,7,7-hexachlorobicyclo-/2,2,1/-hept-5-en-2,3-dicarboxylsyreanhydrid

DE: 1,4,5,6,7,7-Hexachlorobicyclo-/2,2,1/-5-hept-5-en-2,3-dicarbonsäureanhydrid

EL: ανυδρίτης του 1,4,5,6,7,7-εξαχλωροδικυκλο-[2,2,1]-5-επτενο-2,3-δικαρβοξυλικού οξέος

EN: 1,4,5,6,7,7-hexachlorobicyclo/2,2,1/hept-5-ene-2,3-dicarboxylic anhydride chlorendic anhydride

FR: anhydride 1,4,5,6,7,7-hexachlorobicyclo /2,2,1/-hept-5.ène-2,3-dicarboxylique; anhydride chlorendique

IT: anidride 1,4,5,6,7,7-esaclorobiciclo [2,2,1]-5-epten-2,3-dicarbossilica; anidride clorendica

NL: 2H-3H-hexachloorbicyclo-/2,2,1/-5-hepteen-2,3-dicarbonzuuranhydride

PT: anidrido 1,4,5,6,7,7-hexaclorobiciclo [2,2,1]-hepta 5-eno-2,3-dicarboxílico; anidrido cloréndico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36/37/38
	S : (2-)25

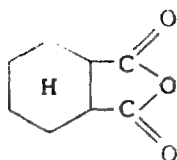
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao

C ≥ 1 %	Xi; R 36/37/38

Cas No 85-42-7

EEC No 201-604-9

No 607-102-00-X



ES: anhídrido 1,2-ciclohexanodicarboxílico; anhídrido hexahidroftálico

DA: 1,2-cyclohexandicarboxylsyreanhydrid; hexahydrophthalsyreanhydrid

DE: 1,2-Cyclohexandicarbonsäureanhydrid; Hexahydrophthalsäureanhydrid

EL: ανυδρίτης του 1,2-κυκλοεξανοδικαρβοξυλικού οξέος· ανυδρίτης του εξαϋδροφθαλικού οξέος

EN: cyclohexane-1,2-dicarboxylic anhydride; hexahydrophthalic anhydride

FR: anhydride 1,2-cyclohexanedicarboxylique; anhydride hexahydrophthalique

IT: anidride 1,2-cicloesandicarbossilica; anidride esaidroftalica

NL: 1,2-cyclohexaandicarbonzuuranhydride; hexahydroftaalzuuranhydride

PT: anidrido 1,2-cicloexanodicarboxílico; anidrido hexahidroftálico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36/37/38
	S : (2-)23-39

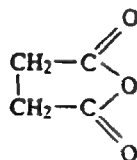
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

C ≥ 1 %	Xi; R 36/37/38

Cas No 108-30-5

EEC No 203-570-0

No 607-103-00-5



ES: anhídrido succínico

DA: ravsyreanhydrid

DE: Bernsteinsäureanhydrid

EL: ανυδρίτης του ηλεκτρικού οξέος

EN: succinic anhydride

FR: anhydride succinique

IT: anidride succinica


NL: barnsteenzuuranhydride

PT: anidrido succínico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 36/37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 36/37
	S : (2-)25

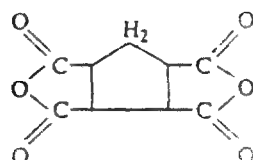
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 1 %	Xi; R 36/37

Cas No 6053-68-5

EEC No 227-964-7

No 607-104-00-0



ES: dianhídrido 1,2,3,4-ciclopentanotetracarboxílico

DA: 1,2,3,4-cyclopentanetetracarboxylsyredianhydrid

DE: 1,2,3,4-Cyclopentanetetracarbonsäuredianhydrid

EL: διανυδρίτης του 1,2,3,4-κυκλοπεντανοτετρακαρβοξυλικού οξέος

EN: cyclopentane-1,2,3,4-tetracarboxylic dianhydride

FR: dianhydride 1,2,3,4-cyclopentanetétracarboxylique

IT: dianidride 1,2,3,4-ciclopentan tetracarbossilica

NL: 1,2,3,4-cyclopentaantetracarbonzuurdianhydride

PT: dianidrido 1,2,3,4-ciclopentanotetracarboxílico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi; R 36/37

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36/37
	S : (2-)25

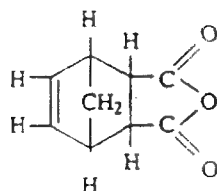
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã

C ≥ 1 %	Xi; R 36/37

Cas No 129-64-6

EEC No 204-957-7

No 607-105-00-6



ES: anhídrido 5-norborneno-2,3-dicarboxílico

DA: 5-norbornen-2,3-dicarbonoxylsyreanhydrid

DE: 5-cis-Norbornen-2,3-dicarbonssäureanhydrid

EL: ανυδρίτης του ενδο-*cis*-δικυκλο[2,2,1]-5-επτενο-2,3-δικαρβοξυλικού οξέος

EN: 8,9,10-trinorborn-5-ene-2,3-dicarboxylic anhydride

FR: anhydride 5-norbornène-2,3-dicarboxylique; anhydride 8,9,10-trinorborn-5-ène-2,3-dicarboxylique

IT: anidride endo-*cis*-bicielo[2,2,1]-5-epten-2,3-dicarbossilica

NL: 5-norborneen-2,3-dicarbonzuuranhydride

PT: anidrido 5-norborneno-2,3-dicarboxílico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36/37/38
	S : (2-)39

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

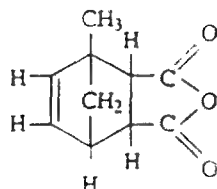
C ≥ 1 %	Xi; R 36/37/38

Cas No 123748-85-6

EEC No —

No 607-106-00-1

NOTA C



ES: anhídrido 1-metil-5-norborneno-2,3-dicarboxílico

DA: 1-methyl-5-norbomen-2,3-dicarboxylsyreanhydrid

DE: 1-Methyl-5-norbomen-2,3-dicarbonssäureanhydrid

EL: ανυδρίτης του 1-μεθυλ-5-νορβορνενο-2,3-δικαρβοξυλικού οξέος· ανυδρίτης του 8,9-δικαρβουν-5-εν-2,3-δικαρβοξυλικού οξέος

EN: 8,9-dinorborn-5-ene-2,3-dicarboxylic anhydride

FR: anhydride 1-méthyl-5-norbornène-2,3-dicarboxylique; anhydride 8,9-dinorborn-5-ène-2,3-dicarboxylique

IT: anidride 1-metil-5-norbomen-2,3-dicarbossilica

NL: 1-methyl-5-norborneen-2,3-dicarbonzuuranhydride

PT: anidrido 1-metil-5-norborneno-2,3-dicarboxílico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36/37/38

R 42

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-36/37/38-42

S : (2-)39

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

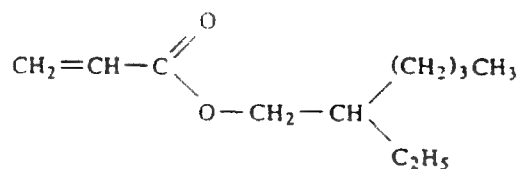
C ≥ 25 %	Xn; R 22-36/37/38-42
10 % ≤ C < 25 %	Xn; R 36/37/38-42
1 % ≤ C < 10 %	Xn; R 42

Cas No 103-11-7

EEC No 203-080-7

No 607-107-00-7

NOTA D



ES : acrilato de 2-etilhexilo

DA : 2-ethylhexylacrylat

DE : 2-Ethylhexylacrylat

EL : ακρυλικός 2-αιθυλεξυλεστέρας

EN : 2-ethylhexyl acrylate

FR : acrylate de 2-éthylhexyle

IT : 2-etilesil acrilato

NL : 2 ethylhexylacrylaat

PT : acrilato de 2-etilexilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xi ; R 37/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 37/38-43

S : (2-)24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 20 %	Xi ; R 37/38-43
1 % ≤ C < 20 %	Xi ; R 43

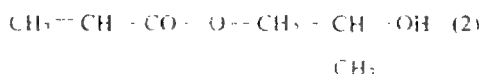
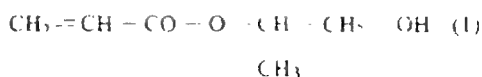


Cas No 2918-23-2 (1)  
999-61-1 (2)  
25584-83-2 (mix)

EEC No 220-852-9 (1)  
213-663-8 (2)  
247-118-0 (mix)

No 607-108-00-2

NOTA C  
NOTA D



ES : acrilato de hidroxipropilo  
DA : hydroxypropylacrylat  
DE : Hydroxypropylacrylat  
EL : ακρυλικός υδροξυπροπυλεστέρας  
EN : hydroxypropyl acrylate  
FR : acrylate d'hydroxypropyle  
IT : idrossipropilacrilato  
NL : Hydroxypropylacrylaat  
PT : acrilato de hidroxipropilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 23/24/25	C; R 34	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	
	R : 23/24/25-34-43
	S : (1/2-)26-36/37/39-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

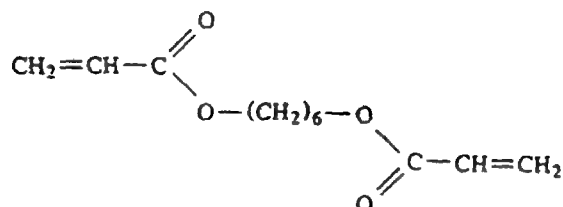
C ≥ 10 %	T; R 23/24/25-34-43
5 % ≤ C < 10 %	T; R 23/24/25-36/38-43
2 % ≥ C < 5 %	T; R 23/24/25-43
0,2 % ≤ C < 2 %	Xn; R 20/21/22-43

Cas No 13048-33-4

EEC No 235-921-9

No 607-109-00-8

NOTA D



ES: diacrilato de hexametileno; diacrilato de hexano-1,6-diol

DA: 1,6-hexandioldiacrylat

DE: 1,6-Hexandioldiacrylat

EL: διακρυλικός 1,6-εξανοδιστέρας · διακρυλικός εξαμεθυλενεστέρας

EN: hexamethylene diacrylate; hexane-1,6-diol diacrylate

FR: diacrylate d'hexaméthylène; diacrylate de 1,6-hexanediol

IT: 1,6-esandiol diacrilato

NL: 1,6-hexaandioldiacrylaat; hexamethyleendiacylaat

PT: diacrilato de 1,6-hexanodiol; diacrilato de hexametileno

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi; R 36/38 R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/38-43

S : (2-)39

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 20 %	Xi ; R 36/38-43
1 % ≤ C < 20 %	Xi ; R 43

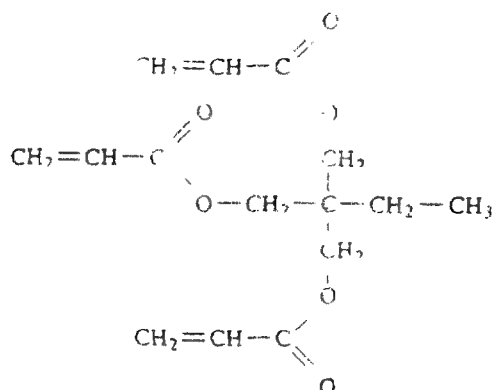


Cas No 15625-89-5

EEC No 239-701-3

No 607-111-00-9

NOTA D



ES acrilato de 2-2-bis(acriloximetil)butilo; triacrilato de trimetilolpropano

DA 1,1,1-trihydroxymethylpropyltriacrylat; trimethylolpropantriacrylat

DE 1,1,1-Trihydroxymethylpropyltriacrylat; Trimethylolpropantriacrylat

EL τριακρυλικός τριμεθυλοπροπανοτριεστέρας

EN 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate

FR diacrylate de 2-(acryloyloxyméthyl)-2-éthyl-1,3-propanediyle; triacrylate de triméthylolpropane

IT trimetilolpropan triacrilato

NL trimethyloolpropantriacrylaat


PT diacrilato de 2-(acriloximetil)-2-etil-1,3-propanodíilo; triacrilato de trimetilolpropano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 36/38-43 S : (2-)39

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 20 %	Xi; R 36/38-43
1 % ≤ C < 20 %	Xi; R 43

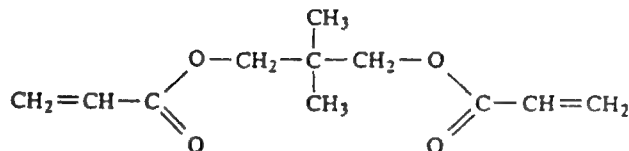


Cas No 2223-82-7

EEC No 218-741-5

No 607-112-00-4

NOTA D



ES: diacrilato de 2,2-dimetil-1,3-propanodiolo; diacrilato de neopentilglicol

DA: 2,2-dimethylpropandiol-1,3-diacrylat; neopentylglycoldiacrylat

DE: 2,2-Dimethylpropandiol-1,3-diacrylat; Neopentylglykoldiacrylat

EL: διακρυλικός 2,2-διμεθυλοπροπανο-1,3-διεστέρας

EN: 2,2-dimethyltrimethylene diacrylate; neopentyl glycol diacrylate

FR: diacrylate de 2,2-diméthyl-1,3-propanediyle, diacrylate de néopentylglycol

IT: diacrilato di 2,2-dimetilpropan-1,3-propandiol

NL: 2,2-dimethylpropanediol-1,3-diacrylaat; neopentylglycoldiacrylaat

PT: diacrilato de 2,2-dimetilpropan-1,3-propanodiolo, diacrilato de neopentilglicol


Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T; R 24

Xi; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 24-36/38-43</p> <p>S : (1/2-)28-39-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

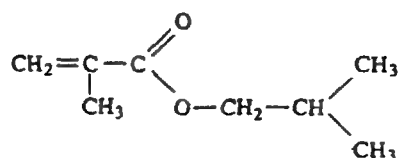
C ≥ 20 %	T; R 24-36/38-43
5 % ≤ C < 20 %	T; R 24-43
1 % ≤ C < 5 %	Xn; R 21-43
0,2 % ≤ C < 1 %	Xn; R 21

Cas No 97-86-9

EEC No 202-613-0

No 607-113-00-X

NOTA D



ES: metacrilato de isobutilo

DA: isobutylmethacrylat

DE: 2-Methylpropylmethacrylat

EL: μεθακρυλικός ισοβουτυλεστέρας

EN: isobutyl methacrylate

FR: methacrylate d'isobutyle

IT: isobutil metacrilato

NL: isobutylmethacrylaat

PT: metacrilato de isobutilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

R 10

Xi; R 36/37/38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 10-36/37/38-43

S : (2-)24-37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 20 %	Xi; R 36/37/38-43
1 % ≤ C < 20 %	Xi; R 43



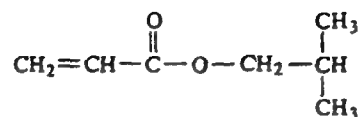


Cas No 106-63-8

EEC No 203-417-8

No 607-115-00-0

NOTA D



ES: acrilato de isobutilo

DA: isobutylacrylat

DE: 2-Methylpropylacrylat

EL: ακρυλικός ισοβουτυλεστέρας

EN: isobutyl acrylate

FR: acrylate d'isobutyle

IT: isobutile acrilato

NL: isobutylacrylaat

PT: acilato de isobutilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

R 10

Xn; R 20/21

Xi; R 38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 10-20/21-38-43

S : (2-)9-24-37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

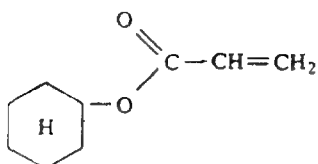
C ≥ 25 %	Xn; R 20/21-38-43
10 % ≤ C < 25 %	Xi; R 38-43
1 % ≤ C < 10 %	Xi; R 43

Cas No 3066-71-5

EEC No 221-319-3

No 607-116-00-6

NOTA D



ES: acrilato de ciclohexilo

DA: cyclohexylacrylat

DE: Cyclohexylacrylat

EL: ακρυλικός κυκλοεξυλεστέρας

EN: cyclohexyl acrylate

FR: acrylate de cyclohexyle

IT: cicloesile acrilato

NL: cyclohexylacrylaat

PT: acrilato de cicloexilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 37/38

S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

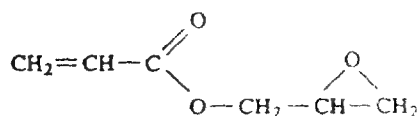
C ≥ 10 %	Xi; R 37/38

Cas No 106-90-1

EEC No 203-440-3

No 607-117-00-1

NOTA



ES: acrilato de 2,3-epoxipropilo; acrilato de glicidilo

DA: 2,3-epoxypropylacrylat; glycidylacrylat

DE: 2,3-Epoxypropylacrylat; Glycidylacrilat

EL: ακρυλικός 2,3-εποξυπροπυλεστέρας· ακρυλικός γλυκιδυλεστέρας

EN: 2,3-epoxypropyl acrylate; glycidyl acrylate

FR: acrylate de 2,3-époxypropyle; acrylate de glycidyle

IT: 2,3-epossipropile acrilato; glicidile acrilato

NL: 2,3-epoxypropylacrylaat; glycidylacrylaat

PT: acrilato de 2,3-epoxipropilo; acrilato de glicidilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

C; R 34

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem

T



R 23/24/25-34-43

S: (1/2-)26-36/37/39-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao

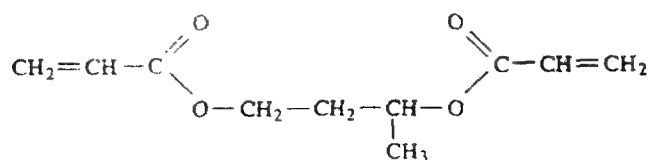
$C \geq 10 \%$	T; R 23/24/25-34-43
$5 \% \leq C < 10 \%$	T; R 23/24/25-36/38-43
$2 \% \leq C < 5 \%$	T; R 23/24/25-43
$0,2 \% \leq C < 2 \%$	Xn; R 20/21/22-43

Cas No 19485-03-1

EEC No 243-105-9

No 607-118-00-7

NOTA D




- ES diacrilato de 1-metiltrimetileno ; diacrilato de 1,3-butilenglicol  
 DA 1,3-butandioldiacrylat ; 1,3-butylenglycoldiacrylat  
 DE 1,3-Butandioldiacrylat  
 EL διακρυλικός 1,3-βουτανοδιεστέρας  
 EN 1-methyltrimethylene diacrylate ; 1,3-butylene glycol diacrylate  
 FE diacrylate de 1-méthyl-1,3-propanediyle ; diacrylate de 1,3-butyène-glycol  
 IT 1,3-butandioldiacrilato  
 NL diacrylaat van 1,3-butaandiol  
 PT diacrilato de 1-metil-1,3-propanodiuolo ; diacrilato de 1,3-butileno-glicol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Xn ; R 21	C ; R 34	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	R : 21-34-43 S : (1/2-)26-36/37/39-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

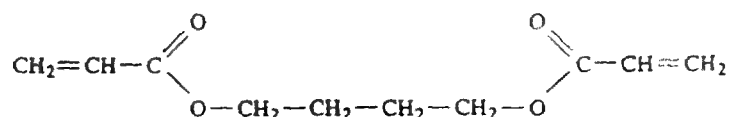
C ≥ 25 %	C ; R 21-34-43
10 % ≤ C < 25 %	C ; R 34-43
5 % ≤ C < 10 %	Xi ; R 36/38-43
1 % ≤ C < 5 %	Xi ; R 43

Cas No 1070-70-8

EEC No 213-979-6

No 607-119-00-2

NOTA D



ES: diacrilato de 1,4-tetrametileno; diacrilato de 1,4-butilenglicol

DA: 1,4-butandiol diacrylat; 1,4-butylen glycoldiacrylat

DE: 1,4-Butandiol diacrylat

EL: διακρυλικός 1,4-δουτανοδιεστέρας

EN: tetramethylene diacrylate; 1,4-butyleneglycol diacrylate

FR: diacrylate de tétraméthylène; diacrylate de 1,4-butyleneglycol

IT: 1,4-butandiol diacrilato

NL: diacrylaat van 1,4-butaandiol; diacrylaat van 1,4-butyleenglycol

PT: diacrilato de tetrametileno; diacrilato de 1,4-butilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xn; R 21 C; R 34 R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	R : 21-34-43
	S : (1/2-)26-36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

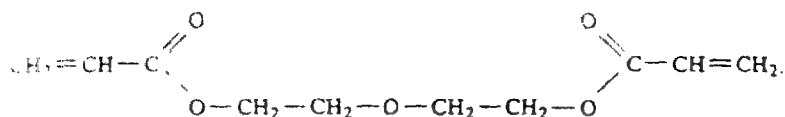
C ≥ 25 %	C; R 21-34-43
10 % ≤ C < 25 %	C; R 34-43
5 % ≤ C < 10 %	Xi; R 36/38-43
1 % ≤ C < 5 %	Xi; R 43

Cas No 4074-88-8

EEC No 223-791-6

No 607-120-00-8

NOTA D



- ES diacrilato de 2,2'-oxidietilo, diacrilato de dietilenglicol  
 DA diethylenglycoldiacrylat  
 DE Diethylenglykoldiacrylat  
 EL διακρυλικός διαιθυλενογλυκολεστέρας· διακρυλικός 2,2'-οξυδιαιθυλεστέρας  
 EN 2,2'-oxydiethyl diacrylate; diethylene glycol diacrylate  
 FR diacrylate de 2,2'-oxydiéthyle; diacrylate de diéthylèneglycol  
 IT dietileneglicoldiacrilato  
 NL diacrylaat van diethyleenglycol  
 PT diacrilato de 2,2'-oxidietilo, diacrilato de dietilenoglicol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 24

Xi; R 36/38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 24-36/38-43</p> <p>S : (1/2-)28-39-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*

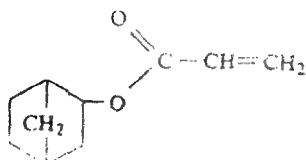
C ≥ 20 %	T; R 24-36/38-43
2 % ≤ C < 20 %	T; R 24-43
0,2 % ≤ C < 2 %	Xn; R 21-43

Cas No 10027-06-2

EEC No —

No 607-121-00-3

NOTA D



ES: acrilato de 2-norbornilo

DA: bicyclo[2,2,1]-2-ylacrylat; 2-norbornylacrylat

DE: 2-norbornylacrylat

EL: ακρυλικός 2-νορβορνυλεστέρας

EN: 8,9,10-trinorborn-2-yl acrylate

FR: acrylate de 2-norbornyle; acrylate de 8,9,10-trinorborn-2-yle

IT: 2-norbornilacrilato

NL: 2-norbornylacrylaat

PT: acrilato de 2-norbornilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 21

Xi; R 38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rosulagem

Xn



R : 21-38-43

S (2-)28

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

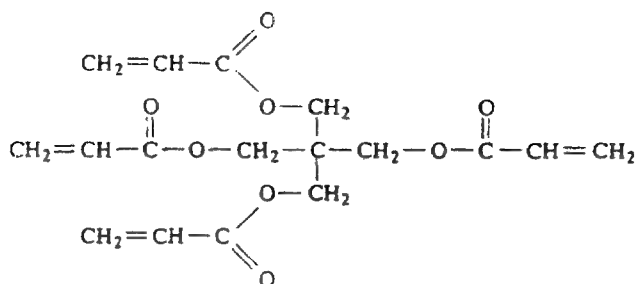
C ≥ 25 %	Xn; R 21-38-43
10 % ≤ C < 25 %	Xi; R 38-43
1 % ≤ C < 10 %	Xi; R 43

Cas No 4986-89-4

EEC No 225-644-1

No 607-122-00-9

NOTA D



ES : tetracnato de pentaeritritol

DA : pentaerythritoltetraacrylat

DE : Pentaerythritetraacrylat

EL: τετρακυλικός εστέρας πενταερυθρίτη

EN : pentaerythritol tetraacrylate

FR : diacrylate de 2,2-bis(acryloyloxyméthyl)-1,3-propanediyle ; tétraacrylate de pentaérythritol

IT : pentaeritritol tetraacrilato

NL : pentaerythritoltetraacrylaat

PT: tetracrilato de pentaeritritol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xi ; R 36/38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

xi



R : 36/38-43

S : (2-)26-39

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationgrenzen, Limites de concentraçao*

$C \geq 20 \%$	$X_i$ ; R 36/38-43
$1 \% \leq C < 20 \%$	$X_i$ ; R 43

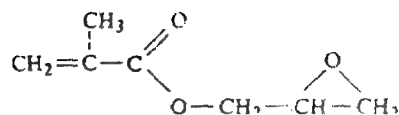


Cas No 106-91-2

EEC No 203-441-9

No 607-123-00-4

NOTA D



ES: metacrilato de 2,3-epoxipropilo; metacrilato de glicidilo

DA: 2,3-epoxypropylmethacrylat; glycidylmethacrylat

DE: 2,3-Epoxypropylmethacrylat; Glycidylmethacrylat

EL: μεθακρυλικός 2,3-εποξυπροπυλεστέρας· μεθακρυλικός γλυκυδυλεστέρας

EN: 2,3-epoxypropyl methacrylate; glycidyl methacrylate

FR: methacrylate de 2,3-époxypropyle; méthacrylate de glycidyle

IT: 2,3-epossipropile metacrilato; glicidil metacrilato

NL: 2,3-epoxypropylmethacrylaat; glycidylmethacrylaat

PT: metacrilato de 2,3-epoxipropilo; metacrilato de glicidilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Xi; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> Xn   </div> <div style="text-align: right;"> R 20/21/22-36/38-43  S (2-)26-28 </div> </div>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

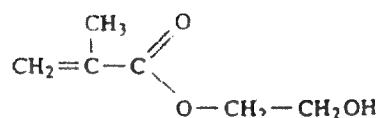
C ≥ 25 %	Xn; R 20/21/22-36/38-43
10 % ≤ C < 25 %	Xi; R 36/38-43
1 % ≤ C < 10 %	Xi; R 43

Cas No 868-77-9

EEC No 212-782-2

No 607-124-00-X

NOTA D



ES metacrilato de 2-hidroxiétilo

DA 2-hydroxyethylmethacrylat

DE 2-Hydroxyethylmethacrylat

EL μεθακρυλικός 2-υδροξυαιθυλεστέρας

EN 2-hydroxyethyl methacrylate

FR methacrylate de 2-hydroxyéthyle

IT 2-idrossietile metacrilato

NL 2-hydroxyethylmethacrylaat

PT metacrilato de 2-hidroxiétilo

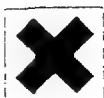
Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi ; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/38-43

S : (2-)26-28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

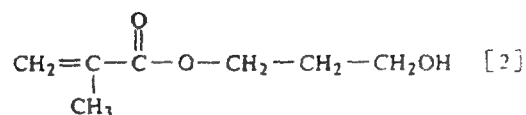
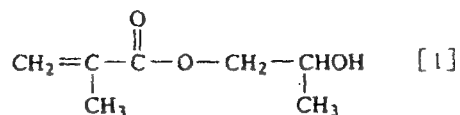
C ≥ 20 %	Xi ; R 36/38-43
1 % ≤ C < 20 %	Xi ; R 43

Cas No 923-26-2 [1]  
2761-09-3 [2]

EEC No 213-090-3 [1]  
220-426-2 [2]

No 607-125-00-5

NOTA D



ES: metacrilato de hidroxipropilo, mezcla de [1] y [2]

DA: hydroxypropylmethacrylat; blanding [1] og [2]

DE: Hydroxypropylmethacrylat, Mischung [1] und [2]

EL: μείγμα των [1] και [2] του μεθακρυλικού υδροξυπροπυλεστέρα

EN: hydroxypropyl methacrylate, mixture of [1] and [2]

FR: methacrylate d'hydroxypropyle, mélange [1] et [2]

IT: idrossipropile metacrilato, miscela [1] e [2]

NL: 3-hydroxypropylmethacrylaat, mengsel [1] en [2]

PT: metacrilato de hidroxipropilo, mistura [1] e [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 36/38
	S : (2-)26-28

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

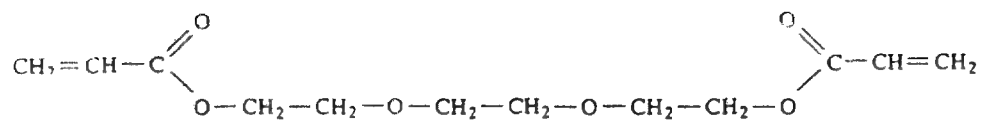
C ≥ 10 %	Xi; R 36/38

Cas No 1680-21-3

EEC No 216-853-9

No 607-126-00-0

NOTA D



ES: diacrilato de 2,2'-(etilendioxo)dietilo; diacrilato de trietilenglicol

DA: triethylenglycoldiacrylat

DE: Triethylenglykoldiacrylat

EL: διακρυλικός τριαιθυλενογλυκολεστέρας

EN: 2,2'-(ethylenedioxy)diethyl diacrylate; triethylene glycol diacrylate

FR: diacrylate de 2,2'-(éthylènedioxy)diéthyle; diacrylate de triéthylène-glycol

IT: trietilen glicole diacrilato

NL: diacrylaat van triethyleenglycol

PT: diacrilato de 2,2'-(etilenodioxo)dietilo; diacrilato de trietilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/38-43

S : (2-)26-28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

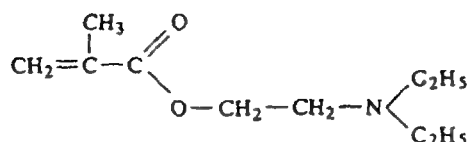
C ≥ 20 %	Xi; R 36/38-43
1 % ≤ C < 20 %	Xi; R 43

Cas No 105-16-8

EEC No 203-275-7

No 607-127-00-6

NOTA D



ES: metacrilato de 2-dietilaminoetilo

DA: 2-diethylaminoethylmethacrylat

DE: 2-Diethylaminoethylmethacrylat

EL: μεθακρυλικός 2-διαιθυλαμινοαιθυλεστέρας

EN: 2-diethylaminoethyl methacrylate

FR: methacrylate de 2-diéthylaminoéthyle

IT: metacrilato di 2-dietilamino etile

NL: 2-diethylaminoethylmethacrylaat

PT: metacrilato de 2-dietilaminoetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Xn; R 20

Xi; R 36/38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20-36/38-43

S : (2-)26

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

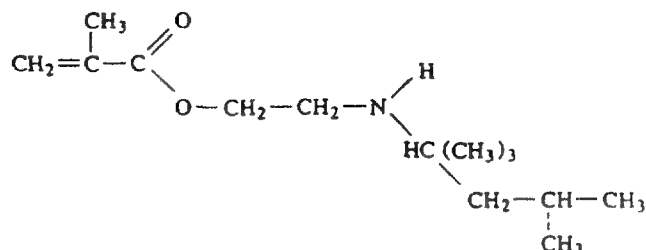
$C \geq 25 \%$	Xn; R 20-36/38-43
$10 \% \leq C < 25 \%$	Xi; R 36/38-43
$1 \% \leq C < 10 \%$	Xi; R 43

Cas No 3775-90-4

EEC No 223-228-4

No 607-128-00-1

NOTA D



ES: metacrilato de 2-terc-butilaminoetilo

DA: 2-*tert*-butylaminoethylmethacrylateDE: 2-*tert*-Butylaminoethylmethacrylat

EL: μεθακρυλικός 2-(τριτοταγής δουνυλο)-αμινοαιθυλεστέρας

EN : 2-*tert*-butylaminoethyl methacrylate

FR. methacrylate de 2-*tert*-butylaminoéthyleIT: 2-*tert*-butilaminoetile metacrilato

NL: 2-tert-butylaminoethylmethacrylaat

PT: metacrilato de 2-*terc*-butilaminoetilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xi ; R 36/38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

 $x_i$ 

R : 36/38-43

S : (2-)26

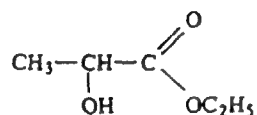
*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 20 \%$	Xi ; R 36/38-43
$1 \% \leq C < 20 \%$	Xi ; R 43

Cas No 97-64-3

EEC No 202-598-0

No 607-129-00-7



ES: lactato de etilo

DA: ethyllactat

DE: Ethyllaktat

EL: γαλακτικός αιθυλεστέρας

EN: ethyl lactate

FR: lactate d'éthyle

IT: etil lattato

NL: ethyllactaat

PT: lactato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

R 10

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

R : 10

S : (2-)23

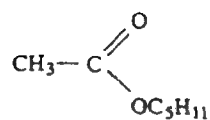
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 628-63-7

EEC No 211-047-3

No 607-130-00-2

NOTA C



ES: acetato de pentilo; acetato de amilo

DA: pentylacetat; amylacetat

DE: Pentylacetat; Amylacetat

EL: οξικός αμυλεστέρας

EN: pentyl acetate; amyl acetate

FR: acetate de pentyle; acétate d'amyne

IT: amile acetato

NL: pentylacetaat; amylacetaat

PT: acetato de pentilo; acetato de amilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

R 10

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

R : 10

S : (2-)23

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

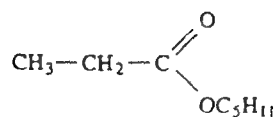



Cas No 624-54-4

EEC No 210-852-7

No 607-131-00-8

NOTA C



ES propionato de pentilo, propionato de amilo

DA: pentylpropionat, amypropionat

DE Amylpropionat

EL: προπιονικός αμυλεστέρας

EN: pentyl propionate, amyl propionate

FR: propionate de pentyle propionate d'amyne

IT amile propionato

NL amypropionaat

PT propionato de pentilo, propionato de amilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

R 10

S (2)23

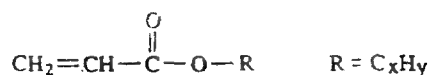
Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No

EEC No

No 607-133-00-9



ES: acrilatos excepto de los especialmente citados en este Anexo

DA: acrylater undtagen sådanne nævnt andetsteds i dette bilag

DE: Acrylate mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: ακρυλικοί εστέρες εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: acrylates with the exception of those specified elsewhere in this Annex

FR: acrylates à l'exclusion de ceux nommément désignés dans cette annexe

IT: acrilati esclusi quelli espressamente indicati in questo allegato

NL: acrylaten met uitzondering van deze met name genoemd in deze bijlage

PT: acrilatos, com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/37/38

S : (2-)26-28

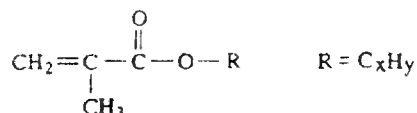
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	Xi; R 36/37/38

Cas No —

EEC No —

No 607-134-00-4



ES: metacrilatos, excepto de los especialmente citados en este Anexo

DA: methacrylater undtagen sådanne nævnt andetsteds i dette bilag

DE: Methacrylate mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: μεθακρυλικοί εστέρες εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: methacrylate with the exception of those specified elsewhere in this Annex

FR: methacrylates à l'exclusion de ceux nommément désignés dans cette annexe

IT: metacrilati esclusi quelli espressamente indicati in questo allegato

NL: methacrylaten met uitzondering van deze met name genoemd in deze bijlage

PT: metacrilatos, com excepção dos expressamente referidos no presente anexo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36/37/38

S : (2-)26-28

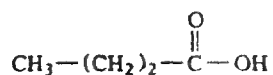
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 10 %	Xi; R 36/37/38

Cas No 107-92-6

EEC No 203-532-3

No 607-135-00-X



ES: ácido butírico

DA: butansyre ; smørsyre

DE: Buttersäure

EL: βουτυρικό οξύ

EN: butyric acid

FR: acide butyrique

IT: acido butirrico

NL: boterzuur

PT: ácido butírico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C: R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

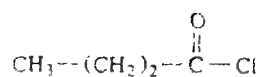
<p>C</p> 	<p>R : 34</p> <p>S : (1/2-)26-36-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits.  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 141-75-3

EEC No 205-498-5

No 607-136-00-5



ES: cloruro de butirio

DA: butyrylchlorid

DE: Butyrylchlorid

EL: βουτυρυλοχλωρίδιο

EN: butyryl chloride

FR: chlorure de butyryle

IT: butirile cloruro

NL: butyrylchloride

PT: cloreto de butirio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

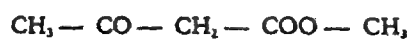
F	C	
		
		R: 11-34
		S: (1/2-)16-23-26-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 105-45-3

EEC No 203-299-8

No 607-137-00-0



ES: acetoacetato de metilo

DA: methylacetoacetat ; aceteddikesyremethylester

DE: Methylacetoacetat ; Acetessigsäuremethylester

EL: ακετοξικός μεθυλεστέρας

EN: methyl acetoacetate

FR: acetoacetate de méthyle

IT: metile acetoacetato

NL: methylacetoacetaat

PT: acetoacetato de metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi ; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 36

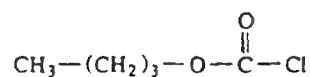
S : (2-)26

*Límites de concentración, Konzentrationgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 592-34-7

EEC No 209-750-5

No 607-138-00-6



ES: cloroformiato de butilo; ester butílico del ácido cloroformico

DA: butylchlorformiat; chlorformyresyrebutylester

DE: Butylchlorformiat; Chlorameisensäurebutylester

EL: χλωρομυρμηκικός βουτυλεστέρας

EN: butyl chloroformate; chloroformic acid butyl ester

FR: chloroformiate de butyle; chloroformiate de n-butyle

IT: butile cloroformiato

NL: n-butylchloroformiaat

PT: cloroformato de butilo; cloroformato de n-butilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

T; R 23

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 10-23-34

S : (1/2-)26-36-45

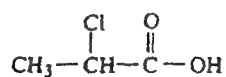
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 598-78-7

EEC No 209-952-3

No 607-139-00-1



ES: ácido 2-cloropropiónico

DA: 2-chlorpropionsyre

DE: 2-Chlorpropionsäure

EL: 2-χλωροπροπιονικό οξύ

EN: 2-chloropropionic acid

FR: acide 2-chloropropionique

IT: ácido 2-cloropropionico

NL: 2-chloorpropionzuur

PT: ácido 2-cloropropiónico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

C; R 35

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem

C



R: 22-35

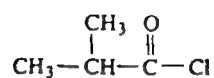
S: (1/2-)23-26-28-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 79-30-1

EEC No 201-194-1

No 607-140-00-7



ES: cloruro de isobutirilo

DA: isobutyrylchlorid

DE: Isobutyrylchlorid

EL: ισοβουτυρυλοχλωρίδιο

EN: isobutyryl chloride

FR: chlorure d'isobutyryle

IT: isobutirile cloruro

NL: isobutyrylchloride

PT: cloreto de isobutirilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

F; R 11

C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

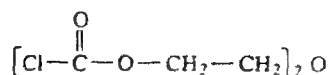
F	C	
		
		R : 11-35
		S : (1/2-)16-23-26-36-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 106-75-2

EEC No 203-430-9

No 607-141-00-2



ES: bis (cloroformiato) de oxidietileno

DA: oxydiethylenbis(chloroformiat)

DE: Oxydiethylenbis(chloroformiat)

EL: δις(χλωρομυρμηκικός) οξυδιαιθυλεστέρας

EN: oxydiethylene bis(chloroformate)

FR: bis(chloroformiate) d'oxydiéthylène; bis(chloroformiate) de diéthylène-glycol

IT: ossidietilen bis (cloroformiato)

NL: oxydiëthyleenbis(chloorformiaat)

PT: bis(cloroformato) de oxidietileno; bis(cloroformato) de dietilenoglicol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 38-41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

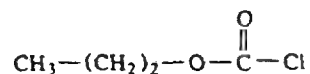
Xn	
	R : 22-38-41
	S : (2-)23-26

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 109-61-5

EEC No 203-687-7

No 607-142-00-8



ES: cloroformiato de n-propilo

DA: n-propylchlorformiat; chlormyresyrepropylester

DE: n-Propylchlorformiat; Chlorameisensäurepropylester

EL: χλωρομυρμηκικός προπυλεστέρας

EN: propyl chloroformate; chloroformic acid propylester; n-propyl chloroformate

FR: chloroformiate de propyle; chloroformiate de n-propyle

IT: n-propil cloroformiato

NL: n-propylchlorformiaat

PT: cloroformato de propilo; cloroformato de n-propilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

R 10

T; R 23

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 10-23-34

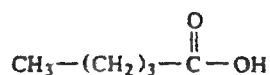
S : (1/2-)26-36-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 109-52-4

EEC No 203-677-2

No 607-143-00-3



ES: ácido valérico

DA: pentansyre; valerianesyre

DE: Valeriansäure

EL: βαλεριανικό οξύ

EN: valeric acid

FR: acide valérique

IT: acido valerianico

NL: valeriazuur

PT: ácido valérico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R. 34

S: (1/2-)26-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 124-04-9

EEC No 204-673-3

No 607-144-00-9



ES: ácido adipico

DA: adipinsyre

DE: Adipinsäure

EL: αδιπικό οξύ

EN: adipic acid

FR: acide adipique

IT: acido adipico

NL: adipinezuur

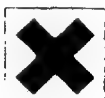
PT: ácido adipico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xi; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R: 36

S: (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 75-75-2

EEC No 200-898-6

No 607-145-00-4



ES: ácido metanosulfónico

DA: methansulfonsyre

DE: Methansulfonsäure

EL: μεθανοσουλφονικό οξύ

EN: methanesulphonic acid

FR: acide méthanesulfonique

IT: acido metansolfonico

NL: methaansulfonzuur

PT: ácido metanossulfónico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 34

S : (1/2-)26-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 110-17-8

EEC No 203-743-0

No 607-146-00-X



ES: ácido fumánico

DA: fumarsyre

DE: Fumarsäure

EL: φουμαρικό οξύ

EN: fumaric acid

FR: acide fumarique

IT: acido fumanco

NL: fumaarzuur

PT: ácido fumánico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36

S : (2-)26

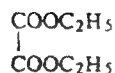
Límites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraç3o




Cas No 95-92-1

EEC No 202-464-1

No 607-147-00-5



ES: oxalato de dietilo; éster dietílico del ácido oxálico

DA: diethyloxalat; ethyloxalat

DE: Diethyloxalat; Oxalsäurediethylester

EL: οξαλικός διαιθυλεστέρας

EN: oxalic acid diethylester; diethyl oxalate

FR: oxalate de diéthyle; oxalate d'éthyle

IT: dietile ossalato; etile ossalato

NL: diëthyloxalaat

PT: oxalato de dietilo; oxalato de etilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R 22 36

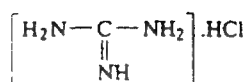
S: (2-)23

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limit, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 50-01-1

EEC No 200-002-3

No 607-148-00-0



ES: cloruro de guanidinio

DA: guanidinhydrochlorid; guanidiniumchlorid

DE: Guanidiniumchlorid; Guanidinhydrochlorid

EL: υδροχλωρική γουανιδίνη

EN: guanidinium chloride; guanadine hydrochloride

FR: chlorure de guanidinium

IT: guanidinio cloruro

NL: guanidiniumchloride

PT: cloreto de guanidinio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-36/38

S : (2-)22

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 51-79-6

EEC No 200-123-1

No 607-149-00-6



ES: uretano (DCI); carbamato de etilo  
 DA: urethan (INN); ethylcarbamate  
 DE: Urethan (INN); Ethylcarbamate  
 EL: ουρεθάνη · καρβαμικός αιθυλεστέρας  
 EN: urethane (INN); ethyl carbamate  
 FR: urethane (DCI); carbamate d'éthyle  
 IT: uretano (DCI); carbammato di etile  
 NL: urethaan (INN); ethylcarbamaat  
 PT: uretano (DCI); carbamato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

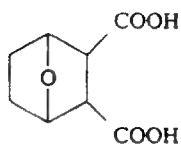
T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 145-73-3

EEC No 205-660-5

No 607-150-00-1



- ES : endotal ; ácido 7-oxabicyclo(2,2,1)heptano-2,3-dicarboxílico  
 DA : endothal ; 7-oxabicyclo(2,2,1)heptan-2,3-dicarboxylsyre  
 DE : Endothal ; 7-Oxabicyclo(2,2,1)heptan-2,3-dicarbonsäure  
 EL : endothal ; 7-οξαδικυκλο(2,2,1)επτανο-2,3-δικαρβοξυλικό οξύ  
 EN : endothal ; 7-oxabicyclo(2,2,1)heptane-2,3-dicarboxylic acid  
 FR : endothal ; acide 7-oxabicyclo(2,2,1)heptane-2,3-dicarboxylique  
 IT : endotale ; acido 7-ossabicyclo(2,2,1)eptan-2,3-dicarbossilico  
 NL : endothal ; 7-oxabicyclo(2,2,1)heptaan-2,3-dicarbonzuur  
 PT : endotal ; ácido 7-oxabicyclo(2,2,1)heptano-2,3-dicarboxílico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T ; R 25

Xn ; R 21

Xi ; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

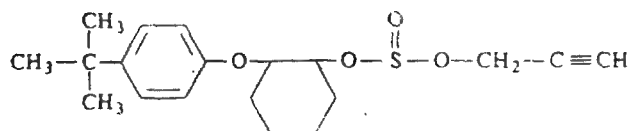
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 2312-35-8

EEC No 219-006-I

No 607-151-00-7



ES: propargita (ISO); sulfito de 2-(4-terc-butilfenoxi)ciclohexilo y de prop-2-inoilo

DA: propargit (ISO); 2-(4-tert-butylphenoxy) cyclohexylprop-2-ynylsulfid

DE: Propargit (ISO); 2-(4-tert-Butylphenoxy) cyclohexylprop-2-ynylsulfid

EL: propargite (ISO) · θειώδες 2-(4-τριτ-βουτυλοφαινοξυ)κυκλοεξύλιο και προπ-2-υνύλιο

EN: propargite (ISO); 2-(4-tert-butylphenoxy) cyclohexyl prop-2-ynyl sulphite

FR: propargite (ISO); sulfite de 2-(4-tert-butylphénoxy)cyclohexyle et de prop-2-ynyle

IT: propargite (ISO); solfito di 2-(4-terz-butilfenossi) cicloesile e prop-2-inile

NL: propargite (ISO); 2-(4-tert-butylfenoxy) cyclohexylprop-2-ynylsulfiet

PT: propargite (ISO); sulfito de 2-(4-terc-butilfenoxil)ciclohexilo e de prop-2-inoilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

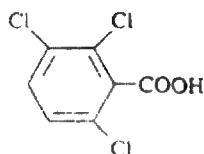
Xn	
	R : 22-36
	S : (2-)24

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 50-31-7

EEC No 200-026-4

No 607-152-00-2



ES 2,3,6-TBA (ISO) ; ácido 2,3,6-triclorobenzoico  
 DA : 2,3,6-TBA (ISO) ; 2,3,6-trichlorbenzoesyre  
 DE : 2,3,6-TBA (ISO) ; 2,3,6-Trichlorbenzoesäure  
 EL : 2,3,6-TBA (ISO) ; 2,3,6-τριχλωροδενζοϊκό οξύ  
 EN : 2,3,6-TBA (ISO) ; 2,3,6-trichlorobenzoic acid  
 FR : 2,3,6-TBA (ISO) ; acide 2,3,6-trichlorobenzoïque  
 IT : 2,3,6-TBA (ISO) ; acido 2,3,6-triclorobenzoico  
 NL : 2,3,6-TBA (ISO) ; 2,3,6-trichloorbenzoezuur  
 PT : 2,3,6-TBA (ISO) ; ácido 2,3,6-triclorobenzoico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

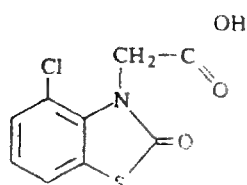
Xn	
	R : 22
	S : (2-)22

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 3813-05-6

EEC No 223-297-0

No 607-153-00-8



ES: benazolina (ISO); ácido 4-cloro-2-oxobenzotiazolin-3-ilacético

DA: benazolin (ISO); 4-chlor-2-oxobenzothiazolin-3-yleddikesyre

DE: Benazolin (ISO); 4-Chlor-2-oxobenzothiazolin-3-yllessigsäure

EL: benazolin (ISO); 4-χλωρο-2-οξοθενζοθειαζολιν-3-υλοξικό οξύ

EN: benazolin (ISO); 4-chloro-2-oxobenzothiazolin-3-ylacetic acid

FR: bēnazoline (ISO); acide 4-chloro-2-oxobenzothiazoline-3-ylacétique

IT: benazolina (ISO); acido 4-cloro-2-ossobenzotiazolin-3-ilacetico

NL: benazoline (ISO); 4-chloor-2-oxobenzothiazoline-3-ylazijnzuur

PT: benazolina (ISO); ácido 4-cloro-2,3-diidro-2-oxo-1,3-benzotiazol-3-ilacético

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazion, Classificazione, Indeling, Classificação

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

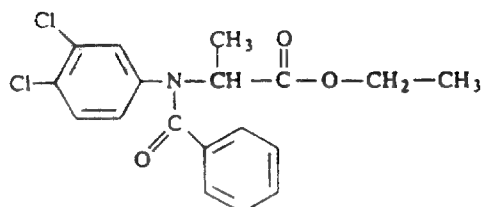
Xi	
	R : 36/38
	S : (2-)22

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 33878-50-1

EEC No —

No 607-154-00-3



- ES : benzoilprop-etil (ISO) ; N-benzoil-N-(3,4-diclorofenil)-DL-alaninato de etilo  
 DA : benzoylprop-ethyl (ISO) ; ethyl-N-benzoyl-N-(3,4-dichlorophényl)-DL-alaninat  
 DE : Benzoylprop-ethyl (ISO) ; Ethyl-N-benzoyl-N-(3,4-dichlorophenyl)-DL-alaninat  
 EL : benzoylprop-ethyl (ISO) · Ν-δενζοϋλο-Ν-(3,4-διχλωροφαινυλο)-DL-αλανινικός αιθυλεστέρας  
 EN : benzoylprop-ethyl (ISO) ; ethyl N-benzoyl-N-(3,4-dichlorophenyl)-DL-alaninate  
 FR : benzoylprop-éthyl (ISO) ; N-benzoyl-N-(3,4-dichlorophényl)-DL-alaninate d'éthyle  
 IT : benzoilprop-etil (ISO) ; N-benzoil-N-(3,4-diclorofenil)-DL-alaninato di etile  
 NL : benzoylprop-ethyl (ISO) ; ethyl-N-benzoyl-N-(3,4-dichloorfenyl)-DL-alaninaat  
 PT : benzoilprop-etilo (ISO) ; N-benzoil-N-(3,4-diclorofenil)-DL-alaninato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>Xn</p> 	<p>R : 22</p> <p>S : (2-)24</p>
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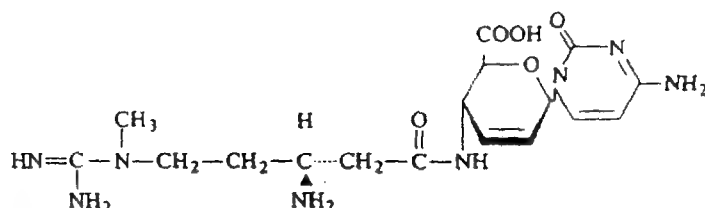
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*




Cas No 2079-00-7

EEC No —

No 607-155-00-9



- ES : acido 3-(3-amino-5-(1-metilguanidino)-1-oxopentilamino-6-(4-amino-2-oxo-2,3-dihidro-pirimidin-1-il)-2,3-dihidro-:(6H)-pirano-2-carboxílico ; blasticidin-s
- DA : 3-(3-amino-5-(1-methylguanidino)-1-oxopentylamino-6-(4-amino-2-oxo-2,3-dihydro-pyrimidin-1-yl)-2,3-dihidro-:(6H)-pyran-2-carboxylsyre ; blasticidin-s
- DE : 3-(3-Amino-5-(1-methylguanidino)-1-oxopentylamino-6-(4-amino-2-oxo-2,3-dihydro-pyrimidin-1-yl)-2,3-dihidro-:(6H)-pyran-2-carbonsäure ; Blasticidin-s
- EL : 3-(3-αμινό-5-(1-μεθυλογουανιδιν)-1-οξοπεντυλαμινό-6-(4-αμινό-2-οξο-2,3-διυδροπυριμιδιν-1-υλο)-2,3-διυδρο-:(6H)-πυράνο-2-καρβοξυλικό οξύ · blasticidin-s
- EN : 3-(3-amino-5-(1-methylguanidino)-1-oxopentylamino-6-(4-amino-2-oxo-2,3-dihydro-pyrimidin-1-yl)-2,3-dihidro-:(6H)-pyran-2-carboxylic acid ; blasticidin-s
- FR : acide 3-(3-amino-5-(1-méthylguanidino)-1-oxopentylamino-6-(4-amino-2-oxo-2,3-dihydro-pyrimidine-1-yl)-2,3-:(dihydro-(6H)-pyranne-2- carboxylique ; blasticidin
- IT : acido 3-(3-ammino-5-(1-metilguanidino)-1-ossopentilammino-6-(4-ammino-2-osso-2,3-diidro-pirimidin-1-il)-2,3-:(diidro-(6H)-piran-2-carbossilico ; blasticidin-s
- NL : 3-(3-amino-5-(1-methylguanidino)-1-oxopentylamino-6-(4-amino-2-oxo-2,3-dihydro-pyrimidine-1-yl)-2,3-dihidro-:(6H)-pyran-2-carbonzuur ; blasticidin-s
- PT : acido 3-(3-amino-5-(1-metilguanidino)-1-oxopentilamino-6-(4-amino-2-oxo-2,3-diidro-pirimidina-1-il)-2,3-diidro-:(6H)-pirano-2-carboxílico ; blasticidina-s

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

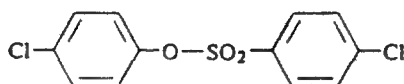
T+	
	R : 28
	S : (1/2-)24/25-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 80-33-1

EEC No 201-270-4

No 607-156-00-4



ES: clorfenson (ISO); 4-clorobencenosulfonato de 4-clorofenilo

DA: chlorfenson (ISO); 4-chlorophenyl-4-chlorbenzensulfonat

DE: Chlorfenson (ISO); 4-Chlorphenyl-4-chlorbenzolsulfonat

EL: chlorfenson (ISO); 4-χλωροβενζολοσουλφονικό 4-χλωροφαινύλιο

EN: chlorfenson (ISO); 4-chlorophenyl 4-chlorobenzenesulphonate

FR: chlorfenson (ISO); 4-chlorobenzènesulfonate de 4-chlorophényle

IT: clorfenson (ISO); 4-clorobenzensolfonato di 4-clorofenile

NL: chloorfenson (ISO); 4-chloorfenyl-4-chloorbzeensulfonaat

PT: clorfensone (ISO); 4-clorobenzenossulfonato de 4-clorofenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-38

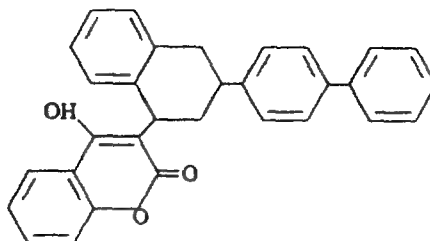
S : (2-)37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 56073-07-5

EEC No 259-978-4

No 607-157-00-X



- ES: 3-(3-bifenil-4-il-1,2,3,4-tetrahidro-1-naftil)-4-idroxicumarina ; difenacum  
 DA: 3-(3-biphenyl-4-yl-1,2,3,4-tetrahydro-1-naphthyl)-4-hydroxycumarin ; difenacoum  
 DE: 3-(3-Biphenyl-4-yl-1,2,3,4-tetrahydro-1-naphthyl)-4-hydroxycumarin ; Difenacoum  
 EL: 3-(3-διφαινυλ-4-υλ-1,2,3,4-τετραυδρο-1-ναφθυλ)-4-υδροξικουμαρίνη · difenacoum  
 EN: 3-(3-biphenyl-4-yl-1,2,3,4-tetrahydro-1-naphthyl)-4-hydroxycoumarin ; difenacoum  
 FR: 3-(3-biphényl-4-yl-1,2,3,4-tétrahydro-1-naphthyl)-4-hydroxycoumarine ; difénacoum  
 IT: 3-(3-bifenil-4-il-1,2,3,4-tetraidro-1-naftil)-4-idrossicumarina ; difenacum  
 NL: 3-(3-bifenyl-4-yl-1,2,3,4-tetrahydro-1-naftyl)-4-hydroxycoumarine ; difenacum  
 PT: 3-(3-bifenil-4-il-1,2,3,4-tetrahidro-1-naftil)-4-idroxicumarina ; difenacoum

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+ ; R 28

T ; R 48/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 28-48/25

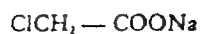
S : (1/2-)36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 3926-62-3

EEC No 223-498-3

No 607-158-00-5




ES: sal de sodio del ácido cloroacético; cloroacetato de sodio  
 DA: natrium-salt af chloredikesyre; natriumchloracetat  
 DE: Natriumsalz von Chloressigsäure; Natriumchloracetat  
 EL: άλας νατρίου του χλωροξικού οξέος· χλωροξικό νάτριο  
 EN: sodium salt of chloroacetic acid; sodium chloroacetate  
 FR: sel de sodium de l'acide chloroacétique; chloroacétate de sodium  
 IT: sale di sodio dell'acido cloroacetico; cloroacetato di sodio  
 NL: natriumzout van chloorazijnzuur; natriumchloracetaat  
 PT: sal de sódio do ácido cloroacético; cloroacetato de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

T; R 25

Xi; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

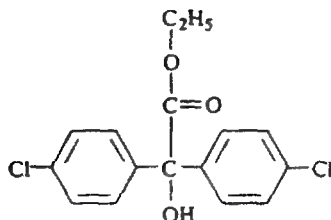
T	
	R : 25-38
	S : (1/2-)22-37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçāo


Cas No 510-15-6

EEC No 208-110-2

No 607-159-00-0



- ES: clorobencilato (ISO); 4,4'-diclorobencilato de etilo  
 DA: chlorobenzilat (ISO); ethyl-4,4'-dichlorbenzilat  
 DE: Chlorobenzilat (ISO); Ethyl-4,4'-dichlorbenzilat  
 EL: chlorobenzilate (ISO); 4,4'-διχλωροβενζυλικός αιθυλεστέρας  
 EN: chlorobenzilate (ISO); ethyl 4,4'-dichlorobenzilate  
 FR: chlorobenzilate (ISO); 4,4'-dichlorobenzilate d'éthyle  
 IT: clorobencilato (ISO); 4,4'-diclorobencilato di etile  
 NL: chloorbenzilaat (ISO); ethyl-4,4'-dichloorbenzilaat  
 PT: clorobencilato (ISO); 4,4'-diclorobencilato de etilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

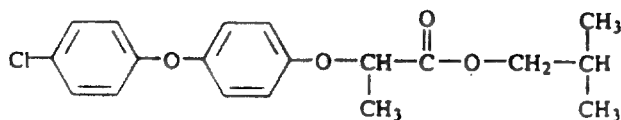
Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 51337-71-4

EEC No —

No 607-160-00-6



ES: 2-(4-(4-clorofenoxi)fenoxi)propionate de isobutilo

DA: isobutyl-2-(4-(4-chlorphenoxy)phenoxy)propionat

DE: Isobutyl-2-(4-(4-chlorphenoxy)phenoxy)propionat

EL: 2-(4-(4-χλωροφαινοξυ)φαινοξυ)προπιονικός ισοδουτυλεστέρας

EN: isobutyl 2-(4-(4-chlorophenoxy)phenoxy)propionate; clofop-isobutyl (ISO)

FR: 2-(4-(4-chlorophénoxy)phénoxy)propionate d'isobutyle; clofop-isobutyl (ISO)

IT: 2-(4-(4-clorofenossi)fenossi)propionato di isobutile

NL: isobutyl-2-(4-(4-chloorfenoxy)fenoxy)propionaat

PT: 2-[4-(4-clorofenoxi)fenoxi]propionato de isobutilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

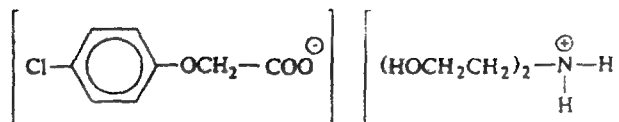
Xn	
	R : 22
	S : (2)

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No —

No 607-161-00-1



ES: sal de dietanolamina de 4-CPA

DA: salt af diethanolamin af 4-CPA

DE: Salz von Diethanolamin von 4-CPA

EL: άλας διαιθανολαμίνης του 4-CPA

EN: diethanolamine salt of 4-CPA

FR: sel de diéthanolamine du 4-CPA; sel de 2,2'-iminodiéthanol de l'acide 4-chlorophénoxyacétique

IT: sale di dietanolamina di 4-CPA

NL: diethanolamine zout van 4-CPA

PT: sal de dietanolamina de 4-CPA

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

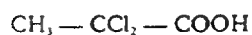
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 75-99-0

EEC No 200-923-0

No 607-162-00-7



ES: ácido 2,2-dicloropropiónico; dalapon  
 DA: 2,2-dichlorpropionsyre; dalapon  
 DE: 2,2-Dichlorpropionsäure; Dalapon  
 EL: 2,2-διχλωροπροπιονικό οξύ  
 EN: 2,2-dichloropropionic acid; dalapon  
 FR: acide 2,2-dichloropropionique; dalapon  
 IT: ácido 2,2-dicloropropionico; dalapon  
 NL: 2,2-dichloorpropionzuur; dalapon  
 PT: ácido 2,2-dicloropropiónico; dalapão

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn; R 22

Xi; R 38-41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	<p>R : 22-38-41</p> <p>S : (2-)26-39</p>

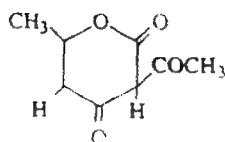
*Límites de concentraci3n, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraç3o*




Cas No 520-45-6

EEC No 208-293-9

No 607-163-00-2



ES: 3-acetil-6-metil-2H-pirano-2,4(3H)-diona; ácido dehidroacético

DA: 3-acetyl-6-methyl-2H-pyran-2,4(3H)-dion; dehydracetsyre

DE: 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dion; Dehydracetsäure

EL: 3-ακετυλο-6-μεθυλο-2H-πυρανο-2,4(3H)-διόνη· δευδροξικό οξύ

EN: 3-acetyl-6-methyl-2H-pyran-2,4(3H)-dione; dehydracetic acid

FR: 3-acétyl-6-méthyl-2H-pyranne-2,4(3H)-dione; acide déhydroacétique

IT: 3-acetil-6-metil-2H-piran-2,4(3H)-dione; acido deidroacetico

NL: 3-acetyl-6-methyl-2H-pyran-2,4(3H)-dion; dehydroazijnzuur

PT: 3-acetil-6-metil-2H-pirano-2,4(3H)-diona; ácido dehidroacético

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

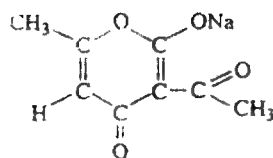
Xn	
	R : 22 S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 4418-26-2

EEC No 224-580-1

No 607-164-00-8



- ES: 1-(3,4-dihidro-6-metil-2,4-dioxo-2H-piran-3-iliden)etanolato de sodio; dehidracetato sódico  
 DA: natrium-1-(3,4-dihydro-6-methyl-2,4-dioxo-2H-pyran-3-yliden)ethanolat; natrium dehydracetat  
 DE: Natrium-1-(3,4-dihydro-6-methyl-2,4-dioxo-2H-pyran-3-yliden)ethanolat; Natrium dehydracetat  
 EL: 1-(3,4-διυδρο-6-μεθυλο-2,4-διοξο-2Η-πυραν-3-υλιδεν)αιθυλικό νάτριο · δεϋδροξικό νάτριο  
 EN: sodium 1-(3,4-dihydro-6-methyl-2,4-dioxo-2H-pyran-3-ylidene)ethonolate; sodium dehydracetate  
 FR: 1-(3,4-dihydro-6-méthyl-2,4-dioxo-2H-pyranne-3-ylidène)éthanolate de sodium; déhydroacétate de sodium  
 IT: 1-(3,4-diidro-6-metil-2,4-diosso-2H-piran-3-iliden)etanolato di sodio; deidracetato di sodio  
 NL: natrium-1-(3,4-dihydro-6-methyl-2,4-dioxo-2H-pyran-3-ylideen)ethanolaat; natrium dehydracetaat  
 PT: 1-(3,4-diidro-6-metil-2,4-dioxo-2H-pirano-3-ilideno)etanolato de sódio; dehidracetato de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

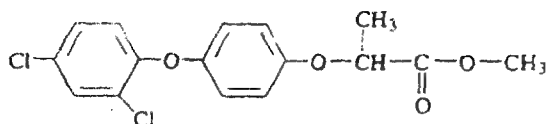
Xn	
	R : 22
	S : (2)

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 51338-27-3

EEC No 257-141-8

No 607-165-00-3



ES: 2-(4-(2,4-diclorofenoxi)fenoxi)propionato de metilo; diclofop-metil (ISO)

DA: methyl-2-(4-(2,4-dichlorphenoxy)phenoxy)propionat

DE: Methyl-2-(4-(2,4-dichlorphenoxy)phenoxy)propionat

EL: 2-(4-(2,4-διχλωροφαινοξυ)φαινοξυ)προπιονικός μεθυλεστέρας

EN: methyl 2-(4-(2,4-dichlorophenoxy)phenoxy)propionate; diclofop-methyl (ISO)

FR: 2-(4-(2,4-dichlorophénoxy)phénoxy)propionate de méthyle; diclofop-méthyl (ISO)

IT: 2-(4-(2,4-diclorofenossi)fenossi)propionato di metile

NL: methyl-2-(2,4-dichloorfenoxy)fenoxy)propionaat

PT: 2-[4-(2,4-diclorofenoxi)fenoxi]propionato de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

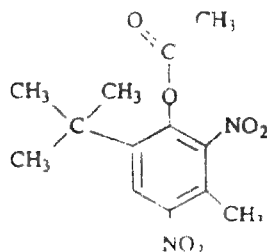
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 2487-01-6

EEC No 219-634-6

No 607-166-00-9



- ES: acetato de medinoterb (ISO); acetato de 6-terc-butil-3-metil-2,4-dinitrofenilo  
 DA: medinoterbacetat (ISO); 6-tert-butyl-3-methyl-2,4-dinitrophenylacetat  
 DE: Medinoterbacetat (ISO); 6-Tert-butyl-3-methyl-2,4-dinitrophenylacetat  
 EL: medinoterb acetate (ISO); οξικός 6-τερτ-βουτυλο-3-μεθυλο-2,4-δινιτροφαινυλεστέρας  
 EN: medinoterb acetate (ISO); 6-tert-butyl-3-methyl-2,4-dinitrophenyl acetate  
 FR: acetate de médinoterbe (ISO); acétate de 6-tert-butyl-3-méthyl-2,4-dinitrophényle  
 IT: acetato di medinoterbe (ISO); acetato di 6-terz-butil-3-metil-2,4-dinitrofenile  
 NL: medinoterbacetaat (ISO); 6-tert-butyl-3-methyl-2,4-dinitrofenylacetaat  
 PT: acetato de medinoterbe (ISO); acetato de 6-terc-butil-3-metil-2,4-dinitrofenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Xn; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

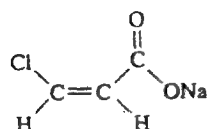
T	
	<p>R: 21-25</p> <p>S: (1/2-)36/37-45</p>

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratsegrenzen, Limites de concentraçào


Cas No 4312-97-4

EEC No —

No 607-167-00-4



ES: 3-cloroacrilato de sodio

DA: natnum-3-chloracrylat

DE: Natrium-3-chloracrylat

EL: 3-χλωροακρυλικό νάτριο

EN: sodium 3-chloroacrylate

FR: 3-chloroacrylate de sodium

IT: 3-cloroacrilato di sodio

NL: natnum-3-chlooracrylaat

PT: cloroacrilato de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

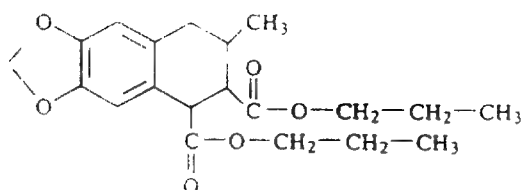
Xn	
	R : 21/22
	S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 83-59-0

EEC No —

No 607-168-00-X



ES: 6,7-metilendioxi-1,2,3,4-tetraidro-3-metilnaftaleno-1,2-dicarboxilato de dipropilo

DA: dipropyl-6,7-methylenedioxy-1,2,3,4-tetrahydro-3-methylnaphthalen-1,2-dicarboxylat

DE: Dipropyl-6,7-methylenedioxy-1,2,3,4-tetrahydro-3-methylnaphthalin-1,2-dicarboxylat

EL: 6,7-μεθυλενοδιοξυ-1,2,3,4-τετραύδρο-3-μεθυλοναφθαλινο-1,2-δικαρβοξυλικός διπροπυλεστέρας

EN: dipropyl 6,7-methylenedioxy-1,2,3,4-tetrahydro-3-methylnaphthalene-1,2-dicarboxylate; propylisome

FR: 6,7-méthylènedioxy-1,2,3,4-tétrahydro-3-méthylnaphtalène-1,2-dicarboxylate de dipropyle

IT: 6,7-metilendiossi-1,2,3,4-tetraidro-3-metilnaftalen-1,2-dicarbossilato di dipropile

NL: dipropyl-6,7-methyleendioxy-1,2,3,4-tetrahydro-3-methylnaftaleen-1,2-dicarboxylaet

PT: 6,7-metilenodioxo-1,2,3,4-tetraidro-3-metilnaftaleno-1,2-dicarboxilato de dipropilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 22-24

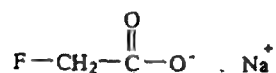
S : (1/2-)36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 62-74-8

EEC No 200-548-2

No 607-169-00-5



ES: fluoroacetato de sodio

DA: natriumfluoracetat

DE: Natriumfluoracetat

EL: φθοροξικό νάτριο

EN: sodium fluoroacetate

FR: fluoroacétate de sodium

IT: fluoroacetato di sodio

NL: natriumfluoracetaat

PT: fluoroacetato de sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 26/27/28

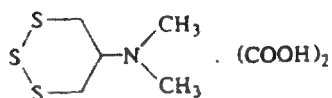
S : (1/2-)13-22-36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 31895-22-4

EEC No 250-859-2

No 607-170-00-0



- ES : oxalato de bis(1,2,3-tritiaciclohexildimetilamonio) ; tiociclám-oxalato  
 DA : bis(1,2,3-trithiacyclohexyldimethylammonium)oxalat ; thiocyclám-oxalat  
 DE : Bis(1,2,3-trithiacyclohexyldimethylammonium)oxalat ; Thiocyclám-oxalat  
 EL : οξαλικό δις(1,2,3-τριθειακυκλοεξυλοδιμεθυλαμμώνιο) · thiocyclám-oxalate  
 EN : bis(1,2,3-trithiacyclohexyldimethylammonium) oxalate ; thiocyclám-oxalate  
 FR : oxalate de bis(1,2,3-trithiacyclohexyldiméthylammonium) ; thiocyclame-oxalate  
 IT : ossalato di bis(1,2,3-tritiacicloesildimetilammonio) ; tiociclám-ossalato  
 NL : bis(1,2,3-trithiacyclohexyldimethylammonium)oxalaat ; thiocyclám-oxalaat  
 PT : oxalato de bis(1,2,3-tritiaciclohexildimetilamónio) ; tiociclame-oxalato

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 21/22
	S : (2-)36/37-46

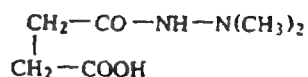
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 1596-84-5

EEC No 216-485-9

No 607-171-00-6



ES: daminozida

DA: daminozid

DE: Daminozid

EL: daminozide · N-διμεθυλαμινοκινναμωμικό οξύ

EN: daminozide; N-dimethylaminosuccinamic acid

FR: daminozide; acide N-diméthylaminosuccinamique

IT: daminozide

NL: daminozide

PT: daminozida

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

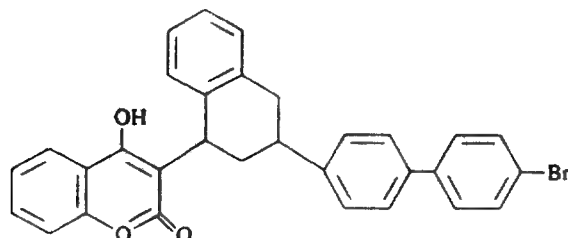
Xn	
	R : 40
	S : (2-)36/37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 56073-10-0

EEC No 259-980-5

No 607-172-00-1



ES: 4-hidroxi-3-(3-(4'-bromo-4-bifenilil)-1,2,3,4-tetraidro-1-naftil)cumarina; brodifacoum

DA: 4-hydroxy-3-(3-(4'-brom-4-biphenyl)-1,2,3,4-tetrahydro-1-naphthyl)cumarin; brodifacoum

DE: 4-Hydroxy-3-(3-(4'-brom-4-biphenyl)-1,2,3,4-tetrahydro-1-naphthyl)cumarin; Brodifacoum

EL: 4-υδροξυ-3-(3-(4'-δρωμο-4-διφαινυλο)-1,2,3,4-τετραυδρο-1-ναφθυλο)κουμαρίνη; brodifacoum

EN: 4-hydroxy-3-(3-(4'-bromo-4-biphenyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin; brodifacoum

FR: 4-hydroxy-3-(3-(4'-bromo-4-biphenyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarine; brodifacoum

IT: 4-idrossi-3-(3-(4'-bromo-4-bifenilil)-1,2,3,4-tetraidro-1-naftil)cumarina; brodifacoum

NL: 4-hydroxy-3-(3-(4'-brom-4-biphenyl)-1,2,3,4-tetrahydro-1-naftyl)cumarine; brodifacoum

PT: 4-hidroxi-3-(3-(4'-bromo-4-bifenilil)-1,2,3,4-tetraidro-1-naftil)cumarino; brodifacoum

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+; R 27/28

T; R 48/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R: 27/28-48/24/25

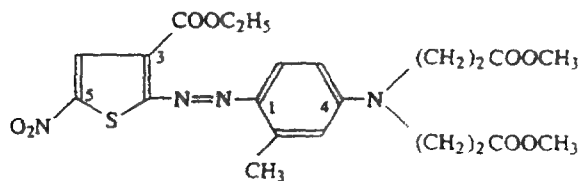
S: (1/2-)36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 400-460-6

No 607-173-00-7



- ES : (3-metil-4-(5-nitro-3-etoxicarbonil-2-tienil)azo)fenilnitrilodipropionato de dimetilo  
 DA : dimethyl-(3-methyl-4-(5-nitro-3-ethoxycarbonyl-2-thienyl)azo)phenylnitrilodipropionat  
 DE : Dimethyl-(3-methyl-4-(5-nitro-3-ethoxycarbonyl-2-thienyl)azo)phenylnitrilodipropionat  
 EL : (3-μεθύλο-4-(3-αιθοξυκαρβονυλο-5-νιτρο-2-θειαινυλ)αζω)φαινυλονιτριλοδιπροπιονικό διμεθύλιο  
 EN : dimethyl (3-methyl-4-(5-nitro-3-ethoxycarbonyl-2-thienyl)azo)phenylnitrilodipropionate  
 FR : (3-méthyl-4-(5-nitro-3-ethoxycarbonyl-2-thiényl)azo)phénylnitrilodipropionate de diméthyle  
 IT : (3-metil-4-(5-nitro-3-etossicarbonil-2-tienil)azo)fenilnitrilodipropionato di dimetile  
 NL : dimethyl-(3-methyl-4-(5-nitro-3-ethoxycarbonyl-2-thiēnyl)azo)fenylnitrilodipropionaat  
 PT : (3-metil-4-(5-nitro-3-etoxicarbonil-2-tienil)azo)fenilnitrilodipropionato de dimetilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

R 43

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43-52/53

S : (2-)24-37-61

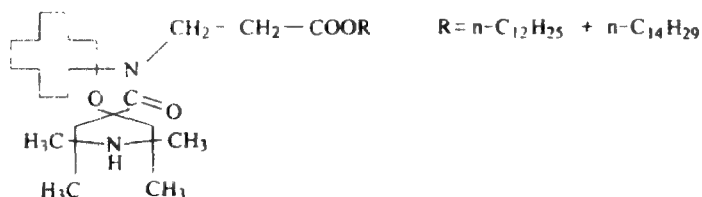
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 400-580-9

No 607-174-00-2

Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de :



- ES 3-(2,2,4,4-tetrametil-21-oxo-7-oxa-3,20-diazadiespiro(5,1,1,2)henicosan-20-il)propionato de dodecilo  
 DA dodecyl-3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)henicosan-20-yl)propionat  
 DE Dodecyl-3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)henicosan-20-yl)propionat  
 EL 3-(2,2,4,4-τετραμεθύλ-21-οξο-7-οξα-3,20-διαζαδισπειρο(5,1,1,2)ηνεκοσαν-20-υλο)προπιονικό δωδεκύλιο  
 EN dodecyl 3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)henicosan-20-yl)propionate  
 FR 3-(2,2,4,4-tétraméthyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)hénicosane-20-yl)propionate de dodécyle  
 IT 3-(2,2,4,4-tetrametil-21-osso-7-ossa-3,20-diazadispiro(5,1,1,2)enicosan-20-il)propionato di dodecile  
 NL dodecyl-3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)henicosaan-20-yl)propionaat  
 PT 3-(2,2,4,4-tetrametil-21-oxo-7-oxa-3,20-diazadiespiro(5,1,1,2)henicosano-20-il)propionato de dodecilo

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- ES 3-(2,2,4,4-tetrametil-21-oxo-7-oxa-3,20-diazadiespiro(5,1,1,2)henicosan-20-il)propionato de tetradecilo  
 DA tetradecyl-3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)henicosan-20-yl)propionat  
 DE Tetradecyl-3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)henicosan-20-yl)propionat  
 EL 3-(2,2,4,4-τετραμεθύλ-21-οξο-7-οξα-3,20-διαζαδισπειρο(5,1,1,2)ηνεκοσαν-20-υλο)προπιονικό δεκατετρύλιο  
 EN tetradecyl 3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)henicosan-20-yl)propionate  
 FR 3-(2,2,4,4-tétraméthyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)hénicosane-20-yl)propionate de tétradcyle  
 IT 3-(2,2,4,4-tetrametil-21-osso-7-ossa-3,20-diazadispiro(5,1,1,2)enicosan-20-il)propionato di tetradecile  
 NL tetradecyl-3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3,20-diazadispiro(5,1,1,2)henicosaan-20-yl)propionaat  
 PT 3-(2,2,4,4-tetrametil-21-oxo-7-oxa-3,20-diazadiespiro(5,1,1,2)henicosano-20-il)propionato de tetradecilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi; R 38

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

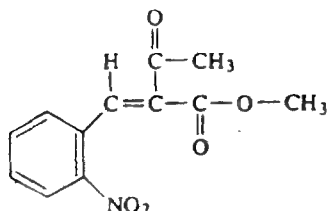
Xi	N	
		R : 38-51/53 S : (2-)28-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 39562-27-1

EEC No 400-650-9

No 607-175-00-8



- ES: 2-(2-nitrobenziliden)acetoacetato de metilo  
 DA: methyl-2-(2-nitrobenzyliden)acetoacetat  
 DE: Methyl-2-(2-nitrobenzyliden)acetoacetat  
 EL: 2-(2-νιτροβενζυλιδενο)ακετοοξικό μεθύλιο  
 EN: methyl 2-(2-nitrobenzylidene)acetoacetate  
 FR: 2-(2-nitrobenzylidène)acétoacétate de méthyle  
 IT: 2-(2-nitrobenziliden)acetoacetato di metile  
 NL: methyl-2-(2-nitrobenzylideen)acetoacetaat  
 PT: 2-(2-nitrobenzilideno)acetoacetato de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

R 43

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	N	
		R : 43-51/53
		S : (2-)24-37-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No —



EEC No 400-830-7

No 607-176-00-3

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 48/22 R 43 N ; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 43-48/22-51/53 S : (2-)36/37-61

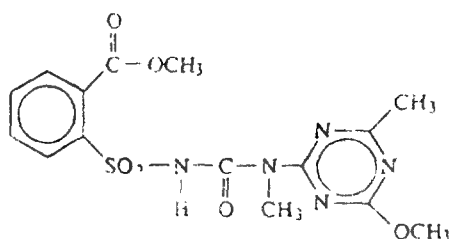
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 101200-48-0

EEC No 401-190-1

No 607-177-00-9



- ES: 2-(3-(6-metil-4-metoxi-1,3,5-triazin-2-il)3-metilureidosulfonyl)benzoato de metilo  
 DA: methyl-2-(3-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)3-methylureidosulfonyl)benzoat  
 DE: Methyl-2-(3-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)3-methylureidosulfonyl)benzoat  
 EL: 2-(3-(4-μεθοξυ-6-μεθυλο-1,3,5-τριαζιν-2-υλο)3-μεθυλουρεϊδοσουλφονυλο)δενζοϊκό μεθύλιο  
 EN: methyl 2-(3-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)3-methylureidosulphonyl)benzoate  
 FR: 2-(3-(4-méthoxy-6-méthyl-1,3,5-triazine-2-yl)3-méthyluréidosulfonyl)benzoate de méthyle  
 IT: 2-(3-(6-metil-4-metossi-1,3,5-triazin-2-il)3-metilureidosulfonyl)benzoato di metile  
 NL: methyl-2-(3-(4-methoxy-6-methyl-1,3,5-triazine-2-yl)3-methyluréidosulfonyl)benzoaat  
 PT: 2-(3-(4-metoxi-6-metil-1,3,5-triazin-2-il)3-metilureidossulfonyl)benzoato de metilo

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificazio

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

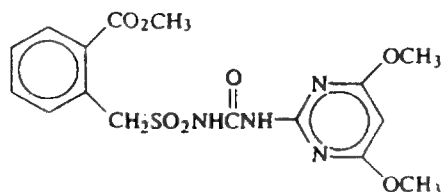
Xi 	R 43 S (2-)22-24-37
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Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 83055-99-6

EEC No 401-340-6

No 607-178-00-4



ES : alfa-((4,6-dimetoxipirimidin-2-il)ureidosulfonil)-o-toluato de metilo

DA : methyl-alfa-((4,6-dimethoxypyrimidin-2-yl)ureidosulfonyl)-o-toluat

DE : Methyl-alpha-((4,6-dimethoxypyrimidin-2-yl)ureidosulfonyl)-o-toluat

EL : αλφα-((4,6-διμεθοξυπυριμιδιν-2-υλ)ουρεΐδοσουλφονυλ)-ο-τολ.ουικό μεθύλιο

EN : methyl alpha-((4,6-dimethoxypyrimidin-2-yl)ureidosulphonyl)-o-toluate

FR : alpha-((4,6-diméthoxypyrimidine-2-yl)uréidosulfonyl)-o-toluate de méthyle

IT : alfa-((4,6-dimetossipirimidin-2-il)ureidosolfonil)-o-toluato di metile

NL : methyl-alfa-((4,6-dimethoxypyrimidine-2-yl)ureïdosulfonyl)-o-toluaat

PT : alfa-((4,6-dimetoxipirimidin-2-il)ureidossulfonil)-o-toluato de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

R 43

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

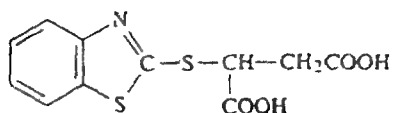
Xi	N	
		R : 43-51/53
		S : (2-)24-37-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 95154-01-1

EEC No 401-450-4

No 607-179-00-X



ES: acido (benzotiazol-2-iltio)succinico

DA: (benzothiazol-2-ylthio)ransyre

DE: (Benzothiazol-2-ylthio)bernsteinsäure

EL: (δενζοθειάζολ-2-υλοθειο)ηλεκτρικό οξύ

EN: (benzothiazol-2-ylthio)succinic acid

FR: acide (benzothiazole-2-ylthio)succinique

IT: acido (benzotiazol-2-iltio)succinico

NL: (benzothiazool-2-ylthio)barnsteenzuur

PT: acido (benzotiazole-2-iltio)succinico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xi



R 43

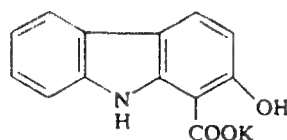
S (2-)24-37

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrație


Cas No 96566-70-0

EEC No 401-630-2

No 607-180-00-5



ES: 2-hidroxicarbazol-1-carboxilato de potasio

DA: kalium-2-hydroxycarbazol-1-carboxylat

DE: Kalium-2-hydroxycarbazol-1-carboxylat

EL: 2-υδροξυκαρβαζολο-1-καρβοξυλικό κάλιο

EN: potassium 2-hydroxycarbazole-1-carboxylate

FR: 2-hydroxycarbazole-1-carboxylate de potassium

IT: 2-idrossicarbazol-1-carbossilato di potassio

NL: kalium-2-hydroxycarbazool-1-carboxylaat

PT: 2-hidroxicarbazole-1-carboxilato de potássio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36/37

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-36/37-52/53

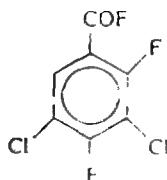
S : (2-)22-26-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 101513-70-6

EEC No 401-800-6

No 607-181-00-0



ES: fluoruro de 3,5-dicloro-2,4-difluorobenzóilo

DA: 3,5-dichlor-2,4-difluorbenzoylfluorid

DE: 3,5-Dichlor-2,4-difluorbenzoylfluorid

EL: φθορίδιο του 2,4-διφθορο-3,5-διχλωροβενζοΐου

EN: 3,5-dichloro-2,4-difluorobenzoyl fluoride

FR: fluorure de 3,5-dichloro-2,4-difluorobenzoyl

IT: fluoruro di 3,5-dicloro-2,4-difluorobenzóile

NL: 3,5-dichloor-2,4-difluorbenzoylfluoride

PT: fluoreto de 3,5-dicloro-2,4-difluorbenzóilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Inledning Classification

T; R 23

C; R 34

Xn; R 22

R 29

R 43

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

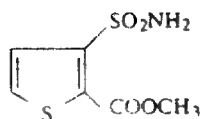
T	C	
		R : 22-23-29-34-43-52/53
		S : (1/2-)26-36/37/39-45-61

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrație


Cas No —

EEC No 402-050-2

No 607-182-00-6



ES 3-sulfamoi-2-tenoato de metilo

DA methyl-3-sulfamoyl-2-thenoat

DE : Methyl-3-sulfamoyl-2-thenoat

EL 3-σουλφαμοϋλο-2-θενοϊκό μεθύλιο

EN : methyl 3-sulphamoyl-2-thenoate

FR : 3-sulfamoyl-2-thénoate de méthyle

IT 3-solfammoil-2-tenoato di metile

NL : methyl-3-sulfamoyl-2-thenoat

PT 3-sulfamoi-2-tenoato de metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 43

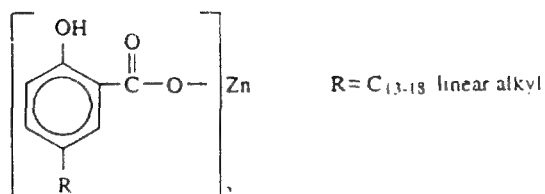
S : (2-)24-37

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits.  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No —

EEC No 402-280-3

No 607-183-00-1



ES: 2-hidroxi-5-C13-18-alkilbenzoato de zinc

DA: zink-2-hydroxy-5-C13-18-alkylbenzoat

DE: Zink-2-hydroxy-5-C13-18-alkylbenzoat

EL: 2-υδροξυ-5-C13-18-αλκυλοθενζοϊκόξ ψευδάργυρος

EN: zinc 2-hydroxy-5-C13-18alkylbenzoate

FR: 2-hydroxy-5-C13-18alkylbenzoate de zinc

IT: 2-idrossi-5-C13-18-alcilbenzoato di zinco

NL: zink-2-hydroxy-5-C13-18-alkylbenzoaat

PT: 2-hidroxi-5-C13-18alkilbenzoato de zinco

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/38

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

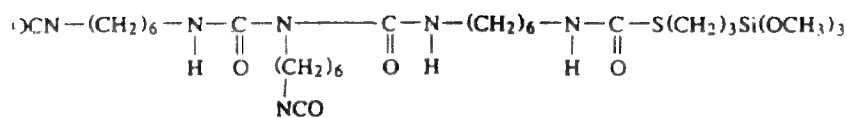
Xi	N	
		R: 36/38-51/53
		S: (2) 26-61

Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limit, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 85702-90-5

EEC No 402-290-8

No 607-184-00-7



- ES : 19-isocianato-11-(6-isocianatohexil)-10,12-dioxo-2,9,11,13-tetraazonadecantioato de S-(3-trimetoxisilil)propilo
- DA : S-(3-trimethoxysilyl)propyl-19-isocyanoato-11-(6-isocyanatohexyl)-10,12-dioxo-2,9,11,13-tetraazonadecanthioat
- DE : S-(3-Trimethoxysilyl)propyl-19-isocyanoato-11-(6-isocyanatohexyl)-10,12-dioxo-2,9,11,13-tetraazonadecanthioat
- EL : 19-ισοκυανατο-11-(6-ισοκυανατοεξυλο)-10,12-διοξο-2,9,11,13-τετρααζαδεκαεννεανοθειοϊκό S-=(3-τριμεθοξυσιλυλο)προπύλιο
- EN : S-(3-trimethoxysilyl)propyl 19-isocyanato-11-(6-isocyanatohexyl)-10,12-dioxo-2,9,11,13-tetraazonadecanethioate
- FR : 19-isocyanato-11-(6-isocyanatohexyl)-10,12-dioxo-2,9,11,13-tétraazonadécanethioate de S-(3-triméthoxysilyl)-propyle
- IT : 19-isocianato-11-(6-isocianatoesil)-10,12-diosso-2,9,11,13-tetraazonadecantioato di S-(3-trimetossisilil)propile
- NL : S-(3-trimethoxysilyl)propyl-19-isocyanato-11-(6-isocyanatohexyl)-10,12-dioxo-2,9,11,13-tetraazonadecanthioaat
- PT : 19-isocianato-11-(6-isocianatohexil)-10,12-dioxo-2,9,11,13-tetraazonadecanotioato de S-(3-trimetoxissilil)propilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

R 10

R 42/43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 10-42/43

S : (2-)23-24-37

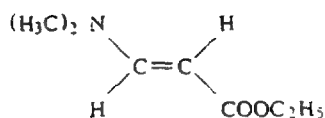
limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 924-99-2

EEC No 402-650-4

No 607-185-00-2



ES: trans-3-dimetilaminoacrilato de etilo

DA: ethyl-trans-3-dimethylaminoacrylat

DE: Ethyl-trans-3-dimethylaminoacrylat

EL: trans-3-διμεθυλαμινοακρυλικό αιθύλιο

EN: ethyl trans-3-dimethylaminoacrylate

FR: trans-3-diméthylaminoacrylate d'éthyle

IT: trans-3-dimetilamminoacrilato di etile

NL: ethyl-trans-3-dimethylaminoacrylaat

PT: trans-3-dimetilaminoacrilato de etilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xi



R 43

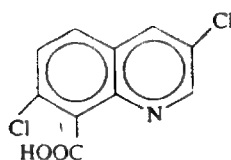
S (2-)24-37

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 84087-01-4

EEC No 402-780-1

No 607-186-00-8



ES: ácido 3,7-dicloroquinolina-8-carboxílico

DA: 3,7-dichloroquinolin-8-carboxylsyre

DE: 3,7-Dichlorchinolin-8-carbonsäure

EL: 3,7-διχλωροκινολινο-8-καρβοξυλικό οξύ

EN: 3,7-dichloroquinoline-8-carboxylic acid

FR: acide 3,7-dichloroquinoléine-8-carboxylique

IT: ácido 3,7-diclorochinolin-8-carbossilico

NL: 3,7-dichloorchinoline-8-carbonzuur

PT: ácido 3,7-dicloroquinolina-8-carboxílico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43

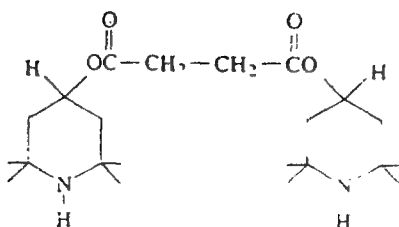
S : (2-)24-37

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 62782-03-0

EEC No 402-940-0

No 607-187-00-3



ES: succinato de bis(2,2,6,6-tetrametil-4-piperidilo)

DA: bis(2,2,6,6-tetramethyl-4-piperidyl)succinat

DE: Bis(2,2,6,6-tetramethyl-4-piperidyl)succinat

EL: ηλεκτρικό δις(2,2,6,6-τετραμεθυλο-4-πιπεριδύλιο)

EN: bis(2,2,6,6-tetramethyl-4-piperidyl) succinate

FR: succinate de bis(2,2,6,6-tétraméthyl-4-pipéridyle)

IT: succinato di bis(2,2,6,6-tetrametil-4-piperidile)

NL: bis(2,2,6,6-tetramethyl-4-piperidyl)succinaat

PT: succinato de bis(2,2,6,6-tetrametil-4-piperidilo)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi; R 36

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem

Xi



R : 36-52/53

S : (2-)26-61

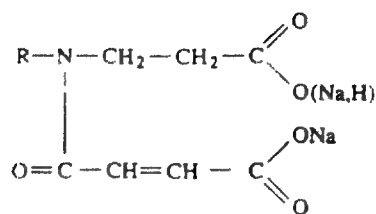
Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào


Cas No

—

EEC No 402-970-4

No 607-188-00-9



ES: N-carboxilatoetil-N-octadec-9-enilmaleamato de hidrogeno y sodio

DA: hydrogennatrium-N-carboxylatoethyl-N-octadec-9-enylmaleamat

DE: Hydrogennatrium-N-carboxylatoethyl-N-octadec-9-enylmaleamat

EL: Ν-καρβοξυλατοαιθυλ-Ν-δεκαοκτ-9-ενυλομηλείναμικό νάτριο και υδρογόνο

EN: hydrogen sodium N-carboxylatoethyl-N-octadec-9-enylmaleamate

FR: N-carboxylatoéthyl-N-octadec-9-énylmaléamate d'hydrogène et de sodium

IT: N-carbossilatoetil-N-ottadec-9-enilmaleamato di idrogeno e sodio

NL: hydrogennatrium-N-carboxylatoethyl-N-octadec-9-enylmaleamaat

PT: N-carboxilatoetil-N-octadec-9-enilmaleamato de hidrogeno e sódio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

R 43

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43-52/53

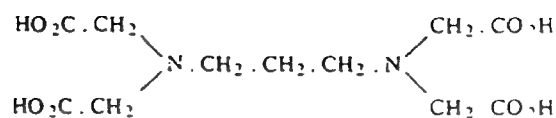
S : (2-)24-37-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1939-36-2

EEC No 400-400-9

No 607-189-00-4



ES: ácido trimetilendiamintetraacético

DA: trimethylendiamintetraeddikesyre

DE: Trimethylendiamintetraessigsäure

EL: τριμεθυλενοδιαμινητετραοξικό οξύ

EN: trimethylenediaminetetraacetic acid

FR: acide triméthylènediaminotétraacétique

IT: acido trimetilendiamminatetraacetico

NL: trimethyleendiaminetetraazijnzuur

PT: acido trimetilenodiaminatetracético

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

Xi; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R: 22-36,

S: (2-)22-26

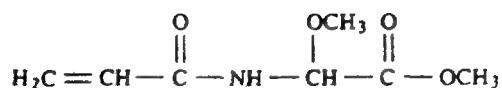
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 77402-03-0

EEC No 401-890-7

No 607-190-00-X

NOTA E



ES: acrilamidometoxiacetato de metilo (conteniendo ≥ 0,1 % de acrilamida)

DA: methylacrylamidomethoxyacetat (der indeholder ≥ 0,1 % acrylamid)

DE: Methylacrylamidomethoxyacetat (mit ≥ 0,1 % Acrylamid)

EL: ακρυλαμιδομεθοξοξικό μεθύλιο (περιέχον ≥ 0,1 % ακρυλαμίδιο)

EN: methyl acrylamidomethoxyacetate (containing ≥ 0,1 % acrylamid)

FR: acrylamidométhoxyacétate de méthyle (contenant ≥ 0,1 % d'acrylamide)

IT: acrilamidometossiacetato di metile (contenente ≥ 0,1 % di acrilammide)

NL: methylacrylamidomethoxyacetaat (bevattende ≥ 0,1 % acrylamide)

PT: acrilamidometoxiacetato de metilo (contendo ≥ 0,1 % de acrilamida)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Muta. Cat. 2; R 46

Xn; R 22

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

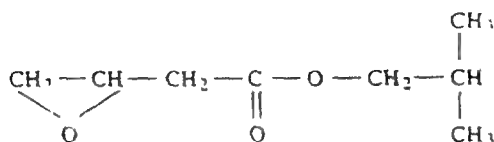
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 100181-71-3

EEC No 401-920-9

No 607-191-00-5



ES: 3,4-epoxibutirato de isobutilo  
DA: isobutyl-3,4-epoxybutyrate  
DE: Isobutyl-3,4-epoxybutyrate  
EL: 3,4-εποξιβουτυρικό ισοβουτύλιο  
EN: isobutyl 3,4-epoxybutyrate  
FR: 3,4-époxybutyrate d'isobutyle  
IT: 3,4-epossibutirrato di isobutile  
NL: isobutyl-3,4-epoxybutyraat  
PT: 3,4-epoxibutirato de isobutilo



*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificazioe*

Xi; R 38

R 43

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

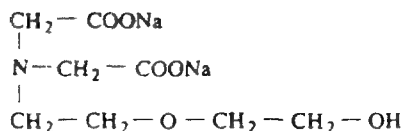
$X_1$	$N$	
		<p>R 38-43 50/53</p> <p>S. (2-)24-28 36/37-60-61</p>

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentratio


Cas No 92511-22-3

EEC No 402-360-8

No 607-192-00-0



- ES : N-carboximetil-N-(2-(2-hidroxietoxi)etil)glicinato de disodio  
 DA : dinatrium-N-carboxymethyl-N-(2-(2-hydroxyethoxy)ethyl)glycinat  
 DE : Dinatrium-N-carboxymethyl-N-(2-(2-hydroxyethoxy)ethyl)glycinat  
 EL : Ν-καρβοξυμεθυλ-Ν-(2-(2-υδροξυαιθοξυ)αιθυλο)γλυκινικό δινάτριο  
 EN : disodium N-carboxymethyl-N-(2-(2-hydroxyethoxy)ethyl)glycinate  
 FR : N-carboxyméthyl-N-(2-(2-hydroxyéthoxy)éthyl)glycinate de disodium  
 IT : N-carbossimetil-N-(2-(2-idrossietossi)etil)glicinato di disodio  
 NL : dinatrium-N-carboxymethyl-N-(2-(2-hydroxyethoxy)ethyl)glycinaat  
 PT : N-carboximetil-N-(2-(2-hidroxietoxi)etil)glicinato de dissódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xi; R 41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi	
	R : 41
	S : (2-)26-39

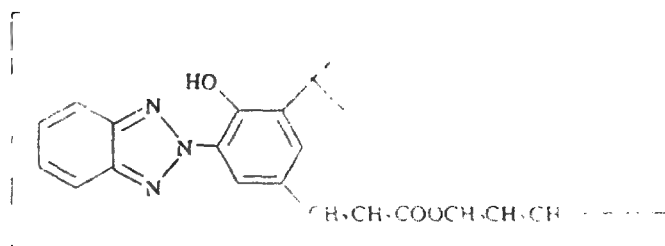
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 84268-08-6

EEC No 402-930-6

No 607-193-00-6



- ES : bis(3-(3-benzotriazol-2-il-5-terc-butil-4-hidroxifenil)propionato) de hexan-1,6-diolo  
 DA : hexan-1,6-diylbis(3-(3-benzotriazol-2-yl-5-tert-butyl-4-hydroxyphenyl)propionat)  
 DE : Hexan-1,6-diylbis(3-(3-benzotriazol-2-yl-5-tert-butyl-4-hydroxyphenyl)propionat)  
 EL : δις(3-(3-θενζοτρίαζολ-2-υλο-5-τερτ-δουτυλ-4-υδροξυφαινυλο)προπιονικό) εξανο-1,6-διόλιο  
 EN : hexane-1,6-diyl bis(3-(3-benzotriazol-2-yl-5-tert-butyl-4-hydroxyphenyl)propionate)  
 FR : bis(3-(3-benzotriazole-2-yl-5-tert-butyl-4-hydroxyphényl)propionate) d'hexane-1,6-divyle  
 IT : bis(3-(3-benzotriazol-2-il-5-terz-butil-4-idrossifenil)propionato) di esan-1,6-diolo  
 NL : hexaan-1,6-diylbis(3-(3-benzotriazool-2-yl-5-tert-butyl-4-hydroxyfenyl)propionaat)  
 PT : bis(3-(3-benzotriazol-2-il-5-terc-butil-4-hidroxifenil)propionato) de hexano-1,6-diolo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

R 53

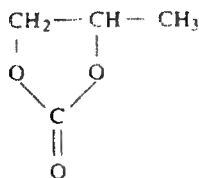
S 61

Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 108-32-7

EEC No 203-572-1

No 607-194-00-1



ES: carbonato de propileno

DA: propylencarbonat

DE: Propylencarbonat

EL: ανθρακικό προπυλένιο

EN: propylene carbonate

FR: carbonate de propylène

IT: carbonato di propilene; 4-metil-1,3-dirossolan-2-one

NL: propyleencarbonaat

PT: carbonato de propileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36

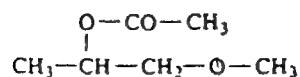
S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 108-65-6

EEC No 203-603-9

No 607-195-00-7



ES · acetato de 1-metil-2-metoxietilo  
 DA · 2-methoxy-1-methylethylacetat  
 DE · 2-Methoxy-1-methylethylacetat  
 EL · οξικός 2-μεθοξύ-1-μεθυλαιθυλεστέρας  
 EN · 2-methoxy-1-methylethyl acetate  
 FR · acetate de 2-methoxy-1-méthylethyle  
 IT · acetato di 1-metil-2-metossietile, 2-metossi-1-metiletilacetato  
 NL · 2-methoxy-1-methylethylacetaat  
 PT · acetato de 1-metil-2-metoxietilo

Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação

R 10

Xi, R 36

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Étiquetage Etichettatura Kenmerken Rotulagem

Xi



R 10 36

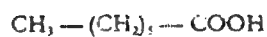
S (2-)25

Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzuerte Όρια συγκεντρώσεως Concentration limits  
 Limites de concentration Limite di concentrazione Concentrationsgrenzen Limites de concentraçãõ


Cas No 111-14-8

EEC No 203-838-7

No 607-196-00-2



ES: ácido heptanoico

DA: heptansyre

DE: Heptansäure

EL: επτανοϊκό οξύ

EN: heptanoic acid

FR: acide heptanoïque

IT: acido eptanoico

NL: heptaanzuur

PT: ácido heptanóico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

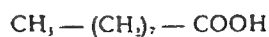
C	
	R 34
	S: (1/2-)26-28-36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 112-05-0

EEC No 203-931-2

No 607-197-00-8



ES: ácido nonanoico

DA: nonansyre

DE: Nonansäure

EL: εννεανοϊκό οξύ

EN: nonanoic acid

FR: acide nonanoïque

IT: acido nonanoico

NL: nonaanzuur

PT: ácido nonanóico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

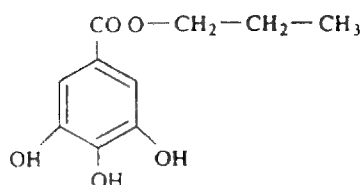
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Limites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 121-79-9

EEC No 204-498-2

No 607-198-00-3



ES: 3,4,5-trihidroxybenzoato de propilo

DA: propyl-3,4,5-trihydroxybenzoat

DE: Propyl-3,4,5-trihydroxybenzoat

EL: 3,4,5-τριυδροξυδενζοϊκός προπυλεστέρας

EN: propyl 3,4,5-trihydroxybenzoate

FR: 3,4,5-trihydroxybenzoate de propyle; gallate de propyle

IT: 3,4,5-triidrossibenzoato di propile; propil gallato

NL: propyl-3,4,5-trihydroxybenzoaat

PT: 3,4,5-trihidroxibenzoato de propilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 22

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-43

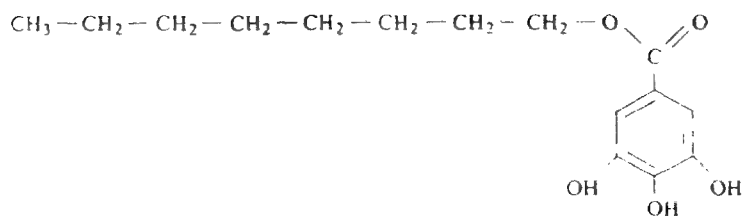
S : (2-)24-37

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 1034-01-1

EEC No 213-853-0

No 607-199-00-9



ES : 3,4,5-trihidroxybenzoato de octilo

DA : octyl-3,4,5-trihydroxybenzoat

DE : Octyl-3,4,5-trihydroxybenzoat

EL : 3,4,5-τριυδροξυβενζοϊκός οκτυλεστερας

EN : octyl 3,4,5-trihydroxybenzoate

FR : 3,4,5-trihydroxybenzoate d'octyle ; gallate d'octyle

IT : 3,4,5-triidrossibenzoato di ottile ; ottil gallato


NL : octyl-3,4,5-trihydroxybenzoaat

PT : 3,4,5-trihidroxi benzoato de octilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 22 R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

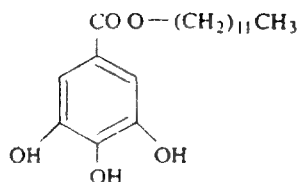
Xn	
	R : 22-43
	S : (2-)24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1166-52-5

EEC No 214-620-6

No 607-200-00-2



ES : 3,4,5-trihidroxybenzoato de dodecilo

DA : dodecyl-3,4,5-trihydroxybenzoat

DE : Dodecyl-3,4,5-trihydroxybenzoat

EL : 3,4,5-τριυδροξυθενζοϊκός δωδεκυλεστέρας

EN : dodecyl 3,4,5-trihydroxybenzoate

FR : 3,4,5-trihydroxybenzoate de dodécyle ; gallate de dodécyle

IT : 3,4,5-triidrossibenzoato di dodecile

NL : dodecyl-3,4,5-trihydroxybenzoaat

PT : 3,4,5-trihidroxibenzoato de dodecilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43

S : (2-)24-37

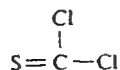
... mites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraç3o




Cas No 463-71-8

EEC No 207-341-6

No 607-201-00-X



ES: cloruro de tiocarbonilo

DA: thiocarbonychlorid

DE: Thiocarbonychlorid; Thiophosgen

EL: χλωρίδιο του θειοκαρβονυλίου

EN: thiocarbonyl chloride

FR: chlorure de thiocarbonyle

IT: cloruro di tiocarbonile; tiofosgene

NL: thiocarbonylchloride

PT: cloreto de tiocarbonilo


Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

T: R 23

Xn: R 22

Xi: R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichetare, Kenmerken, Rotulagem

T	
	R: 22-23-36/37/38 S: (1/2-)7-9-36/37-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 463-71-8

EEC No 207-341-6

No 607-201-00-8



ES: cloruro de tiocarbonilo  
 DA: tiocarbonychlorid  
 DE: Thiocarbonychlorid; Thiophosgen  
 EL: χλωρίδιο του θειοκαρβονυλίου  
 EN: thiocarbonyl chloride  
 FR: chlorure de thiocarbonyle  
 IT: cloruro di tiocarbonile; tiofosgene  
 NL: thiocarbonylchloride  
 PT: cloreto de tiocarbonilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

T; R 23    Xn; R 22    Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

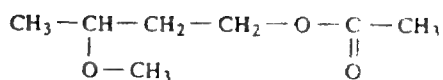
<p>T</p> 	<p>R : 22-23-36/37/38</p> <p>S : (1/2-)7-9-36/37-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 4435-53-4

EEC No 224-644-9

No 607-202-00-3



ES: acetato de 3-metoxibutilo

DA: 3-methoxybutylacetat

DE: 3-Methoxybutylacetat

EL: οξικός 3-μεθοξυβουτυλεστέρας

EN: 3-methoxybutyl acetate

FR: acétate de 3-méthoxybutyle

IT: acetato di 3-metossibutile

NL: 3-methoxybutylacetaat

PT: acetato de 3-metoxibutilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36

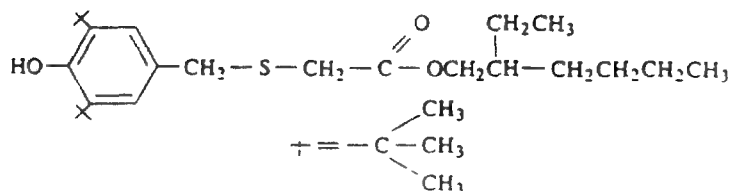
S : (2-)25

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 80387-97-9

EEC No 279-452-8

No 607-203-00-9



ES: 3,5-bis(1,1-dimetiletil)-4-hidroxifenil metil tio acetato de 2-etilhexilo

DA: 2-ethylhexyl-[[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]thio]acetat

DE: 2-Ethylhexyl- 3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl methyl thio acetat

EL: [[[3,5-δισ(1,1διμεθυλαιθυλο)-4-υδροξυφαινυλο]μεθυλο]θειο]οξικός 2-αιθυλεξύλεστερας

EN: 2-ethylhexyl 3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl methyl thio acetate

FR: 3,5-bis(1,1-diméthyléthyl)-4-hydroxyphénil méthyl thio acétate de 2-éthylhexyle

IT: 3,5-bis(1,1-dimetiletil)-4-idrossifenil metil tio acetato di 2-etilesile

NL: 2-ethylhexyl- 3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl methyl thio acetat

PT: 3,5-bis(1,1-dimetiletil)-4-hidroxifenil metil tio acetato de 2-etilhexilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 2; R 61 R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

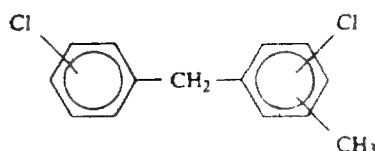
T	
	R : 61-43
	S : 53-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No 400-140-6

No 607-204-00-4



- ES: (clorofenil)(clorotolil)metano, mezcla de isómeros  
 DA: (chlorphenyl)(chlortolyl)methan, blanding af isomerer  
 DE: (Chlorphenyl)(chlortolyl)methan, Isomerengemisch  
 EL: (χλωροφαινυλο)(χλωροτολυλο)μεθάνιο, μείγμα ισομερών  
 EN: (chlorophenyl)(chlorotolyl)methane; mixed isomers  
 FR: (chlorophényl)(chlorotolyl)méthane, mélange d'isomères  
 IT: (clorofenil)(clorotolil)metano, miscela di isomeri  
 NL: (chloorfenyl)(chloortolyl)methaan, mengsel van isomeren  
 PT: (clorofenil)(clorotolil)metano, mistura de isómeros

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

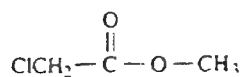
	N
	R : 50/53 S : 60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 96-34-4

EEC No 202-501-1

No 607-205-00-X



ES: cloroacetato de metilo

DA: methylchloracetat

DE: Methylchloracetat; Chloressigsäuremethylester

EL: χλωροοξικός μεθυλεστέρας

EN: methyl chloroacetate

FR: chloroacetate de méthyle

IT: cloroacetato di metile; metilcloroacetato

NL: methylchloroacetat

PT: cloroacetato de metilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificaçào*

R 10	T, R 23/25	Xi; R 37/38-41
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etikettilausta, Kenmerken, Rotulagem*

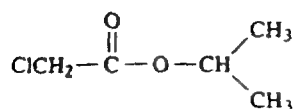
<p>T</p> 	<p>R 10-23/25-37/38-41</p> <p>S: (1/2-)26-37/39-45</p>
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*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 105-48-6

EEC No 203-301-7

No 607-206-00-5



ES: cloroacetato de isopropilo

DA: isopropylchloracetat

DE: Isopropylchloracetat

EL: χλωροοξικός ισοπροπυλεστέρας

EN: isopropyl chloroacetate

FR: chloroacétate d'isopropyle

IT: cloroacetato di isopropile

NL: isopropylchloroacetaat

PT: cloroacetato de isopropilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

T; R 25

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 10-25-36/37/38

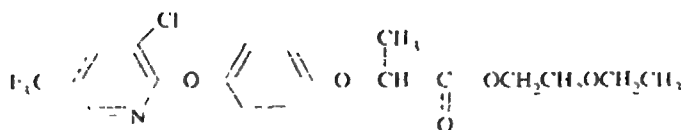
S : (1/2-)26-37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 87237-48-7

EEC No 402-560-5

No 607-207-00-0



- FS 2-(4-(3-cloro-5-trifluorometil-2-piridilossi)fenossi)propionato de 2-etossietile  
 DA 2-ethoxyethyl-2-(4-(3-chlor-5-trifluormethyl-2-pyridyloxy)phenoxy)propionat  
 DE 2-Ethoxyethyl-2-(4-(3-chlor-5-trifluormethyl-2-pyridyloxy)phenoxy)propionat  
 EL 2-(4-(5-τριφθορομεθύλο-3-χλώρο-2-πυριδυλοξύ)φαινοξύ)προπιονικό 2-αιθοξαιθύλιο  
 EN 2-ethoxyethyl 2-(4-(3-chloro-5-trifluoromethyl-2-pyridyloxy)phenoxy)propionate , haloxyfop-(2-ethoxyethyl)(ISO)  
 FR 2-(4-(3-chloro-5-trifluorométhyl-2-pyridyloxy)phénoxy)propionate de 2-ethoxyéthyle , haloxyfop-(2-éthoxyéthyl)(ISO)  
 IT 2-(4-(3-cloro-5-trifluorometil-2-piridilossi)fenossi)propionato di 2-etossietile  
 NL 2-ethoxyethyl-2-(4-(3-chloor-5-trifluormethyl-2-pyridyloxy)fenoxy)propionaat  
 PT 2-(4 (3-cloro 5-trifluorometil-2-piridilossi)fenossi)propionato de 2-etoxietilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação

Xn ; R 22

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Keimzeichen, Rotulagen

Xn	N	
		R : 22-50/53 S : (2-)22-36-60-61

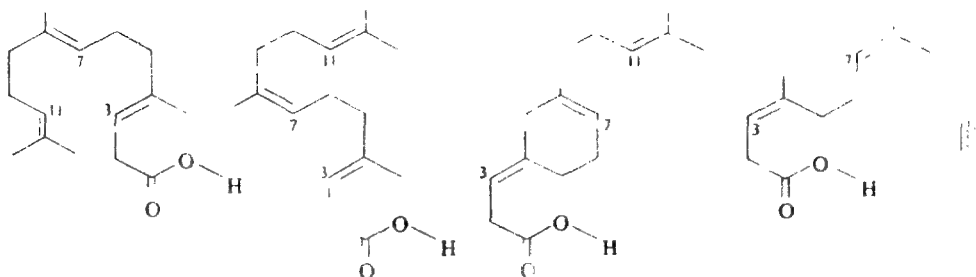
Limites de concentration, Konzentrationen, Grenzen, Konzentrationen, Grenzen, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite de concentration, Concentrazioni, Limites de concentration




Cas No 91853-67-7

EEC No 403-000-2

No 607-208-00-6

3,7-trans/trans-  
isomer3,7-trans/  
cis-isomer3,7-cis/trans-  
isomer3,7-cis/cis-  
isomer

ES : ácido 4,8,12-trimetiltrideca-3,7,11-trienoico, mezcla de isómeros

DA : 4,8,12-trimethyltrideca-3,7,11-triensyre, blanding af isomerer

DE : 4,8,12-Trimethyltrideca-3,7,11-triensäure, isomerengemisch

EL : 4,8,12-τριμεθυλοδεκατρι-3,7,11-τριενικό οξύ, μείγμα ισομερών

EN : 4,8,12-trimethyltrideca-3,7,11-trienoic acid, mixed isomers

FR : acide 4,8,12-triméthyltridéca-3,7,11-triénoïque, mélange d'isomères

IT : ácido 4,8,12-trimetiltrideca-3,7,11-trienoico, miscela di isomeri

NL : 4,8,12-trimethyltrideca-3,7,11-trieenzuur, mengsel van isomeren

PT : ácido 4,8,12-trimetiltrideca-3,7,11-trienóico, mistura de isómeros

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi ; R 38

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	N	
		R : 38-50/53
		S : (2-)37/39-60-61

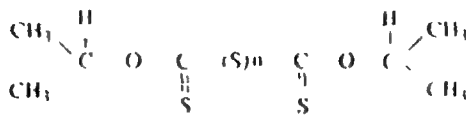
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

—

EEC No 403-030-6

No 607-209-00-1



n = 3, 4, 5

*Mezcla de, Blanding af, Gemisch aus, Μίγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de*

- ES (pentatio)dithioformiato de O,O'-diisopropilo  
 DA O,O'-diisopropyl-(pentathio)dithioformiat  
 DE O,O'-Diisopropyl-(pentathio)dithioformiat  
 EL (πενταθλιο)διθιομορμιακό O,O'-διισοπροπυλιο  
 EN O,O'-diisopropyl (pentathio)dithioformate  
 FR (pentathio)dithioformiate de O,O' diisopropyle  
 IT (pentatio)dithioformiato di O,O'-diisopropile  
 NL O,O'-diisopropyl (pentathio)dithioformiaat  
 PT (pentatio)dithioformato de O,O'-diisopropilo

*τετράθλιο και and, et e en e*

- ES (tetratio)dithioformiato de O,O' diisopropilo  
 DA O,O'-diisopropyl-(tetrathio)dithioformiat  
 DE O,O' Diisopropyl (tetrathio)dithioformiat  
 EL (τετραθλιο)διθιομορμιακό O,O'-διισοπροπυλιο  
 EN O,O' diisopropyl (tetrathio)dithioformate  
 FR (tétrathio)dithioformiate de O,O' diisopropyle  
 IT (tetratio)dithioformiato di O,O' diisopropile  
 NL O,O' diisopropyl-(tetrathio)dithioformiaat  
 PT (tetratio)dithioformato de O,O' diisopropilo

*τριθλιο και and, et e en e*

- ES (tratio)dithioformiato de O,O diisopropilo  
 DA O,O' diisopropyl (trithio)dithioformiat  
 DE O,O' Diisopropyl (trithio)dithioformiat  
 EL (τριθλιο)διθιομορμιακό O,O diisοπροπυλιο  
 EN O,O' diisopropyl (trithio)dithioformate  
 FR (trithio)dithioformiate de O,O' diisopropyle  
 IT (tratio)dithioformiato di O,O diisopropile  
 NL O,O diisopropyl (trithio)dithioformiaat  
 PT (tratio)dithioformato de O,O' diisopropilo

Cas No

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BEC No 403-030-6

No 607-209-00-1

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiem, Classificazioni, Limites de concentration*

Xn ; R 22	Xi ; R 38	R 43	N ; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichetare, Kennzeichen, Rotulagem*

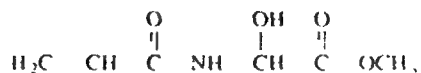
Xn	N	
		R 22-38-43 50/53 S : (2-)36/37-60-61

*Limites de concentration, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration Limits - Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 77402-05-2

EEC No 403-230-3

No 607-210-00-7



- ES acrilamidoglicolato de metilo (conteniendo  $\geq 0,1$  % de acrilamida)  
 DA methylacrylamidoglycolat (der indeholder  $\geq 0,1$  % acrylamid)  
 DE Methylacrylamidoglykolat (mit  $\geq 0,1$  % Acrylamid)  
 EL ακρυλαμιδογλυκολικό μεθύλιο (περιέχον  $\geq 0,1$  % ακρυλαμίδιο)  
 EN methyl acrylamidoglycolate (containing  $\geq 0,1$  % acrylamide)  
 FR acrylamidoglycolate de méthyle (contenant  $\geq 0,1$  % d'acrylamide)  
 IT acrilammidoglicolato di metile (contenente  $\geq 0,1$  % di acrilammide)  
 NL methylacrylamidoglycolaat (bevattende  $\geq 0,1$  % acrylamide)  
 PT acrilamidoglicolato de metilo (contendo  $\geq 0,1$  % de acrilamida)

Classification Klassifizierung Einstufung Ταξινόηση Classification Classificazione Indeling Classificação

Carc. Cat. 2, R 45	Muta. Cat. 2, R 46	C., R 34	R 43
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Etiquetas Etikettering Kennzeichnung Επισήμανση Labelling Etiquetaze Lijbetsatura Kenmerken, Rotulagem

	R 45 46 34 43
	S 53-45

Limite de concentrație Concentratie Limite de concentrazione Concentrazione Limite de concentrazione Concentrazione Concentration Limite de concentrazione Concentrazione Concentration


Cas No 6386-39-6

EEC No 403-2/0-1

No 607-211-00-2





- ES 3-(3-tert-butyl-4-hidroxi-5-metillenil)propionato de metilo  
 DA methyl-3-(3-tert-butyl-4-hydroxy-5-methylphenyl)propionat  
 DE Methyl-3-(3-tert-butyl-4-hydroxy-5-methylphenyl)propionat  
 EL 3-(3-τερτ-βουτυλ-5-μεθυλ-4-υδροξυφαινυλο)προπιονικό μεθυλιο  
 EN methyl 3-(3-tert-butyl-4-hydroxy-5-methylphenyl)propionate  
 FR 3-(3-tert-butyl-4-hydroxy-5-methylphenyl)propionate de méthyle  
 IT 3-(3-terz-butyl-4-idrossi-5-metilfenil)propionato di metile  
 NL methyl-3-(3-tert-butyl-4-hydroxy-5-methylfenyl)propionaat  
 PT 3 (3 tert-butyl-4-hidroxi-5-metillenil)propionato de metilo

Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification, Classificazione Indeling Classificação

Xn, R 22

N, R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	N	
		R : 22-51/53 S : (2-)36-61

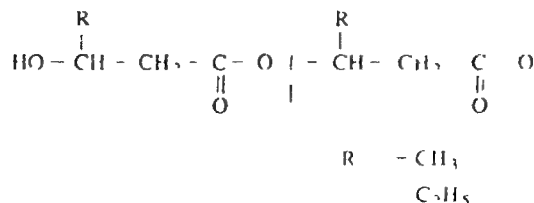
Limits de concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration Limite di concentrazione Concentratiegrenzen, Limites de concentraçao


Cas No

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EEC No 403-300-3

No 607-212-00-8



ES: poli(oxipropilencarbonilo-co-oxi(etiltilen)carbonilo), con 27 % hidroxivalerato

DA: poly(oxypropylencarbonyl-co-oxy(ethylethylen)carbonyl), indholdende 27 % hydroxyvalerat

DE: Poly(oxypropylencarbonyl-co-oxy(ethylethylen)carbonyl), enthalt 27 % hydroxyvalerat

EL: πολυ(οξυπροπυλένοκαρβονυλο-co-οξυ(αιθυλαιθυλένο)καρβονύλιο), περιέχον 27 % υδροξυβαλεριανικό

EN: poly(oxypropylencarbonyl-co-oxy(ethylethylene)carbonyl), containing 27 % hydroxyvalerate

FR: poly(oxypropylèncarbonyl-co-oxy(éthyléthylène)carbonyl), contenant 27 % d'hydroxyvalérate

IT: poli(ossipropilencarbonile-co-ossi(etiltilen)carbonile), contenente 27 % idrossivalerato

NL: poly(oxypropyleencarbonyl-co-oxy(ethylethyleen)carbonyl), dat 27 % hydroxyvaleraat bevat

PT: poli(oxipropilenocarbonilo-co-oxi(etiltileno)carbonilo), contendo 27 % hidroxivalerato

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etikettierung, Kenmerken, Rotulagem

Xi



R 43

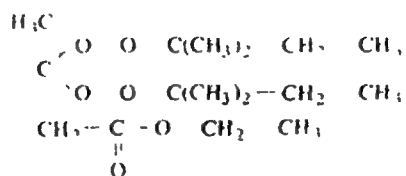
S (2)24-37

Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Ορία συγκεντρώσεως, Concentration limits, Limieten de concentratie, Concentrazioni, Concentrazioni, Concentrazioni, Concentrazioni


Cas No 67567-23-1

EEC No 403-320-2

No 607-213-00-3



- ES 3,3-bis(terc-pentilperoxi)butirato de etilo  
 DA ethyl-3,3-bis(tert-pentylperoxy)butyrat  
 DE Ethyl-3,3-bis(tert-pentylperoxy)butyrat  
 EL 3,3-δισ(τερτ-πεντυλπεροξυ)βουτυρικό αιθύλιο  
 EN ethyl 3,3-bis(tert-pentylperoxy)butyrate  
 FR 3,3-bis(tert-pentylperoxy)butyrate d'éthyle  
 IT 3,3-bis(terz-pentilperossi)butirrato di etile  
 NL ethyl-3,3-bis(tert-pentylperoxy)butyraat  
 PT 3,3-bis(terc-pentilperoxi)butirato de etilo

Classificação, Klassificering, Einleitung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R 2

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

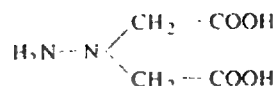
E	N	
		R : 2-51/53
		S : (2-)3/7/9-14-27-33-61

Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 19247-05-3

EEC No 403-510-5

No 607-214-00-9



ES: ácido N,N-hidrazinodiacético

DA: N,N-hydrazinodieddikesyre

DE: N,N-Hydrazinodiessigsäure

EL: N,N-υδραζινοδιοξικό οξύ

EN: N,N-hydrazinodiacetic acid

FR: acide N,N-hydrazinodiacétique

IT: acido N,N-idrazinodiacetico

NL: N,N-hydrazinodiazijnzuur

PT: ácido N,N-hidrazinodiacético

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T; R 25	Xn; R 48/22	R 43	R 52-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichetare, Kenmerken, Rotulagem

	<p>R : 25-43 48/22-52/53</p> <p>S : (1/2-)26-36/37/39-45-61</p>
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Limits of concentration, Konzentrationsgrenze, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits

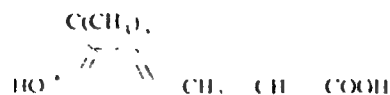
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 107551-67-7

EEC No 403-920-4

No 607-215-00-4




ES ácido 3-(3-terc-butil-4 hidroxifenil)propionico  
 DA 3 (3-tert-butyl-4-hydroxyphenyl)propionsyre  
 DE 3-(3-tert-Butyl-4-hydroxyphenyl)propionsäure  
 EL 3 (3-terp-βουτυλ-4-υδροξυφαινυλ)προπιονικο οξύ  
 EN 3 (3-tert butyl 4-hydroxyphenyl)propionic acid  
 FR acide 3 (3-tert-butyl-4-hydroxyphényl)propionique  
 IT acido 3 (3-terz butil-4 idrossifenil)propionico  
 NI 3 (3 tert butyl 4 hydroxyphenyl)propionzuur  
 PT ácido 3 (3-terc butil-4 hidroxiifenil)propionico

Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificazione Inndeling Classificacão

Xn; R 22

Xn, R 36

Etiquetas Etiketter: Kennzeichnung Επισήμανση Labelling Etiquette Etichettatura Kennzeichen Rotulagem

<div data-bbox="343 1411 422 1556"> <p>Xn</p>  </div> <div data-bbox="949 1456 1117 1556"> <p>R : 22-36 S : (2-)25-26-36</p> </div>
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Limits of concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte Όρια συγκέντρωσης Concentration limits  
 Limites de concentration, Limite di concentrazione Concentrationsgrenzen Limites de concentração


Cas No

EEC No 403-950-8

No 607-216-00-X

- ES ácido glutámico, productos de reacción con N-(C12-14alquil)propileno-1,3-diamina  
 DA glutamsyre, reaktionsprodukter med N-(C12-14alkyl)propylen-1,3-diamin  
 DE Glutaminsäure, reaktionsprodukte mit N-(C12-14alkyl)propylen-1,3-diamin  
 EL γλουταμινικό οξύ, προϊόντα αντίδρασης με N-(C12-14αλκυλο)προπυλενο-1,3-διαμίνη  
 EN glutamic acid, reaction products with N-(C12-14alkyl)propylenediamine  
 FR acide glutamique, produits de réaction avec la N-(C12-14alkyl)propylène-1,3-diamine  
 IT acido glutammico, prodotti di reazione con N-(C12-14alchil)propilen-1,3-diammina  
 NL glutaminezuur, reaktieprodukten met N-(C12-14alkyl)propileen-1,3-diamine  
 PT ácido glutámico, produtos de reacção com N-(C12-14alquil)propileno-1,3-diamina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T + , R 26

Xn ; R 22

C ; R 34

N ; R 50-53

etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

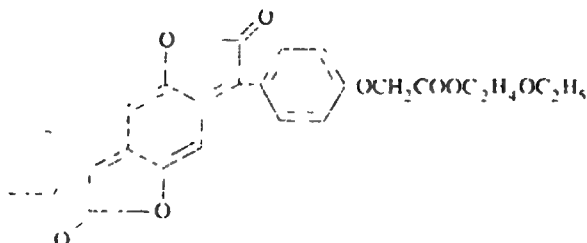


limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrație


Cas No —

EEC No 403-960-2

No 607-217-00-5



- ES : 2-(4-(7-fenil-2,6-dihidro-2,6-dioxo 1,5-dioxaindacen-3-il)fenoxi)acetato de 2-etoxietilo  
 DA : 2-ethoxyethyl-2-(4-(2,6-dihydro-2,6-dioxo-7-phenyl-1,5-dioxaindacen-3-yl)phenoxy)acetat  
 DE : 2-Ethoxyethyl 2-(4-(2,6-dihydro 2,6-dioxo-7-phenyl-1,5-dioxaindacen-3-yl)phenoxy)acetat  
 EL : 2-(4-(2,6-διοξο-2,6-διυδρο-7-φαινυλ-ο-1,5-διοξαινδακεν-3-υλ)οφαινοξυ)οξικό 2-αιθοξυαιθυλίο  
 EN : 2-ethoxyethyl 2-(4-(2,6-dihydro 2,6-dioxo-7-phenyl-1,5-dioxaindacen-3-yl)phenoxy)acetate  
 FR : 2-(4-(2,6-dihydro-2,6-dioxo-7-phenyl-1,5-dioxaindacène-3-yl)phénoxy)acétate de 2-ethoxyéthyle  
 IT : 2-(4-(7-fenil-2,6-diidro-2,6-diosso-1,5-diossaindacen-3-il)fenossi)acetato di 2-etossietile  
 NL : 2-ethoxyethyl-2-(4-(7-fenyl-2,6-dihydro-2,6-dioxo-1,5-dioxaindaceen-3-yl)fenoxy)acetaat  
 PT : 2-(4-(7-fenil-2,6-dihidro-2,6-dioxo-1,5-dioxaindaceno-3-il)fenoxi)acetato de 2-etoxietilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

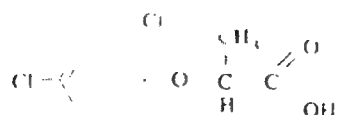
Xi 	R : 43  S : (2-)24-37
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 15165-67-0

EEC No 403-980-1

No 607-218-00-0



- ES · acido (+)-R-2-(2,4-diclorofenoxi)propionico  
 DA · (+)-R-2-(2,4-dichlorphenoxy)propionsyre  
 DE · (+)-R-2-(2,4-Dichlorphenoxy)propionsäure  
 EL · (+)-R-2-(2,4-διχλωροφαινοξύ)προπιονικό οξύ  
 EN · (+)-R-2-(2,4-dichlorphenoxy)propionic acid  
 FR · acide (+)-R-2-(2,4-dichlorophénoxy)propionique  
 IT · acido (+)-R-2-(2,4-diclorofenossi)propionico  
 NL · (+)-R-2-(2,4-dichloorfenoxy)propionzuur  
 PT · acido (+)-R-2-(2,4-diclorofenoxi)propionico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Xn ; R 22

Xi ; R 38-41

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22-38-41-43

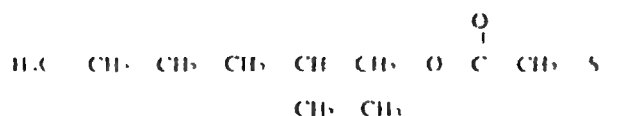
S : (2-)24-26-37/39

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


**Cas No 62268-47-7**

**EEC No 404-510-8**

No 607-219-00-6



ES    ditiodiacetatò de bis(2-etilhexilo)

DA bis(2-ethylhexyl)dichloroacetate

DE · Bis(2-ethylhexyl)dithiodiacetat

FL διφειοδιοξικό δις(2-αιθυλ + ζυγιο)

EN bis(2-ethylhexyl) dithiodiacetate

FR dithioacetate de bis(2-ethylhexyle)

IT ditioacetato di bis(2-etilesile)

NL bis(2-ethylhexyl)dithioacetaar

PT ditionoacetato de bis(2-etilheviolo)

*Classification* *Κλασifizierung* *Einordnung* *Ταξινόμηση* *Classification* *Classification*, *Classification* *Indeling*, *Classificatiedo*

Xn , R 22

R 43

N, R 51-53

*Επιγραφή Ετικετών: Κουτί, ετικέτα, Επισήμανση Labeling, Etiquette, Etikettatura Κουτί, ετικέτα, Rotulagem*

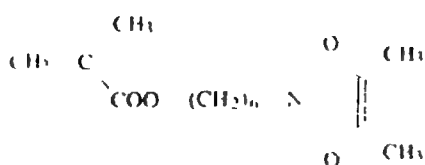


Limites de concentration Limites de concentration Concentration nentzen Limites de concentracão


Cas No 63740-41-0

EEC No 404-870-6

No 607-222-00-2



- ES metacrilato de 6-(2,3-dimetilmaleimido)hexilo  
 DA 6-(2,3-dimethylmaleimido)hexylmethacrylat  
 DE 6-(2,3-Dimethylmaleimido)hexylmethacrylat  
 EL μεθακρυλικό 6-(2,3-διμεθυλομηλεϊμίδιο)εξύλιο  
 EN 6-(2,3-dimethylmaleimido)hexyl methacrylate  
 FR methacrylate de 6-(2,3-diméthylmaléimido)hexyle  
 IT metacrilato di 6-(2,3-dimetilmaleimmido)esile  
 NL 6-(2,3-dimethylmaleimido)hexylmethacrylaat  
 PT metacrilato de 6-(2,3-dimetilmaleimido)hexilo

Classificação Klassifizierung Einstufung Ταξινόμηση Classification Classificazione Classificação

R 43	N ; R 51-53
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Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken, Rotulagem

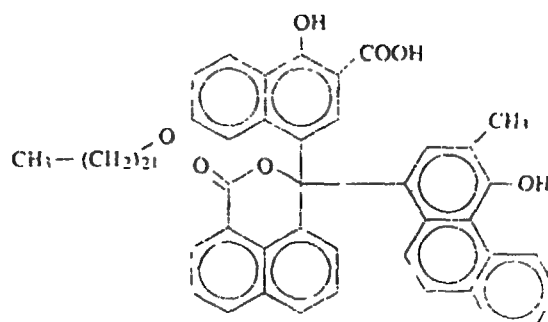
Xi	N	
		R 43 51/53
		S (2) 24-37-61

Limits Λι concentration, Konzentrationen, Konzentrationen, Konzentrationen, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No

EEC No 404-550-6.

No 607-221-00-7



- ES: ácido 2-docosiloxi-1-hidroxi-4-(1-(4-hidroxi-3-metilfenantren-1-il)-3-oxo-2-oxafenalen-1-il)naftaleno-2-carboxílico
- DA: 6-docosyloxy-1-hydroxy-4-(1-(4-hydroxy-3-methylphenanthren-1-yl)-3-oxo-2-oxaphenalen-1-yl)naphthalene-2-carboxylic acid
- DE: 6-Docosyloxy-1-hydroxy-4-(1-(4-hydroxy-3-methylphenanthren-1-yl)-3-oxo-2-oxaphenalen-1-yl)naphthalin-2-carbonsäure
- EL: 6-δωκοσυλοξυ-1-υδροξυ-4-(1-(4-υδροξυ-3-μεθυλοφαινανθρεν-1-υλο)-3-οξο-2-οξαφαιναλεν-1-υλο)ναφθαλενο-2-καρβοξυλικό οξύ
- EN: 6-docosyloxy-1-hydroxy-4-(1-(4-hydroxy-3-methylphenanthren-1-yl)-3-oxo-2-oxaphenalen-1-yl)naphthalene-2-carboxylic acid
- FR: acide 2-docosyloxy-1-hydroxy-4-(1-(4-hydroxy-3-méthylphénanthrène-1-yl)-3-oxo-2-oxaphénalène-1-yl)naphthalene-2-carboxylique
- IT: ácido 2-docosilossi-1-idrossi-4-(1-(4-idrossi-3-metilfenantren-1-il)-3-osso-2-ossafenalen-1-il)naftalen-2-carbossilico
- NL: 2-docosyloxy-1-hydroxy-4-(1-(4-hydroxy-3-methylphenanthren-1-yl)-3-oxo-2-oxafenaleen-1-yl)naftaleen-2-carbonzuur
- PT: ácido 2-docosiloxi-1-hidroxi-4-(1-(4-hidroxi-3-metilfenantreno-1-il)-3-oxo-2-oxafenaleno-1-il)naftaleno-2-carboxílico

Classificação Klassifisering Ertäckning Täckningssättning Classification Classificazione Classificazione Indeling Classificazzjoni

R 43

R 53

Etiquetado Etikettering Kennzeichnung Επισήμανση, Labelling, Étiquetage, Etikettierung, Kenmerken, Rotulagem

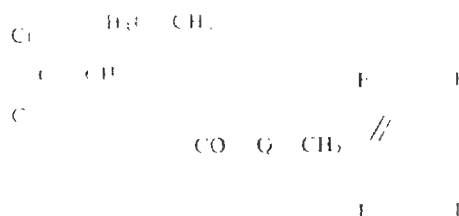
<p>Xi</p>	<p>R: 43-53</p> <p>S: (2)-24-37-61</p>
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Εύρωσις ή συγκέντρωση, Koncetracija, Konzentration, Konzentration, Ορίσμις ή συγκέντρωση, Concentrazione, Concentrazione, Limites de concentration, Limites de concentration, Concentratiegrenzen, Limites de concentratie


Cas No 118712-89-3

BEC No 405-060-5

No 607-223-00-8



ES : trans-2-(2,2-diclorovinil)-3,3-dimetilciclopropanocarboxilato de 2,3,5,6-tetrafluorobenzilo

DA : 2,3,5,6-tetrafluorobenzyl-trans-2-(2,2-dichlorvinyl)-3,3-dimethylcyclopropanecarboxylat

DE : 2,3,5,6-Tetrafluorobenzyl-trans-2-(2,2-dichlorvinyl)-3,3-dimethylcyclopropanecarboxylat

EL : trans-2-(2,2-διχλωροβινυλο)-3,3-διμεθυλοκυκλοπροπανοκαρβοξυλικός 2,3,5,6-τετραφθοροβενζύλεστέρας

EN : 2,3,5,6-tetrafluorobenzyl trans-2-(2,2-dichlorovinyl)-3,3-dimethylcyclopropanecarboxylate

FR : trans-2-(2,2-dichlorovinyl)-3,3-diméthylcyclopropanecarboxylate de 2,3,5,6-tétrafluorobenzyle

IT : trans-2-(2,2-diclorovinil)-3,3-dimetilciclopropanecarbossilato di 2,3,5,6-tetrafluorobenzile

NL : 2,3,5,6-tetrafluorobenzyl-trans-2-(2,2-dichloorvinyl)-3,3-dimethylcyclopropaancarboxylaat

PT : trans-2-(2,2-diclorovinil)-3,3-dimetilciclopropanocarboxilato de 2,3,5,6-tetrafluorobenzilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xi ; R 38

N ; R 50-53

enquadrado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xi	N	
		R : 38-50/53
		S : (2-)36/37-60-61

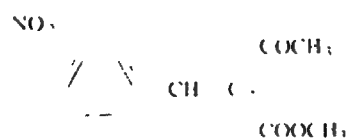
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 39562-17-9

EEC No 405-270-7

No 607-224-00-3



- ES 2-(3-nitrobenziliden)acetoacetato de metilo  
 DA methyl-2-(3-nitrobenzyliden)acetoacetat  
 DE Methyl-2-(3-nitrobenzyliden)acetoacetat  
 EL 2-(3-νιτροβενζυλιδενο)ακετοοξικό μεθύλιο  
 EN methyl 2-(3-nitrobenzylidene)acetoacetate  
 FR 2-(3-nitrobenzylidène)acétoacétate de méthyle  
 IT 2 (3-nitrobenziliden)acetoacetato di metile  
 NL methyl-2-(3-nitrobenzylideen)acetoacetaat  
 PT 2-(3-nitrobenziliideno)acetoacetato de metilo

Classification Klassificering Einstufung Ταξινόμηση, Classification, Classificazione Classificazione Indeling Classificação

Xi; R 43	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem

Xi	N	
		R 43-50/53
		S: (2) 24-37-60-61

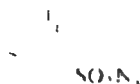
Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 15980-11-7

EEC No 405-310-3

No 607-225-00-9

COOH



ES acido 3-azidosulfonilbenzoico  
 DA 3-azidosultonylbenzoesyre  
 DI 3-Azidosultonylbenzoesaure  
 EL 3 αζιδοςουλ φονυλοδενζοϊκο οξύ  
 EN 3-azidosulfonylbenzoic acid  
 FR acide 3 azidosultonylbenzoïque  
 IT acido 3-azidosoltonilbenzoico  
 NL 3-azidosulfonilbenzoezuur  
 PT acido 3 azidosulfonilbenzoico

Classificazione Klassificering Einstufung Τάξινοληση Classification Classification Classificazione Inddeling Clasi ficazione

C, R 2

Xn, R 48/22

Xi, R 41

R 43

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem

E	Xn	
		
		R 2 41 43-48/22
		S (2) 22-26-35 36/37/39

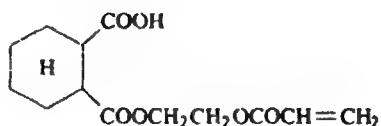
Ποσοστό περιεκτικότητας Κονσεντράτωση Κονσεντράτωση ή ποσοστό καθαρότητας Concentration Concentration Concentrazione Concentration Concentration  
 Ποσοστό περιεκτικότητας Ποσοστό περιεκτικότητας Concentration Concentration Concentrazione Concentration Concentration


Cas No —

EEC No 405-360-6

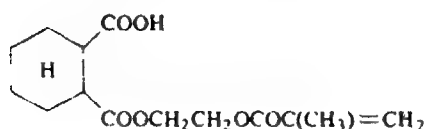
No 607-226-00-4

*Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de :*



- ES : hidrogenociclohexano-1,2-dicarboxilato de 2-acriloiloxietilo  
 DA : 2-acryloyloxyethylhydrogencyclohexan-1,2-dicarboxylat  
 DE : 2-Acryloyloxyethylhydrogencyclohexan-1,2-dicarboxylat  
 EL : υδρογονοκυκλοεξανο-1,2-δικαρβοξυλικό 2-ακρυλοϋλοξαιθύλιο  
 EN : 2-acryloyloxyethyl hydrogen cyclohexane-1,2-dicarboxylate  
 FR : hydrogénocyclohexane-1,2-dicarboxylate de 2-acryloyloxyéthyle  
 IT : idrogenocicloesan-1,2-dicarbossilato di 2-acriloilossietile  
 NL : 2-acryloyloxyethylhydrogeencyclohexaan-1,2-dicarboxylaat  
 PT : hidrogénociclohexano-1,2-dicarboxilato de 2-acriloloxietilo

*y, og, und, και, and, et, e, en, e :*



- ES : hidrogenociclohexano-1,2-dicarboxilato de 2-metacrililoxietil  
 DA : 2-methacryloyloxyethylhydrogencyclohexan-1,2-dicarboxylat  
 DE : 2-Methacryloyloxyethylhydrogencyclohexan-1,2-dicarboxylat  
 EL : υδρογονοκυκλοεξανο-1,2-δικαρβοξυλικό 2-μεθακρυλοϋλοξαιθύλιο  
 EN : 2-methacryloyloxyethyl hydrogen cyclohexane-1,2-dicarboxylate  
 FR : hydrogénocyclohexane-1,2-dicarboxylate de 2-méthacryloyloxyéthyle  
 IT : idrogenocicloesan-1,2-dicarbossilato di 2-metacrililossietile  
 NL : 2-methacryloyloxyethylhydrogeencyclohexaan-1,2-dicarboxylaat  
 PT : hidrogénociclohexano-1,2-dicarboxilato de 2-metacrililoxietil

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xi, R 38-41	R 43	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem*

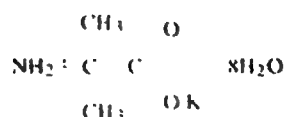
Xi	
	R : 38-41-43-52/53 S : (2)-(24-26-37/39-61)

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 120447-91-8

EEC No 405-560-3

No 607-227-00-X



- ES 2-amino-2-metilpropionato de potasio, octahidrato  
 DA kalium 2-amino-2-methylpropionatoctahydrat  
 DE Kalium-2-amino-2-methylpropionatoctahydrat  
 EL 2-αμινο-2-μεθυλοπρόπιονικό κάλιο οκταϋδρικό  
 EN potassium 2-amino-2-methylpropionate octahydrate  
 FR 2-amino-2-methylpropionate de potassium, octahydrate  
 IT 2-ammino 2-metilpropionato di potassio, ottaidrato  
 NL kalium-2-amino-2-methylpropionaat octahydrat  
 PT 2-amino 2-metilpropionato de potassio, octahidrato

Classification Klassifizierung Einstufung Ταξινόμηση Classification Classificazione Classificazione Including Classification

Xn; R 22	C, R 35
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Prepacked Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kennzeichen Rotulagem

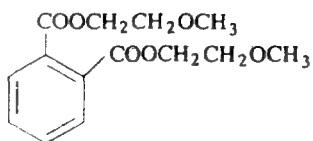
	R 22-35
	S (1/2-)26-28-36/37/39-45

Limit of concentration Konzentration der Dosis Konzentrationsgrenzwerte Όρια συγκέντρωσης Concentration limit  
 Limites de concentration Limite di concentrazione Concentrationsgrenzen Limites de concentratie


Cas No 117-82-8

EEC No 204-212-6

No 607-228-00-5



ES: ftalato de bis(2-metoxietilo)  
 DA: bis(2-methoxyethyl)phthalat  
 DE: Bis(2-methoxyethyl)phthalat  
 EL: φθαλικό δις(2-μεθοξυαιθύλο)  
 EN: bis(2-methoxyethyl) phthalate  
 FR: phtalate de bis(2-méthoxyéthyle)  
 IT: ftalato di bis(2-metossietile)  
 NL: bis(2-methoxyethyl)ftalaat  
 PT: ftalato de bis(2-metoxietilo)  
 FI: bis(2-metoksietyyli)ftalaatti  
 SV: di(2-metoxietyl)ftalat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Repr. Cat. 2; R 61

Repr. Cat. 3; R 62

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

T



R: 61-62

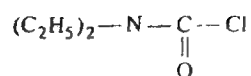
S: 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*


Cas No 88-10-8

EEC No 201-798-5

No 607-229-00-0



ES: cloruro de dietilcarbomoilo

DA: 'diethylcarbamoylechlorid

DE: Diethylcarbamoylechlorid

EL: χλωρίδιο του διαιθυλοκαρβαμολίου

EN: diethylcarbamoyle chloride

FR: chlorure de diéthylcarbamoyle

IT: cloruro di dietilcarbomoile

NL: diethylcarbamoylechloride

PT: cloreto de dietilcarbomoilo

FI: dietyylikarbamylikloridi

SV: dietylkarbamoyleklorid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3; R 40

Xn; R 20/22

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

Xn



R: 20/22-36/37/38-40

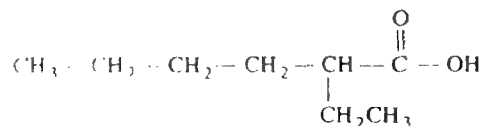
S: (2-)26-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*


Cas No 149-57-5

EEC No 205-743-6

No 607-230-00-6



ES: acido 2-etilhexanoico

DA: 2-ethylhexansyre

DE: 2-Ethylhexansäure

EL: 2-αιθυλεξανικό οξύ

EN: 2-ethylhexanoic acid

FR: acide 2-éthylhexanoïque

IT: acido 2-etilesanoico

NL: 2-ethylhexaanzuur

PT: acido 2-etilhexanóico

FI: 2-etyyliheksaanihappo

SV: 2-ethylhexansyra

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Repr. Cat. 3; R 63

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinntät, Märkning*

Xn



R: 63

S: (2-)36/37

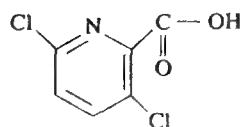
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentraçã, Pitoisuusraajat, Konzentrationsgrænser*




Cas No 1702-17-6

EEC No 216-935-4

No 607-231-00-1



- ES: ácido 3,6-dicloropiridina-2-carboxílico  
 DA: 3,6-dichloropyridin-2-carboxylsyre  
 DE: 3,6-Dichloropyridin-2-carbonsäure  
 EL: 3,6-διχλωροπυριδινό-2-καρβοξυλικό οξύ  
 EN: 3,6-dichloropyridine-2-carboxylic acid; clopyralid  
 FR: acide 3,6-dichloropyridine-2-carboxylique; clopyralid  
 IT: ácido 3,6-dicloropiridin-2-carbossilico; clopiralid  
 NL: 3,6-dichloorpyridine-2-carbonzuur  
 PT: ácido 3,6-dicloropiridina-2-carboxílico  
 FI: 3,6-diklooripyridiini-2-karboksylikhappo; klopyralidi  
 SV: 3,6-diklorpyridin-2-karboxylsyra; klopyralid (ISO)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 41	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem, Merkinnäät, Märkning*

Xi	N	
		R: 41-51/53
		S: (2-)26-39-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã, Pitoisuusrajat, Konzentrationsgrænser*


Cas No 75-05-8

EEC No 200-835-2

No 608-001-00-3

CH<sub>3</sub> — CN

ES acetoniitrilo ; cianuro de metilo  
 DA acetonitril  
 DE Acetonitril  
 EL ακετονιτριλιο  
 EN acetonitrile  
 FR acetonitrile , cyanure de methyle  
 IT acetonitrile  
 NL acetonitril  
 PT acetoniitrilo , cianeto de metilo

*Classificação Klassificering, Einstufung, Ταξινόμηση Classification Classificazione Indeling Classificazio*

F, R 11	T, R 23/24/25
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*Etiquetado Etikettering, Kennzeichnung, Επισήμανση Labelling, Etiquetage, Etichettatura, Kenmerken Rotulagem*

F	T	
		R 11-23/24/25 S (1/2)16-27-43

*Limites de concentración Konzentrationsgrenzen, Konzentrationsgrenzwerte Όρια συγκεντρώσεως Concentration limits, Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao*

C ≥ 20 %	T, R 23/24/25
3 % ≤ C < 20 %	Xn, R 20/21/22

Cas No 545-06-2

EEC No 208-885-7

No 608-002-00-9

CCl<sub>3</sub> — CN

ES : tricloraacetoniitrilo

DA : trichloracetoneitril

DE : Trichloracetoneitril

EL : τριχλωροακετονιτρίλιο

EN : trichloroacetonitrile

FR : trichloroacétonitrile

IT : tricloraacetoniitrile

NL : trichlooracetoneitril

PT : tricloraacetoniitrilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T ; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 23/24/25</p> <p>S : (1/2)-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

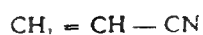

Cas No. 107-13-1

EEC No 203-466-5

No 608-003-00-4

NOTA D

NOTA E



ES: acrilonitrilo

DA: acrylonitril

DE: Acrylnitril

EL: ακρυλονιτρίλιο

EN: acrylonitrile

FR: acrylonitrile

IT: acrilonitrile


NL: acrylnitril

PT: acrilonitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F; R 11	Carc. Cat. 2; R 45	T; R 23/24/25	Xi; R 38
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

F	T	
		R : 45-11-23/24/25-38
		S : 53-45

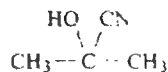
*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 20 %	T; R 45-23/24/25-38
1 % ≤ C < 20 %	T; R 45-23/24/25
0,2 % ≤ C < 1 %	T; R 45-20/21/22
0,1 % ≤ C < 0,2 %	T; R 45

Cas No 75-86-5

EEC No 200-909-4

No 608-004-00-X



ES : 2-ciano-2-propanol ; acetoncianhidrina  
 DA : 2-cvano-2-propanol ; acetonecyanhydrin  
 DE : 2-Cyanopropan-2-ol ; Acetonecyanhydrin  
 EL : 2-κυανο-2-προπανόλη · ακετονοκυανυδρίνη  
 EN : 2-cyanopropan-2-ol ; acetone cyanohydrin  
 FR : 2-cyano-2-propanol ; acétonecyanhydrine  
 IT : 2-cian-propan-2-olo ; acetoncianidrina  
 NL : acetonecyanhydrine  
 PT : 2-ciano-2-propanol ; acetona cianidrina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T+ ; R 26/27/28	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

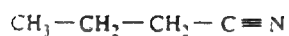
T+	N	
		R : 26/27/28-50
		S : (1/2-)/9-27-45-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 109-74-0

EEC No 203-700-6

No 608-005-00-5



ES: *n*-butironitrilo  
 DA: butyronitril  
 DE: *n*-Butyronitril  
 EL: *n*-βουτυρονιτριλιο  
 EN: *n*-butyronitrile  
 FR: butyronitrile  
 IT: *n*-butirronitrile, nitrile butirrico  
 NL: *n*-butyronitril  
 PT: *n*-butironitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

R 10

T; R 23/24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem*

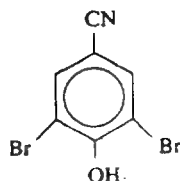
<p>T</p> 	<p>R: 10-23/24/25 S: (1/2-)45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas. No 1689-84-5

EEC No 216-882-7

No 608-006-00-0



ES: bromoxinil (ISO); 3,5-dibromo-4-hidroxibenzonitrilo  
 DA: bromoxynil (ISO); 3,5-dibrom-4-hydroxybenzonitril  
 DE: bromoxynil (ISO); 3,5-Dibrom-4-hydroxybenzonitril  
 EL: bromoxynil (ISO); 3,5-διβρωμο-4-υδροξυδενζονιτριλιο  
 EN: bromoxynil (ISO); 3,5-dibromo-4-hydroxybenzonitrile  
 FR: bromoxynil (ISO); 3,5-dibromo-4-hydroxybenzonitrile  
 IT: bromoxinil (ISO); 3,5-dibromo-4-idrossibenzonitrile  
 NL: bromoxynil (ISO); 3,5-dibroom-4-hydroxybenzonitril  
 PT: bromoxinil (ISO); 3,5-dibromo-4-hidroxibenzonitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Repr. Cat. 3; R 63

T; R 25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

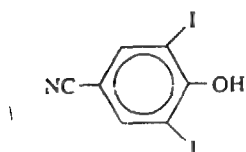
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1689-83-4

EEC No 216-881-1

No 608-007-00-6



ES ioxinil (ISO) ; 4-hidroxi-3,5-diiodobenzonitrilo  
 DA ioxynil (ISO) ; 4-hydroxy-3,5-diiodbenzonitril  
 DE ioxynil (ISO) ; 4-Hydroxy-3,5-diiodbenzonitril  
 EL ioxynil (ISO) 4-υδροξυ-3,5-διωδοβενζονιτριλιο  
 EN ioxynil (ISO) , 4-hydroxy-3,5-diiodobenzonitrile  
 FR ioxynil (ISO) , 4-hydroxy-3,5-diiodobenzonitrile  
 IT ioxynil (ISO) , 4-idrossi-3,5-diiodobenzonitrile  
 NL ioxynil (ISO) , 4-hydroxy-3,5-diiodobenzonitril  
 PT ioxinil (ISO) ; 4-hidroxi-3,5-diiodobenzonitrilo

Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificazione Inbeling Classificazioe

Repr. Cat. 3, R 63	T, R 25	Xn, R 21
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Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem

T	
	R 21 25 63
	S (1/2) 36/37 43

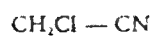
Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Ορια συγκεντρώσεως Concentration limits  
 Limites de concentration Limite di concentrazione Concentrationsgrenzen Limites de concentraçào




Cas No 107-14-2

EEC No 203-467-0

No 608-008-00-1



ES: cloroacetoniitrilo

DA: chloracetoneitril

DE: Chloracetoneitril

EL: χλωροακετονιτρίλιο

EN: chloroacetonitrile

FR: chloroacétonitrile; nitrile monochloroacétique

IT: cloroacetoneitrile

NL: chlooracetoneitril

PT: cloroacetoniitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T; R 23/24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R: 23/24/25
	S: (1/2)-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 109-77-3

EEC No 203-703-2

No 608-009-00-7

CN — CH, — CN

ES: malononitrilo

DA: malonnitril

DE: Malonsäuredinitril

EL: δινιτρίλιον του μηλονικού οξέος

EN: malononitrile

FR: malononitrile

IT: malononitrile

NL: malonnitril

PT: malononitrilo

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T: R 23/24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	S: (1/2-)23-27-45

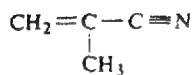
*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 126-98-7

EEC No 204-817-5

No 608-010-00-2

NOTA 10



ES: 2-metil-2-propeno-nitrilo; metacrilonitrilo

DA: 2-methyl-2-propennitril; methacrylnitril

DE: Methacrylnitril; 2-Methyl-2-propennitril

EL: μεθακρυλονιτρίλιο· 2-μεθυλο-2-προπενονιτρίλιο

EN: methacrylonitrile; 2-methyl-2-propene nitrile

FR: methacrylonitrile

IT: 2-metil-2-propene nitrile; metacrilonitrile

NL: 2-methyl-2-propennitril

PT: 2-metil-2-propenonitrile; metacrilonitrilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

F; R 11

T; R 23/24/25

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	T	
		R: 11-23/24/25-43
		S: (1/2)-9-16-18 29 45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 1 %	T; R 23/24/25-43
0,2 % ≤ C < 1 %	Xn; R 20/21/22-43

Cas No 460-19-5

EEC No 207-306-5

No 608-011-00-8



ES: cianogeno, oxalonitrilo

DA: dicyan

DE: Oxalsäuredinitril, Dicyan

EL: δικυανιον

EN: cyanogen

FR: oxalonitrile, cyanogène

IT: cianogeno

NL: cyanogeen

PT: cianogenio

*Classification Klassifisering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação*

F, R 11

T, R 23

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetare Etichettatura Kenmerken Rotulagem*

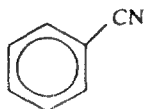
F	T	
		R 11 23
		S (1/2-)23 45

*Limits of concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως Concentration limits*  
*Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentração*


Cas No 100-47-0

EEC No 202-855-7

No 608-012-00-3



ES : benzonitrilo

DA : benzonitril

DE : Benzonitril

EL : βενζονιτρίλιο

EN : benzonitrile

FR : benzonitrile

IT : benzonitrile

NL : benzonitril

PT : benzonitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

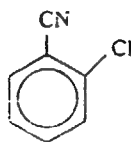
<p>Xn</p> 	<p>R : 21/22</p> <p>S : (2-)23</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 873-32-5

EEC No 212-836-5

No 608-013-00-9



ES 2-clorobenzonitrilo  
 DA 2-chlorbenzonitril  
 DE 2-Chlorbenzonitril  
 EL 2-χλωροδενζονιτρίλιο  
 EN 2-chlorobenzonitrile  
 FR 2-chlorobenzonitrile  
 IT 2-clorobenzonitrile  
 NL 2-chloorbenzonitril  
 PT 2-clorobenzonitrilo

*Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificação*

Xn, R 21/22

Xi, R 36

*Etiquetage Etikettering Kennzeichnung Επισημάνση Libelling Étiquetage Etichettatura Kenmerken Rotulagem*

Xn



R 21/22 36

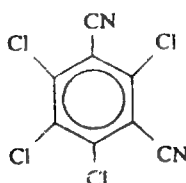
S (2-)23

*Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzuerte Όρια συγκεντρώσεως Concentration limits  
 Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçào*


Cas No 1897-45-6

EEC No 217-588-1

No 608-014-00-4



ES: clorotalonil (ISO); tetracolorisofthalonitrilo

DA: chlorothalonil (ISO); tetrachlorisophthalonitril

DE: chlorothalonil (ISO); Tetrachlorisophthalonitril

EL: chlorothalonil (ISO); τετραχλωροϊσοφθαλονιτρίλιο

EN: chlorothalonil (ISO); tetrachloroisophthalonitrile

FR: chlorothalonil (ISO); tétrachloroisophthalonitrile

IT: clorotalonil (ISO); tetracolorisofthalonitrile

NL: chloorthalonil (ISO); tetrachloorisofthalonitri

PT: clorotalonil (ISO); tetracolorisofthalonitrilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

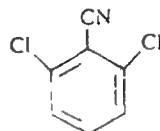
Xn	
	R : 40
	S : (2-)36/37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1194-65-6

EEC No 214-787-5

No 608-015-00-X



ES : diclobenil (ISO) ; 2,6-diclorobenzonitrilo  
 DA : dichlobenil (ISO) ; 2,6-dichlorbenzonitril  
 DE : Dichlobenil (ISO) ; 2,6-Dichlorbenzonitril  
 EL : dichlobenil (ISO) ; 2,6-δυχλωροβενζονιτρίλιο  
 EN : dichlobenil (ISO) ; 2,6-dichlorobenzonitrile  
 FR : dichlobenil (ISO) ; 2,6-dichlorobenzonitrile  
 IT : diclobenil (ISO) ; 2,6-diclorobenzonitrile  
 NL : dichlobenil (ISO) ; 2,6-dichloorbenzonitril  
 PT : diclobenil (ISO) ; 2,6-diclorobenzonitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 21

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 21
	S : (2-)36/37

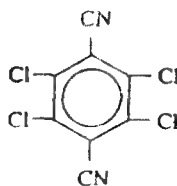
*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 1897-41-2

EEC No 401-550-8

No 608-016-00-5



ES: tetracolorotereftalonitrilo  
 DA: tetrachloroterephthalonitril  
 DE: Tetrachloroterephthalonitril  
 EL: τετραχλωροτερεφθαλονιτρίλιο  
 EN: tetrachloroterephthalonitrile  
 FR: tétrachlorotéréphthalonitrile  
 IT: tetracolorotereftalonitrile  
 NL: tetrachloortereftalonitril  
 PT: tetracolorotereftalonitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

R 43

R 53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 43-53

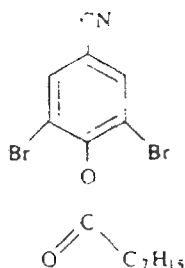
S : (2-)24-37-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1689-99-2

EEC No 216-885-3

No 608-017-00-0



ES octanoato de 2,6-dibromo-4-cianofenilo

DA 2,6-dibrom-4-cyanophenyloctanoat; bromoxyniloctanoat

DE 2,6-Dibrom-4-cyanophenyloctanoat; Bromoxyniloctanoat

EL οκτανοϊκος 2,6-διβρωμο-4-κυανοφαινυλεστέρας

EN 2,6-dibromo-4-cyanophenyl octanoate; bromoxynil octanoate

FR octanoate de 2,6-dibromo-4-cyanophényle; bromoxynil octanoate

IT ottanoato di 2,6-dibromo-4-cianofenile; bromossinil ottanoato

NL 2,6-dibroom-4-cyaanfenyloctanoaat

PT octanoato de 2,6-dibromo-4-cianofenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 3; R 63

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 21/22-63

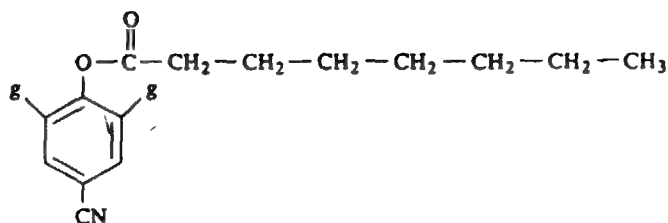
S : (2-)36/37

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 3861-47-0

EEC No 223-375-4

No 608-018-00-6



ES: octanoato de 4-ciano-2,6-diiodofenilo

DA: 4-cyano-2,6-diiodophenyloctanoat; ioxyniloctanoat

DE: 4-Cyan-2,6-diiodophenyloctanoat; Ioxyniloctanoat

EL: οκτανοϊκόξ 4-κυανο-2,6-διωδοφαινυλεστέρας

EN: 4-cyano-2,6-diiodophenyl octanoate; ioxynil octanoate

FR: octanoate de 4-cyano-2,6-diiodophényle; ioxynil octanoate

IT: ottanoato di 4-ciano-2,6-diiodofenile; ioxinil ottanoato

NL: 4-cyaa-2,6-dijoodfenyloctanoat

PT: octanoato de 4-ciano-2,6-diiodofenilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Repr. Cat. 3; R 63

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-63

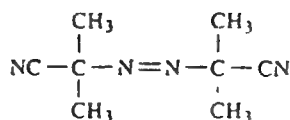
S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçdo


Cas No 78-67-1

EEC No 201-132-3

No 608-019-00-1



- ES · 2,2'-dimetil-2,2'-azodipropiononitrilo  
 DA · 2,2'-dimethyl-2,2'-azodipropiononitril  
 DE · 2,2' Dimethyl-2,2'-azodipropiononitril  
 EL · 2,2 διμεθυλ-2,2'-αζωδιπροπιονονιτρίλιο  
 EN · 2,2'-dimethyl-2,2'-azodipropiononitrile , ADZN  
 FR · 2,2 dimethyl-2,2'-azodipropiononitrile  
 IT · 2,2' dimetil-2,2'-azodipropiononitrile  
 NL · 2,2 dimethyl-2,2'-azodipropiononitril  
 PT · 2,2 dimetil-2,2'-azodiprópiononitrilo

Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classifica zione Inteling Classificazio

E, R 2

F, R 11

Xn, R 20/22

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem

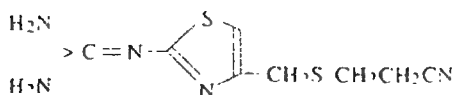
E	Xn	
		R · 2 11 20/22
		S (2)39 41 47

Limites de concentraci3n, Konzentrationsgrenzen, Konzentrationsgrenzuerte, Ορια συγκεντρ3ωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione Concentratiegrenzen Limites de concentraç3o


Cas. No 76823-93-3

EEC No 403-710-2

No 608-021-00-2



- ES : 3-(2-(diaminometilenamino)thiazol-4-ilmetiltio)propiononitrilo  
 DA : 3-(2-(diaminomethylenamino)thiazol-4-ylmethylthio)propiononitril  
 DE : 3-(2-(Diaminomethylenamino)thiazol-4-ylmethylthio)propiononitril  
 EL : 3-(2-(διαμινομεθυλέναμινο)θειαζολ-4-υλομεθυλοθιο)προπιονονιτρίλιο  
 EN : 3-(2-(diaminomethylenamino)thiazol-4-ylmethylthio)propionitrile  
 FR : 3-(2-(diaminométhylénamino)thiazole-4-ylméthylthio)propiononitrile  
 IT : 3-(2-(diamminometilenammino)thiazol-4-ilmetiltio)propiononitrile  
 NL : 3-(2-(diaminomethylenamino)thiazool-4-ylmethylthio)propiononitril  
 PT : 3-(2-(diaminometilenamino)thiazole-4-ilmetiltio)própiõnonitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificazioe*

Xn ; R 22

R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Paccetti*

<p>Λ9</p> 	<p>R + 22-52/53</p> <p>S + 22-52-51</p>
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*Limites de concentration, Koncentratbegrensning, Konzentrationsgrenzen, Ορίσματα συγκεντρώσεως, Limites de concentration, Limiti di concentrazione, Concentratbegrensning, Límites de concentración*


Cas No 108-03-2

EEC No 203-544-9

No 609-001-00-6



ES : 1-nitropropano

DA : 1-nitropropan

DE : 1-Nitropropan

EL : 1-νιτροπροπάνιο

EN : 1-nitropropane

FR : 1-nitropropane

IT : 1-nitropropano

NL : 1-nitropropan

PT : 1-nitropropano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Indeling, Classificação*

R 10

Xn ; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 10-20/21/22

S : (2-)9

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

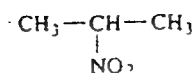
C ≥ 5 %	Xn ; R 20/21/22

Cas No 79-46-9

EEC No 201-209-1

No 609-002-00-1

NOTA E



ES: 2-nitropropano  
 DA: 2-nitropropan  
 DE: 2-Nitropropan  
 EL: 2-νιτροπροπανιο  
 EN: 2-nitropropane  
 FR: 2-nitropropane  
 IT: 2-nitropropano  
 NL: 2-nitropropan  
 PT: 2-nitropropano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

R 10

Carc. Cat. 2; R 45

Xn: R 20/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem*

T



R : 45-10-20/22

S : 53-45

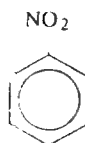
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 25 %	T; R 45-20/22
0,1 % ≤ C < 25 %	T; R 45

Cas No 98-95-3

EEC No 202-716-0

No 609-003-00-7



ES: nitrobenceno  
 DA: nitrobenzen  
 DE: Nitrobenzol  
 EL: νιτροβενζόλιο  
 EN: nitrobenzene  
 FR: nitrobenzène  
 IT: nitrobenzene  
 NL: nitrobenzeen  
 PT: nitrobenzeno  
 FI: nitrobentseeni  
 SV: nitrobenzen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3; R 40

Repr. Cat. 3; R 62

T; R 23/24/25-48/23/24

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäit, Märkning*

T



N



R: 23/24/25-40-48/23/24-51/53-62

S: (1/2-)28-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçã, Pitoisuusrajat, Konzentrationsgrænser*

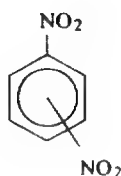



Cas No 25154-54-5 (mix)

EEC No 246-673-6

No 609-004-00-2

NOTA C



ES : dinitrobenceno

DA : dinitrobenzen

DE : Dinitrobenzol

EL : δινιτροβενζόλιο

EN : dinitrobenzene

FR : dinitrobenzène

IT : dinitrobenzene ; dinitrobenzolo

NL : dinitrobenzen

PT : dinitrobenzeno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/27/28

R 33

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	N	
		R : 26/27/28-33-50/53
		S : (1/2-)28-36/37-45-60-61

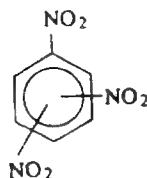
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 25377-32-6 (mix)

EEC No —

No 609-005-00-8

NOTA C



ES: trinitrobenceno

DA: trinitrobenzen

DE: Trinitrobenzol

EL: τρινιτροβενζόλιο

EN: trinitrobenzene

FR: trinitrobenzène

IT: trinitrobenzene; trinitrobenzolo

NL: trinitrobenzeen

PT: trinitrobenzeno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R 2

T+; R 26/27/28

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E	T+	
		R : 2-26/27/28-33
		S : (1/2-)35-45

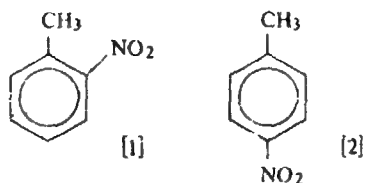
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 88-72-2 [1]  
99-99-0 [2]

EEC No 201-853-3 [1]  
202-808-0 [2]

No 609-006-00-3

NOTA C



ES · 2-nitrotolueno [1], 4-nitrotolueno [2]

DA · 2-nitrotoluen [1], 4-nitrotoluen [2]

DE · 2-Nitrotoluol [1], 4-Nitrotoluol [2]

EL · 2-νιτροτολουόλιο, ο-νιτροτολουόλιο [1], 4-νιτροτολουόλιο, ρ-νιτροτολουόλιο [2]

EN · 2-nitrotoluene [1], 4-nitrotoluene [2]

FR · 2-nitrotoluène [1], 4-nitrotoluène [2]

IT · 2-nitrotoluene, o-nitrotoluolo [1], 4-nitrotoluene, p-nitrotoluolo [2]

NL · 2-nitrotolueen [1], 4-nitrotolueen [2]

PT · 2-nitrotolueno [1], 4-nitrotolueno [2]

Classificaco, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificaço

T, R 23/24/25 R 33 N, R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		R : 23/24/25-33-51/53
		S : (1/2-)28-37-45-61

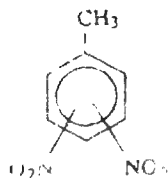
Límites de concentraco, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraço


Cas No 25321-14-6

EEC No 246-836-1

No 609-007-00-9

NOTA C



ES : dinitrotolueno

DA : dinitrotoluen

DE : Dinitrotoluol

EL : δινιτροτολουόλιο

EN : dinitrotoluene

FR : dinitrotoluène

IT : dinitrotoluene , dinitrotoluolo

NL : dinitrotolueen

PT : dinitrotolueno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T; R 23/24/25 R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

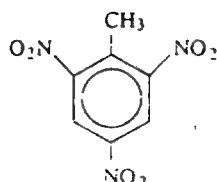
<p>T</p> 	<p>R : 23/24/25-33</p> <p>S : (1/2-)28-37-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 118-96-7

EEC No 204-289-6

No 609-008-00-4



ES : 2,4,6-trinitrotolueno ; TNT

DA : 2,4,6-trinitrotoluen ; TNT

DE : 2,4,6-Trinitrotoluol ; TNT

EL : 2,4,6-τρινιτροτολουόλιο · TNT

EN : 2,4,6-trinitrotoluene ; TNT

FR : 2,4,6-trinitrotoluène ; TNT

IT : 2,4,6-trinitrotoluene ; TNT

NL : 2,4,6-trinitrotoluene ; TNT

PT : 2,4,6-trinitrotolueno ; TNT

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificaçã*

E ; R 2

T ; R 23/24/25

R 33

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

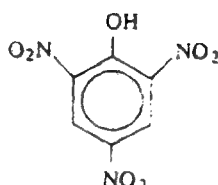
E	T	
		R : 2-23/24/25-33
		S : (1/2-)35-43

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas. No 88-89-1

EEC No 201-865-9

No 609-009-00-X



ES: 2,4,6-trinitrofenol; ácido picrico

DA: 2,4,6-trinitrophenol; picrinsyre

DE: 2,4,6-Trinitrophenol; Pikrinsäure

EL: 2,4,6-τρινιτροφαινόλη; πικρικό οξύ

EN: 2,4,6-trinitrophenol; picric acid

FR: 2,4,6-trinitrophenol; acide picrique

IT: 2,4,6-trinitrofenolo; acido picrico

NL: 2,4,6-trinitrofenol; pikrinezuur

PT: 2,4,6-trinitrofenol; ácido picrico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R 2

R 4

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E	T	
		R : 2-4-23/24/25
		S : (1/2-)28-35-37-45

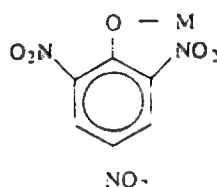
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 609-010-00-5

NOTA A



ES: sales de ácido pícrico; picratos

DA: picrinsyreens salte

DE: Salze der Pikrinsäure

EL: αλατα πικρικού οξέος

EN: salts of picric acid

FR: picrates; sels de l'acide picrique

IT: picrati; sali dell'acido picrico

NL: zouten van pikrinezuur

PT: picratos; sais do ácido picrico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R 3

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

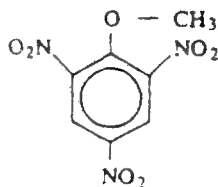
E	T	
		R : 3-23/24/25
		S : (1/2-)28-35-37-45

Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 606-35-9

EEC No —

No 609-011-00-0



ES : 2,4,6-trinitroanisol

DA : 2,4,6-trinitroanisol

DE : 2,4,6-Trinitroanisol

EL : 2,4,6-τρινιτροανισόλη

EN : 2,4,6-trinitroanisole

FR : 2,4,6-trinitroanisol ; picrate de méthyle

IT : 2,4,6-trinitroanisolo

NL : 2,4,6-trinitroanisool

PT : 2,4,6-trinitroanisol ; picrato de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E ; R 2

Xn ; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E	Xn	
		R : 2-20/21/22 S : (2-)35

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits,  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

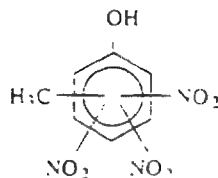



Cas No 28905-71-7

EEC No —

No 609-012-00-6

NOTA C



ES: trinitrocresol

DA: trinitrocresol

DE: Trinitrokresol

EL: τρινιτροκρεζόλη

EN: trinitrocresol

FR: trinitrocresol

IT: trinitrocresolo

NL: trinitrokresol

PT: trinitrocresol

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

E: R 2

R 4

Xn: R 20/21/22

Ετικεταζο, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etikettierung, Kenmerken, Rotulagem

E	Xn	
		R: 2-4-20/21/22 S: (2-)35

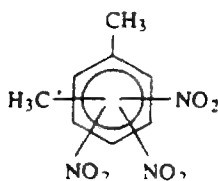
Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 67297-26-1 (mix)

EEC No —

No 609-013-00-1

NOTA C



ES: τρινιτροξιλενο

DA: τρινιτροxylen

DE: Trinitroxytol

EL: τρινιτροξυλόλιο

EN: trinitroxyliene

FR: trinitroxyliène

IT: trinitroxilene ; trinitroxilolo

NL: trinitroxyleen

PT: trinitroxileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E ; R 2

Xn ; R 20/21/22

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E	Xn	
		R : 2-20/21/22-33 S : (2-)35

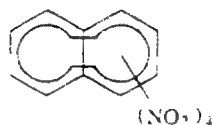
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 55810-18-9 (mix)

EEC No —

No 609-014-00-7

NOTA C



ES: tetranitronattaleno

DA: tetranitronaphthalen

DE: Tetranitronaphthalin

EL: τετρανιτροναφθαλίνιο

EN: tetranitronaphthalene

FR: tetranitronaphtalène

IT: tetranitronaftalina

NL: tetranitronaphtaleen

PT: tetranitronattaleno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

E; R 2

Xn; R 20/21/22

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem

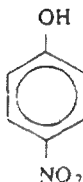
E	Xn	
		R 2-20/21/22-33
		S: (2-)35

Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 100-02-7

EEC No 202-811-7

No 609-015-00-2

ES: 4-nitrofenol; *p*-nitrofenolDA: 4-nitrophenol; *p*-nitrophenolDE: 4-Nitrophenol; *p*-NitrophenolEL: 4-νιτροφαινόλη · *p*-νιτροφαινόληEN: 4-nitrophenol; *p*-nitrophenolFR: 4-nitrophénol; *p*-nitrophénolIT: 4-nitrofenolo; *p*-nitrofenoloNL: 4-nitrofenol; *p*-nitrofenolPT: 4-nitrofenol; *p*-nitrofenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 20/21/22

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 20/21/22-33

S: (2-)28

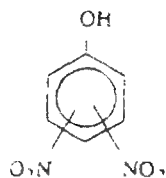
Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 25550-58-7

EEC No 247-096-2

No 609-016-00-8

NOTA C



ES: dinitrofenol

DA: dinitrophenol

DE: Dinitrophenol

EL: δινιτροφαινόλη

EN: dinitrophenol

FR: dinitrophénol

IT: dinitrofenolo

NL: dinitrofenol

PT: dinitrofenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificatio

T: R 23/24/25

R 33

Etiquetado, Erikttering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etikettatura, Kenmerken, Kortelegem

T	
	R: 23/24/25-33 S: (1/2-)28-37-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

EEC No

No 609-017-00-3

NOTA A

ES: sales de dinitrofenol

DA: salte af dinitrophenol

DE: Salze von Dinitrophenol

EL: αλατα δινιτροφαινόλης

EN: salts of dinitrophenol

FR: sels de dinitrophénol

IT: sali di dinitrofenolo

NL: zouten van dinitrofenol

PT: sais de dinitrofenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 23/24/25-33

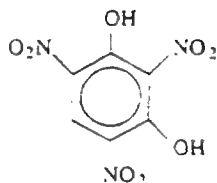
S : (1/2-)28-37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 82-71-3

EEC No 201-436-6

No 609-018-00-9



ES: 2,4,6-trinitroresorcinol; ácido estifnico  
 DA: 2,4,6-trinitroresorcinol; styphninsyre  
 DE: 2,4,6-Trinitroresorcin; Styphninsäure  
 EL: 2,4,6-τρινιτρορεζορκίνη· στυφνικό οξύ  
 EN: 2,4,6-trinitroresorcinol; styphnic acid  
 FR: 2,4,6-trinitrorésorcinol; acide styphnique  
 IT: 2,4,6-trinitroresorcinolo; acido stifnico  
 NL: trinitroresorcinol  
 PT: 2,4,6-trinitrorresorcinol; ácido estifnico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

E; R 2	R 4	Xn; R 20/21/22
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

E	Xn	
		R: 2-4-20/21/22
		S: (2-)35

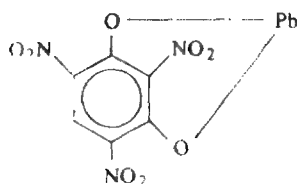
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 15245-44-0

EEC No 239-290-0

No 609-019-00-4

NOTA E



- ES 2,4,6-trinitroresorcinato de plomo ; estífnato de plomo  
 DA bly-2,4,6-trinitroresorcinolat ; blystyphnat  
 DE Blei-2,4,6-Trinitroresorcinat , Trizinar  
 EL 2,4,6-τρινιτρορεζορκινικός μόλυβδος· στυφνικός μόλυβδος  
 EN lead 2,4,6-trinitroresorcinoxide , lead styphnate  
 FR 2,4,6-trinitrorésorcinate de plomb , trincinate  
 IT 2,4,6-trinitroresorcinato di piombo  
 NL loodtrinitroresocinaat  
 PT 2,4,6-trinitrorresorcinato de chumbo· trincinato

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

E ; R 3	Repr. Cat. 1 ; R 61	Repr. Cat. 3 ; R 62	Xn ; R 20/22	R 33
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

E	T	
		R : 61-62-3-20/22-33
		S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

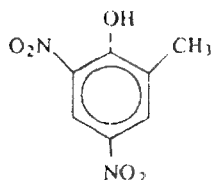

NOTA I



Cas No 534-52-1

EEC No 208-601-1

No 609-020-00-X

ES : DNOC ; 4,6-dinitro-*o*-cresol

DA : DNOC ; 2-methyl-4,6-dinitrophenol

DE : DNOC ; 4,6-Dinitro-*o*-kresolEL : DNOC ; 4,6-δινιτρο-*ο*-κρεζόληEN : DNOC ; 4,6-dinitro-*o*-cresolFR : DNOC ; 4,6-dinitro-*o*-crésolIT : DNOC ; 4,6-dinitro-*o*-cresoloNL : DNOC ; 4,6-dinitro-*o*-kresolPT : DNOC ; 4,6-dinitro-*o*-cresol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

R 44	T+ ; R 27/28	Muta. Cat. 3 ; R 40	Xi ; R 36	R 33
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

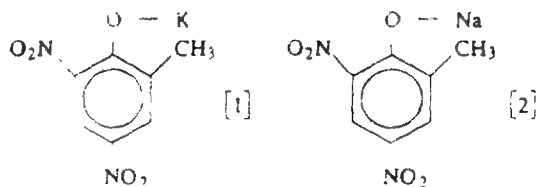
T+	
	R : 27/28-33-36-40-44
	S : (1/2-)/36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 5787-96-2 (1)  
2312-76-7 (2)

EEC No 219-007-7 [2]

No 609-021-00-5



ES: sal de potasio del DNOC; sal de sodio del DNOC  
 DA: kalium-salt af DNOC; natrium-salt af DNOC  
 DE: Kaliumsalz von DNOC; Natriumsalz von DNOC  
 EL: αλας καλίου του DNOC· άλας νατρίου του DNOC  
 EN: potassium salt of DNOC; sodium salt of DNOC  
 FR: sel de potassium de DNOC; sel de sodium de DNOC  
 IT: sale di potassio di DNOC; sale di sodio di DNOC  
 NL: kaliumzout van DNOC; natriumzout van DNOC  
 PT: sal de potássio de DNOC; sal de sódio de DNOC

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T: R 23/24/25 R 33

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

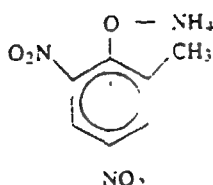
<p>T</p> 	<p>R: 23/24/25-33</p> <p>S: (1/2)-13-45</p>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 2980-64-5

EEC No 221-037-0

No 609-022-00-0



ES: sal de amonio del DNOC  
 DA: ammoniumsalt af DNOC  
 DE: Ammoniumsalz von DNOC  
 EL: αλάς αμμωνίου του DNOC  
 EN: ammonium salt of DNOC  
 FR: sel d'ammonium de DNOC  
 IT: sale di ammonio di DNOC  
 NL: ammoniumzout van DNOC  
 PT: sal de amónio de DNOC

Classification, Klassificering, Einstufung, Ταξινόμηση, Classificatiön, Classificazione, Indeling, Classificação

T+ ; R 26/27/28	R 33
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichetatura, Kenmerken, Rotulagem

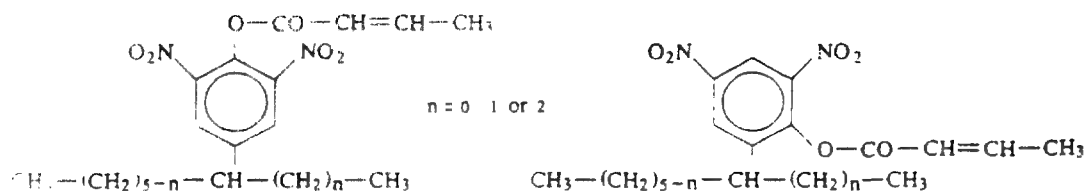
T+	
	R . 26/27/28-33
	S . (1/2-)13-28-45

Limites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 39300-45-3

EEC No 254-408-0

No 609-023-00-6



ES: dinocap (ISO); mezcla de isómeros; crotonato de 2,6-dinitro-4-octilfenilo, crotonato de 2,4-dinitro-6-octilfenilo

DA: dinocap (ISO)

DE: dinocap (ISO)

EL: dinocap (ISO)

EN: dinocap (ISO)

FR: dinocap (ISO)

IT: dinocap (ISO)

NL: dinocap (ISO)

PT: dinocape (ISO)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R: 22-38
	S: (2-)37

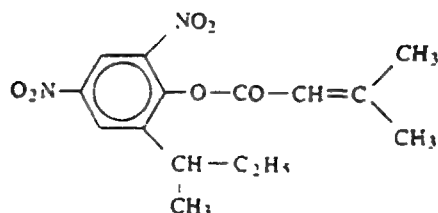
Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 485-31-4

EEC No 207-612-9

No 609-024-00-1

NOTA E



- ES binapacril (ISO) ; 3-metilcrotonato de 2-sec-butil-4,6-dinitrofenilo  
 DA binapacril (ISO) , 2-sec-butyl-4,6-dinitrophenyl-3-methylcrotonat  
 DE Binapacril (ISO) , 2-sec-Butyl-4,6-dinitrophenyl-3-methylcrotonat  
 EL binapacril (ISO) 3-μεθυλοκροτονικός 2-δευ-δουτυλο-4,6-δινιτροφαινυλεστέρας  
 EN binapacril (ISO) , 2-sec-butyl-4,6-dinitrophenyl-3-methylcrotonate  
 FR binapacril (ISO) , 3-methylcrotonate de 2-sec-butyl-4,6-dinitrophenyle  
 IT binapacril (ISO) , 3-metilcrotonato di 2-sec-butil-4,6-dinitrofenile  
 NL binapacril (ISO) , 2-sec-butyl-4,6-dinitrotenyl-3-methylcrotonaat  
 PT binapacrito (ISO) , 3-metilcrotonato de 2-sec-butil-4,6-dinitrofenilo

Classification Klassifizierung, Einstufung Ταξινόμηση Classification, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 2, R 61	Xn ; R 21/22
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Labeling Etikettering, Kennzeichnung Επισήμανση Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<div data-bbox="359 1435 379 1460" data-label="Text">T</div> <div data-bbox="352 1518 399 1563" data-label="Image"> </div>	R : 61-21/22
	S : 53-45

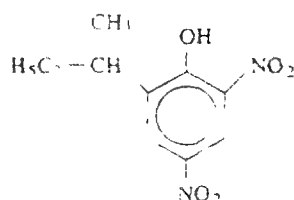
Concentration limits Konzentrationsgrenzen Konzentrationsgrenzuerte, Ορια συγκεντρώσεως, Concentration limits, limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 88-85-7

EEC No 201-861-7

No 609-025-00-7

NOTA E



ES : dinoseb ; 6-sec-butil-2,4-dinitrofenol

DA : dinoseb ; 2-(1-methyl-n-propyl)-4,6-dinitrophenol

DE : Dinoseb ; 6-(1-Methyl-propyl)-2,4-dinitro-phenol

EL : dinoseb ; 2-(1-μεθυλοπροπυλο)-4,6-δινιτροφαινόλη

EN : dinoseb ; 6-sec-butyl-2,4-dinitrophenol

FR : dinosebe ; 2-(1-méthylpropyl)-4,6-dinitrophénol

IT : dinoseb ; 6-(1-metilpropil)-2,4-dinitrofenolo

NL : dinoseb ; 6-(1-methylpropyl)-2,4-dinitrofenol

PT : dinosebe ; 2-(1-metilpropil)-4,6-dinitrofenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

R 44	T : R 24/25	Repr. Cat. 2 ; R 61	Repr. Cat. 3 ; R 62	Xi ; R 36	N ; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		R : 61-62-24/25-36-44-50/53
		S : 53-45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 609-026-00-2

NOTA A

NOTA E

ES: sales y ésteres de dinoseb, excepto aquellos específicamente expresados en este Anexo

DA: salte og estere af dinoseb, undtagen sådanne nævnt andetsteds i dette bilag

DE: Salze und Ester des Dinoseb, mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: αλατα και εστερες του εκτος εκεινων που κατονομαζονται σε αλλο σημειο αυτου του παραρτηματος

EN: salts and esters of dinoseb, with the exception of those specified elsewhere in this Annex

FR: sels et esters de dinosèbe, à l'exclusion de ceux nommément désignés dans cette annexe

IT: sali ed esteri di dinoseb, esclusi quelli espressamente indicati in questo allegato


NL: zouten en esters van dinoseb, met uitzondering van de in deze bijlag met name genoemde

PT: sais e esterés do dinosebe, com excepção dos expressamente referidos no presente anexo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 44	T; R 24/25	Repr. Cat. 2; R 61	Repr. Cat. 3; R 62	Xi; R 36
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

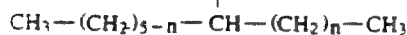
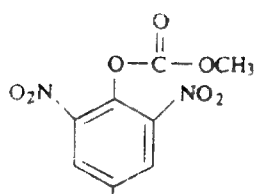
T	
	R 61-62-24/25-36-44
	S: 53-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

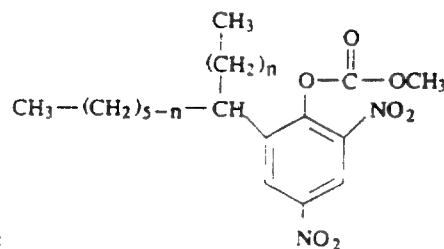

Cas No 63919-26-6

EEC No —

No 609-027-00-8



n = 0, 1, 2



- ES: dinoocton ; mezcla de los isómeros de reacción : carbonato de metilo y de 2,6-dinitro-4-octilfenilo, carbonato de metilo y de 2,4-dinitro-6-octilfenilo
- DA: dinoocton ; isomerblanding : methyl-(2,6-dinitro-4-octylphenyl)-carbonat, methyl-(2,4-dinitro-6-octylphenyl)-carbonat
- DE: Dinoocton ; Mischung aus Isomeren : Methyl-(2,6-dinitro-4-octyl-phenyl)-carbonat, Methyl-(2,4-dinitro-6-octyl-phenyl)-carbonat
- EL: dinoocton · μείγμα ισομερών: ανθρακικός μεθυλεστέρας και 2,6-δινιτρο-4-οκτυλο-φαινυλεστέρας, ανθρακικός μεθυλεστέρας και 2,4-δινιτρο-6-οκτυλο-φαινυλεστέρας
- EN: dinoocton ; mixture of isomers : methyl 2-octyl-4,6-dinitrophenyl carbonate, methyl 4-octyl-2,6-dinitrophenyl carbonate
- FR: dinoocton ; ensemble des isomères de réaction de : carbonates de 2,6-dinitro-4-octylphényle et de méthyle, carbonates de 2,4-dinitro-6-octylphényle et de méthyle
- IT: dinoocton ; miscela di isomeri : metilcarbonato di 4-octil-2,6-dinitrofenile, metilcarbonato di 6-octil-2,4-dinitrofenile
- NL: dinoocton ; mengsel van isomeren : methyl(4-octyl)-2,6-dinitrofenylcarbonaat, methyl(6-octyl)-2,4-dinitrofenylcarbonaat
- PT: dinooctão ; mistura dos isómeros : carbonatos de 2,6-dinitro-4-octilfenilo e de metilo, carbonatos de 2,4-dinitro-6-octilfenilo e de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2)

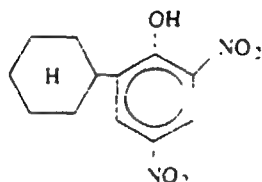
Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 131-89-5

EEC No 205-042-5

No 609-028-00-3



ES: 2-ciclohexil-4,6-dinitrofenol; dinex

DA: dinex; 2-cyclohexyl-4,6-dinitrophenol

DE: Dinex; 2-Cyclohexyl-4,6-dinitro-phenol

EL: dinex; 2-κυκλοεξυλο-4,6-δινιτροφαινόλη

EN: dinex; 2-cyclohexyl-4,6-dinitrophenol

FR: pedinex; 2-cyclohexyl-4,6-dinitrophenol

IT: dinex; 2-cicloesil-4,6-dinitro-fenolo

NL: dinex; 2-cyclohexyl-4,6-dinitrofenol

PT: dinex; 2-cicloexil-4,6-dinitrofenol

Classification Klassifisering, Einstufung Ταξινόμηση Classification Classificazione Classificazione Indefling, Classificação

T, R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem

T	
	R 23/24/25
	S (1/2-)13-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzuerte Όρια συγκεντρώσεως, Concentration limits, Límites de concentración, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào


Cas No

—

EEC No

—

No 609-029-00-9

NOTA A

ES: sales y ésteres de dinex

DA: salte og estere af dinex

DE: Salze und Ester des Dinex

EL: αλατα και εστερες του dinex

EN: salts and esters of dinex

FR: sels et esters de pèdinex

IT: sali ed esteri di dinex

NL: zouten en esters van dinex

PT: sais e esterres de dinex

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R : 23/24/25

S : (1/2-)13-45

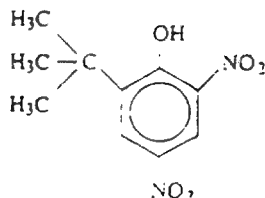
Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1420-07-1

EEC No 215-813-8

No 609-030-00-4

NOTA E



- ES: dinoterb; 2-ter-butil-4,6-dinitrofenol  
 DA: dinoterb; 2-*tert*-butyl-4,6-dinitrophenol  
 DE: Dinoterb; 2-*tert*-Butyl-4,6-dinitro-phenol  
 EL: dinoterb; 2-τριτοταγής βουτυλο-4,6-δινιτροφαινόλη  
 EN: dinoterb; 2-*tert*-butyl-4,6-dinitrophenol  
 FR: dinoterbe; 2-*tert*-butyl-4,6-dinitrophénol  
 IT: dinoterb; 2-*terz*-butil-4,6-dinitro-fenolo  
 NL: dinoterb; 2-*tert*-butyl-4,6-dinitrofenol  
 PT: dinoterbe; 2-*terc*-butil-4,6-dinitrofenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Repr. Cat. 2; R 61

T; R 24/25

Xi; R 36

R 44

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No —

No 609-031-00-X

NOTA A

NOTA E

ES: sales y ésteres de dinoterb  
 DA: salte og estere af dinoterb  
 DE: Salze und Ester des Dinoterb  
 EL: αλατα και εστερες του dinoterb  
 EN: salts and esters of dinoterb  
 FR: sels et esters de dinoterbe  
 IT: sali ed esteri di dinoterb  
 NL: zouten en esters van dinoterb  
 PT: sais e esterres de dinoterbe

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Repr. Cat. 2; R 61 T; R 23/24/25

*Enquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

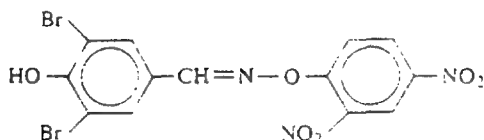
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 61-23/24/25</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 13181-17-4

EEC No 236-129-6

No 609-032-00-5



ES: bromorenoxim; 3,5-dibromo-4-idrossibenzaldehido-O-(2,4-dinitrofenil)oxima

DA: bromopnenoxim; 3,5-dibrom-4-hydroxybenzaldehyd-O-(2,4-dinitrophenyl)oxim

DE: Bromophenoxim; 3,5-Dibrom-4-hydroxybenzaldehyd-O-(2,4-dinitrophenyl)oxim

EL: bromorenoxim; 3,5-διβρωμο-4-υδροξυδεϋζαλδευδο-O-(2,4-δινιτροφαινυλ)-οξιμη

EN: bromorenoxim; 3,5-dibromo-4-hydroxybenzaldehyde-O-(2,4-dinitrophenyl)-oxime

FR: bromophénoxime; 3,5-dibromo-4-hydroxybenzaldéhyde-O-(2,4-dinitrophényle)-oxime

IT: bromorenoxim; 3,5-dibromo-4-idrossibenzaldeide-O-(2,4-dinitrofenil)ossima

NL: bromoienoxim; 3,5-dibroom-4-hydroxybenzaldehyd-O-(2,4-dinitrofenyl)oxim

PT: bromoienoxima; 3,5-dibromo-4-hidroxibenzaldeido-O-(2,4-dinitrofenil)oxima

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem

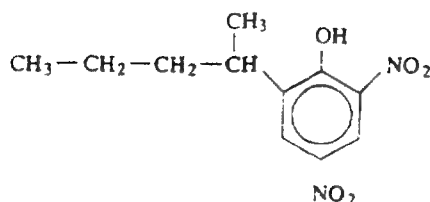
Xn	
	R: 22
	S: (2-)25

Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 4097-36-3

EEC No —

No 609-033-00-0



ES: dinosam; 2-(1-metilbutil)-4,6-dinitrofenol

DA: dinosam; 2-(1-methyl-n-butyl)-4,6-dinitrophenol

DE: Dinosam; 6-(1-Methyl-butyl)-2,4-dinitro-phenol

EL: dinosam; 2-(1-μεθυλοβουτυλο)-4,6-δινιτροφαινόλη

EN: dinosam; 2-(1-methylbutyl)-4,6-dinitrophenol

FR: dinosame; 2-(1-méthylbutyl)-4,6-dinitrophenol

IT: dinosam; 6-(1-metilbutil)-2,4-dinitrofenolo

NL: dinosam; 6-(1-methylbutyl)-2,4-dinitrofenol

PT: dinosame; 2 (1-metilbutil)-4,6-dinitrofenol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R: 23/24/25 S: (1/2)-13-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 609-034-00-6

NOTA A

ES: sales y ésteres de dinosam

DA: salte og estere af dinosam

DE: Salze und Ester des Dinosam

EL: αλατα και εστερες του dinosam

EN: salts and esters of dinosam

FR: sels et esters de dinosame

IT: sali ed esteri di dinosam

NL: zouten en esters van dinosam

PT: sais e ésteres de dinosame

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T; R 23/24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem

T	
	R: 23/24/25
	S: (1/2-)13-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 79-24-3

EEC No 201-188-9

No 609-035-00-1



ES: nitroetano  
 DA: nitroethan  
 DE: Nitroethan  
 EL: νιτροαιθάνιο  
 EN: nitroethane  
 FR: nitroethane  
 IT: nitroetano  
 NL: nitroethaan  
 PT: nitroetano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

R 10

Xn; R 20/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 10-20/22

S : (2-)-9-25-41

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

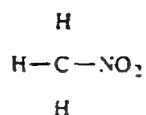
C ≥ 12,5 %	Xn; R 20/22



Cas No 75-52-5

EEC No 200-876-6

No 609-036-00-7



ES nitrometano  
 DA nitromethan  
 DE Nitromethan  
 EL νιτρομεθανιον  
 EN nitromethane  
 FR nitromethane  
 IT nitrometano  
 NL nitromethaan  
 PT nitrometano

Classification Klassificering, Einstufung, Ταξινόηση Classification Classification Classificazione Indeling Classificação

R 5-10

Xn, R 22

Etikettering, Etikettering, Kennzeichnung, Επισήμανση Labelling Etiquetage Etichettatura, Kenmerken Rotulagem

Xn



R. 5-10-22

S. (2-)-41

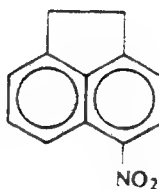
Limites de concentración Konzentrationsgrenzen Konzentrationsgrenzwerte, Ορια συγκεντρώσεως Concentration limits, Limites de concentration, Limite di concentrazione Concentratiegrenzen Limites de concentraçào

C ≥ 12,5 %	Xn, R 22

Cas No 602-87-9

EEC No 210-025-0

No 609-037-00-2



ES: 5-nitroacenafteno  
 DA: 5-nitroacenaphthen  
 DE: 5-Nitroacenaphthen  
 EL: 5-νιτροακεναφθένιο  
 EN: 5-nitroacenaphthene  
 FR: 5-nitroacénaphthène  
 IT: 5-nitroacenaftene  
 NL: 5-nitroacenafteen  
 PT: 5-nitroacenafteno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

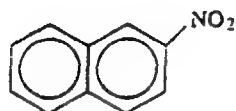
T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 581-89-5

EEC No 209-474-5

No 609-038-00-8



ES : 2-nitronaftaleno  
 DA : 2-nitronaphthalen  
 DE : 2-Nitronaphthalin  
 EL : 2-νιτροναφθαλένιο  
 EN : 2-nitronaphthalene  
 FR : 2-nitronaphtalène  
 IT : 2-nitronaftalene  
 NL : 2-nitronaftaleen  
 PT : 2-nitronaftaleno

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Εtiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

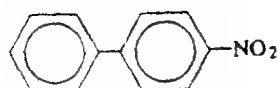
T	
	R : 45 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσης, Concentration limits*  
*Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 92-93-3

EEC No 202-204-7

No 609-039-00-3



ES: 4-nitrobifenilo

DA: 4-nitrobiphenyl

DE: 4-Nitrobiphenyl

EL: 4-νιτροδιφαινυλίο

EN: 4-nitrobiphenyl

FR: 4-nitrobiphényle

IT: 4-nitrobifenile

NL: 4-nitrobifenyl

PT: 4-nitrobifenio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

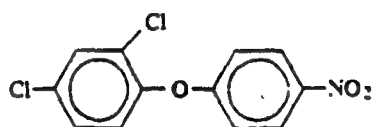
T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1836-75-5

EEC No 217-406-0

No 609-040-00-9



ES: nitrofene (ISO); 2,4-diclorofenil 4-nitrofenil éter

DA: nitrofen (ISO); 2,4-dichlorphenyl-4-nitrophenylether

DE: nitrofen (ISO); 2,4-Dichlorphenyl-4-nitrophenylether

EL: nitrofen (ISO); 2,4-διχλωροφαινυλο-4-νιτροφαινυλικός αιθέρας

EN: nitrofen (ISO); 2,4-dichlorophenyl 4-nitrophenyl ether

FR: nitrofène (ISO); oxyde de 2,4-dichlorophényle et de 4-nitrophényle

IT: nitrofene (ISO); ossido di 2,4-diclorofenile e 4-nitrofenile

NL: nitrofeen (ISO); 2,4-dichloorfenyl-4-nitrofenylether

PT: nitrofene (ISO); éter 2,4-diclorofenilo 4-nitrofenílico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiin, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Repr. Cat. 2; R 61

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

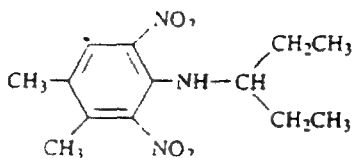
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	R: 45-61
	S: 53-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 40487-42-1

EEC No 254-938-2

No 609-042-00-X



ES: N-(1-etilpropil)-2,6-dinitro-3,4-xilidina

DA: N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidin

DE: N-(1-Ethylpropyl)-2,6-dinitro-3,4-xylidin

EL: N-(1-αιθυλοπροπουλο)-2,6-δινιτρο-3,4-ξυλιδίνη

EN: N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine; pendimethalin

FR: N-(1-éthylpropyl)-2,6-dinitro-3,4-xylidine; pendiméthaline

IT: N-(1-etilpropil)-2,6-dinitro-3,4-xilidina

NL: N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine

PT: N-(1-etilpropil)-2,6-dinitro-3,4-xilidina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn: R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem

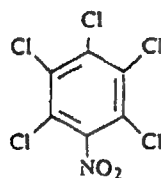
Xn	
	R: 22
	S: (2)

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 82-68-8

EEC No 201-435-0

No 609-043-00-5



ES: quintoceno (ISO); pentacloronitrobenzeno  
 DA: quintozen (ISO); pentachlornitrobenzen  
 DE: Quintozen (ISO); Pentachlornitrobenzol  
 EL: quintozene (ISO); πενταχλωρονιτροβενζολιο  
 EN: quintozene (ISO); pentachloronitrobenzene  
 FR: quintozene (ISO); pentachloronitrobenzène  
 IT: quintozene (ISO); pentacloronitrobenzene  
 NL: chintozeen (ISO); pentachloornitrobenzeen  
 PT: quintozeno (ISO); pentacloronitrobenzeno

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem

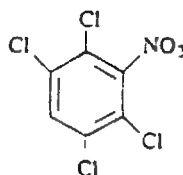
Xi	
	R : 43
	S : (2-)24-37

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 117-18-0

EEC No 204-178-2

No 609-044-00-0



- ES tecnaceno (ISO) ; 1,2,4,5-tetracolor-3-nitrobenceno  
 DA tecnazen (ISO) ; 1,2,4,5-tetrachlor-3-nitrobenzen  
 DE : Tecnazen (ISO) ; 1,2,4,5-Tetrachlor-3-nitrobenzol  
 EL : tecnazene (ISO) ; 1,2,4,5-τετραχλωρο-3-νιτροβενζόλιο  
 EN tecnazene (ISO) ; 1,2,4,5-tetrachloro-3-nitrobenzene  
 FR tecnazene (ISO) ; 1,2,4,5-tétrachloro-3-nitrobenzène  
 IT tecnazene (ISO) ; 1,2,4,5-tetracolor-3-nitrobenzene  
 NL tecnazeen (ISO) ; 1,2,4,5-tetrachloor-3-nitrobenzeen  
 PT tecnazena (ISO) ; 1,2,4,5-tetracolor-3-nitrobenzeno

*Clasificación Klassificering, Einstufung, Ταξινόηση, Classification Classificazione, Indeling, Classificação*

R 43

*Etiquetado Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi 	R : 43 S : (2-)24-37
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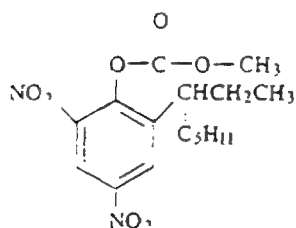
*Limites de concentración, Konzentrationsgrenser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*



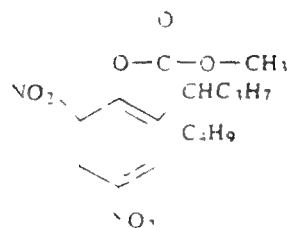

Cas No 8069-76-9

EEC No —

No 609-043-00-6



(I)



(II)

ES: carbonato de 4,6-dinitro-2-(3-octil)fenilo y de metilo--carbonato de 4,6-dinitro-2-(4-octil)fenilo y de metilo, dinocron-6

DA: 4,6-dinitro-2-(3-octyl)phenylmethylcarbonat--4,6-dinitro-2-(4-octyl)phenylmethylcarbonat; dinocron-6

DE: 4,6-Dinitro-2-(3-octyl)phenylmethylcarbonat--4,6-dinitro-2-(4-octyl)phenylmethylcarbonat; Dinocron-6

EL: ανθρακικός 4,6-δινιτρο-2-(3-οκτυλο)φαινυλεστέρας και μεθυλεστέρας; ανθρακικός 4,6-δινιτρο-2-(4-οκτυλο)φαινυλεστέρας και μεθυλεστέρας

EN: 4,6-dinitro-2-(3-octyl)phenyl methyl carbonate--4,6-dinitro-2-(4-octyl)phenyl methyl carbonate; dinocron-6

FR: carbonate de 4,6-dinitro-2-(3-octyl)phényle et de méthyle et de carbonate de 4,6-dinitro-2-(4-octyl)phényle et de méthyle; dinocron-6

IT: carbonato di 4,6-dinitro-2-(3-octil)fenile e metile--carbonato di 4,6-dinitro-2-(4-octil)fenile e metile, dinocron-6

NL: 4,6-dinitro-2-(3-octyl)fenylmethylcarbonaat--4,6-dinitro-2-(4-octyl)fenylmethylcarbonaat; dinocron-6

PT: carbonato de 4,6-dinitro-2-(3-octil)fenilo e de metilo--carbonato de 4,6-dinitro-2-(4-octil)fenilo e de metilo, dinocron-6

Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kennmerken, Rotulagem

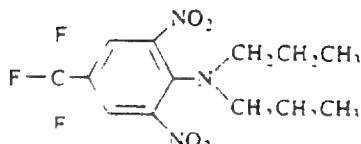
Xn	
	R 22
	S: (2)

Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração


Cas No 1582-09-8

EEC No 216-428-8

No 609-046-00-1



ES : trifluralina (ISO) ; (conteniendo &lt; 0,5 p.p.m. de NPDA)

DA : trifluralin (ISO) (indeholdende &lt; 0,5 ppm NPDA)

DE : Trifluralin (ISO) (mit &lt; 0,5 ppm NPDA)

EL : trifluralin (ISO) (περιέχει &lt; 0,5 ppm NPDA)

EN : trifluralin (ISO) (containing &lt; 0,5 p.p.m. NPDA)

FR : trifluraline (ISO) (contenant &lt; 0,5 ppm de NPDA)

IT : trifluralina (ISO) (contenente &lt; 0,5 ppm NPDA)

NL : trifluraline (ISO) (bevattende &lt; 0,5 ppm NPDA)

PT : trifluraline (ISO) (contendo &lt; 0,5 ppm NPDA)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi : R 36

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 36-43

S : (2-)24-37

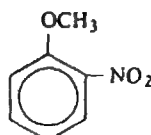
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào


Cas No 91-23-6

EEC No 202-052-1

No 609-047-00-7

NOTA E



ES · 2-nitroanisol

DA 2-Nitroanisol

DE · 2-Nitroanisol, 2-Methoxyanilin

EL 2-νιτροανισόλη

EN · 2-nitroanisole

FR 2-nitroanisole, (methoxy 2-nitrobenzène)

IT 2-nitroanisolo

NL : 2-nitroanisool

PT : 2-nitroanisole

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 22
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

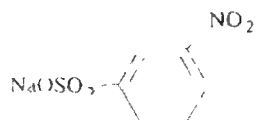
T	
	R : 45-22
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 127-68-4

EEC No 204-857-3

No 609-048-00-2



- ES 3-nitrobencenosulfonato de sodio  
 DA natrium 3-nitrobenzensulfonat  
 DE Natrium-3-nitrobenzolsulfonat  
 EL 3 νιτροβενζολοσουλφονικό νάτριο  
 EN sodium 3-nitrobenzenesulphonate  
 FR 3-nitrobenzènesulfonate de sodium  
 IT 3 nitrobenzensolfonato di sodio  
 NL natrium-3-nitrobenzeensulfonaat  
 PT 3-nitrobenzenossulfonato de sódio  
 FI natrium-3-nitrobenseenisulfonaatti  
 SV natrium 3 nitrobenzensulfonat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

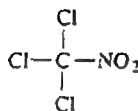
Xi 	R: 36/43 S: (2-)24-26/37
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*limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*


Cas No 76-06-2

EEC No 200-930-9

No 610-001-00-3



ES trichloronitrometano ; cloropicrina  
 DA trichloronitromethan ; chlorpicrin  
 DE Trichlor-nitro-methan ; Chlorpikrin  
 EL τριχλωρονιτρομεθάνιο · χλωροπικρινη  
 EN trichloronitromethane ; chloropicrin  
 FR trichloronitrométhane , chloropicrine  
 IT trichloronitrometano ; cloropicrina  
 NL chloorpikrine  
 PT trichloronitrometano ; cloropicrina

Classification, Klassifizierung, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

T+ , R 26

Xi, R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 22-26-36/37/38

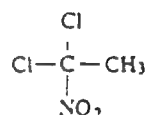
S : (1/2-)36/37-38-45

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 594-72-9

EEC No 209-854-0

No 610-002-00-9



ES. 1,1-dicloro-1-nitroetano  
 DA 1,1-dichlor-1-nitroethan  
 DE 1,1-Dichlor-1-nitro-ethan  
 EL 1,1-διχλωρο-1-νιτροαιθανιο  
 EN 1,1-dichloro-1-nitroethane  
 FR 1,1-dichloro-1-nitroethane  
 IT 1,1-dicloro-1-nitroetano  
 NL 1,1-dichloor-1-nitroethaan  
 PT 1,1-dicloro-1-nitroetano

Clasificación Klassificering Einstufung Ταξινόηση Classification Classificazione Indeling Classificação

T, R 23/24/25

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiketage Etichettatura Kenmerken Rotulagem

T	
	R 23/24/25 S (1/2-)26-45

Limites de concentration, Konzentrationsgrenzen Konzentrationsgrenzuerte Ορια συγκεντρώσεως, Concentration limits  
 Limites de concentration, Limite di concentrazione Concentratiegrenzen Limites de concentraçao


Cas No

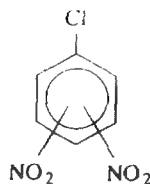
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EEC No

—

No 610-003-00-4

NOTA C



ES: clorodinitrobenceno

DA: chlordinitrobenzen

DE: Chlordinitrobenzol

EL: χλωροδινιτροβενζόλιο

EN: chlorodinitrobenzene

FR: chlorodinitrobenzène

IT: dinitroclorobenzene

NL: dinitrochlorbenzeen

PT: clorodinitrobenzeno

FI: klooridinitrobentseeni

SV: klordinitrobenzen, alla isomerer

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23/24/25

R 33

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

<p>T</p>	<p>N</p>	R: 23/24/25-33-50/53
		S: (1/2-)28-36/37-45-60-61

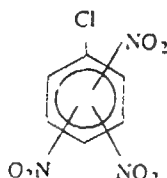
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusrajat, Koncentrationsgränser*


Cas No 28260-61-9 (mix)

EEC No —

No 610-004-00-X

NOTA C



ES clorotrinitrobenceno  
 DA chlortrinitrobenzen  
 DE Chlortrinitrobenzol  
 EL χλωροτρίνιτροβενζόλιο  
 EN chlorotrinitrobenzene  
 FR chlortrinitrobenzene  
 IT trinitroclorobenzene  
 NL trinitrochlorbenzeen  
 PT clorotrinitrobenzeno

*Classification Klassifizierung Einstufung Ταξινόμηση Classification Classificazione Indeling Classificação*

E, R 2	T+, R 26/27/28
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*Labelling Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem*

E	T+	
		R 2-26/27/28
		S (1/2-)35-43

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως Concentration limits  
 Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao*




Cas No 100-00-5

EEC No 202-809-6

No 610-005-00-5

ES: 4-cloro-4-nitrobenzèno; *p*-cloronitrobenzèno

DA: 4-chlor-4-nitrobenzen

DE: 4-Chlor-4-nitro-benzol

EL: 4-χλωρο-4-νιτροδενζόλιο; *p*-χλωρονιτροδενζόλιοEN: 4-chloro-4-nitrobenzene; *p*-chloronitrobenzene

FR: 4-chloro-4-nitrobenzène

IT: 4-cloro-4-nitrobenzene; *p*-cloronitrobenzolo

NL: 4-chloor-4-nitrobenzeen

PT: 4-cloro-4-nitrobenzeno; *p*-cloronitrobenzeno

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T: R 23/24/25

R 33

ετικετizado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem

T	
	R 23/24/25
	S (1/2)28-37-45

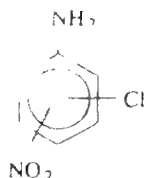
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

EEC No

No 610-006-00-0

NOTA C



ES: cloronitroanilinas excepto aquellos específicamente expresados en este Anexo

DA: chlornitroaniliner undtagen sådanne nævnt andetsteds i dette bilag

DE: Chlornitroanilin mit Ausnahme der namentlich in diesem Anhang bezeichneten

EL: χλωρονιτροανιλίνες εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος

EN: chloronitroanilines with the exception of those specified elsewhere in this Annex

FR: chlornitroanilines à l'exception de ceux nommément désignés dans cette annexe

IT: cloronitroaniline escluse quelle espressamente indicate in questo allegato

NL: chloornitroanilines met uitzondering van de in deze bijlage met name genoemde

PT: cloronitroanilinas com excepção dos expressamente referidos no presente anexo

FI: kloorinitroaniiliinit paitsi muualla tässä liitteessä mainitut

SV: klornitroaniliner med undantag för de föreningar som är upptagna på annat ställe i bilagan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T +, R 26/27/28

R 33

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

T +



N



R: 26/27/28-33-51/53

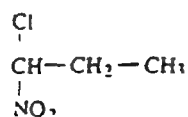
S: (1/2) 28-36/37-45-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*


Cas No 600-25-9

EEC No 209-990-0

No 610-007-00-6



ES: 1-cloro-1-nitropropano

DA: 1-chlor-1-nitropropan

DE: Chlor-1-nitropropan

EL: 1-χλωρο-1-νιτροπροπάνιον

EN: 1-chloro-1-nitropropane

FR: 1-chloro-1-nitropropane

IT: 1-cloro-1-nitropropano

NL: 1-chloor-1-nitropropan

PT: 1-cloro-1-nitropropano

Constitución, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificatie

Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 20/22

S: (2)

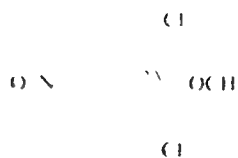
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 5 %	Xn, R 20/22

Cas No 17742-69-7

EEC No 403-350-6

No 610-008-00-1



ES 2,6 dicloro-4 nitroanisol  
 DA 2,6 dichlor-4-nitroanisol  
 DE 2,6 Dichlor-4-nitroanisol  
 EL 2,6 διχλωρο 4 νιτροανισολή  
 EN 2,6 dichloro 4-nitroanisole  
 FR 2,6 dichloro 4-nitroanisole  
 IT 2,6 dicloro 4 nitroanisolo  
 NL 2,6 dichloor-4-nitroanisool  
 PT 2,6 dicloro 4 nitroanisole

Classification Klassifizierung Eintragung Ταξινόμηση Classification Classificazione Classificazione Classificazione Classificazione

T R 25	N, R 51-53
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Etiquetado Etikettering Kennzeichnung Επισήμανση Etichellaz Etiketaz Etichettatura Kennzeichnung Etichellaz

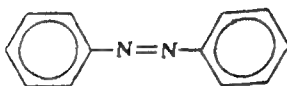


Limits of concentration Konzentrationen der Gefahr Konzentrationsgrenzen Όρια συγκεντρώσεως Concentrazioni di limite  
 Limites de concentration Limite di concentrazione Concentrazien Grenzen Limites de concentracão


Cas No 103-33-3

EEC No 203-102-5

No 611-001-00-6




ES azobenceno  
 DA azopenzen  
 DE Azobenzol  
 EL αζωβενζόλιο  
 EN azobenzene  
 FR azobenzene  
 IT azobenzene  
 NL azobenzeeen  
 PT azobenzeno

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Xn, R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

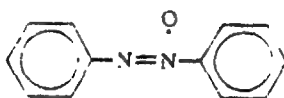
Xn	
	R : 20/22
	S : (2-)28

Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 495-48-7

EEC No 207-802-1

No 611-002-00-1



ES: azobenceno  
 DA: azoxybenzen  
 DE: Azoxybenzol  
 EL: αζωξυθενζολιο  
 EN: azoxybenzene  
 FR: azoxybenzene  
 IT: azossibenzene  
 NL: azoxybenzeen  
 PT: azoxibenzeno

Κατηγοριοποίηση Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Xn, R 20/22

Επιμετάδοση Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem

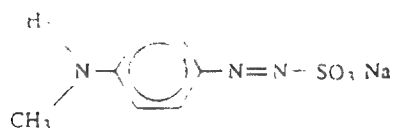
Xn	
	R 20/22
	S: (2-)28

Limites de concentracion, Konzentrationsgrenzen, Konzentrationsgrenzuerte, Ορια συγκεντρώσεως, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 140-56-7

EEC No 205-419-4

No 611-003-00-7



- ES: tenaminosulf (ISO); 4-dimetilaminobencenodiazosulfonato de sodio  
 DA: tenaminosulf (ISO); natrium-4-dimethylaminobenzendiazosulfonat  
 DE: tenaminosulf (ISO); Natrium-4-dimethylaminobenzoldiazosulfonat  
 EL: tenaminosulf (ISO); 4-διμεθυλαμινοβενζολδιαζωσουλφονικό νάτριο  
 EN: tenaminosulf (ISO); sodium 4-dimethylaminobenzenediazosulphonate  
 FR: onenaminosulf (ISO); 4-diméthylaminobenzènediazosulfonate de sodium  
 IT: tenaminosulf (ISO); 4-dimetilamminobenzendiazosolfonato di sodio  
 NL: tenaminosulf (ISO); natrium-4-dimethylaminobenzeendiazosulfonaa  
 PT: tenaminosulf (ISO); 4-dimetilaminobenzodiazossulfonato de sodio

Κατηγορία, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Xn; R 21

Σήμανση, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

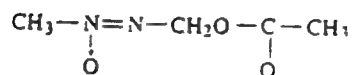
T	
	R: 21-25
	S: (1/2-)36/37-45

Λίmites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào


Cas No 592-62-1

EEC No 209-765-7

No 611-004-00-2



- ES acetato de metil-ONN-azoximetilo, acetato de metilazoximetilo  
 DA (methyl-ONN-azoxy)methylacetat, (methylazoxymethyl)acetat  
 DE Methyl-ONN-azoxy)-methylacetat; Methylazoxymethylacetat  
 EL οξικός μεθυλο-ONN-αζωξυμεθυλεστερας οξικός μεθυλεστερας-αζωξυμεθυλεστερας  
 EN methyl-ONN-azoxymethyl acetate, methyl azoxy methyl acetate  
 FR acetate de methyl-ONN-azoxymethyle, acetate de methylazoxymethyle  
 IT metil-ONN-azossimetile acetato, metilazossimetile acetato  
 NL methyl-ONN-azoxymethylacetaat, methylazoxymethylacetaat  
 PT acetato de metil-ONN-azoximetilo, acetato de metil azoximetil

*Classification Klassifizierung Einstufung Ταξινόηση Classification Classification Classificazione Indeling Classificação*

Carc Cat 2, R 45

Repr Cat 2, R 01

*Etiquetado Etikettering Kennzeichnung Επισημάνση Labelling Etiquetage Etichettatura Kenmerken Rotulagem*

T	
	R 45-61
	S 53-45

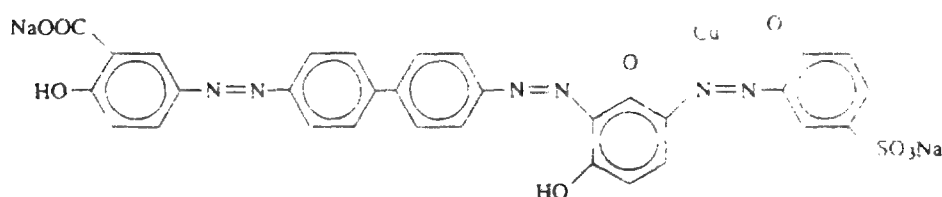
*limits de concentration, Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως, Concentration limits, Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao*




Cas No 16071-86-6

EEC No 240-221-1

No 611-005-00-8



- ES: {5-[(4'-((2,6-dihidroxi-3-((2-hidroxi-5-sulfofenil)azo)fenil)azo)(1,1'-bifenil)-4-il)azo]salicilato(4-)}cuprato(2-) de disodio
- DA: dinatrium-{5-[(4'-((2,6-dihydroxy-3-((2-hydroxy-5-sulphophenyl)azo)phenyl)azo)(1,1'-biphenyl)-4-yl)azo]salicylato(4-)}cuprat(2-)
- DE: Dinatrium-{5-[(4'-((2,6-dihydroxy-3-((2-hydroxy-5-sulphophenyl)azo)phenyl)azo)(1,1'-biphenyl)-4-yl)azo]salicylato(4-)}cuprat(2-)
- EL: {5-[(4'-((2,6-διυδροξυ-3-((2-υδροξυ-5-σουλφοφαινυλ)αζω)φαινυλ)αζω)(1,1'-διφαινυλ)-4-υλ)αζω]σαλικυλ.ατο(4-)}κουπρικό(2-) δινάτριο· CI Direct Brown 95
- EN: disodium {5-[(4'-((2,6-hydroxy-3-((2-hydroxy-5-sulphophenyl)azo)phenyl)azo)(1,1'-biphenyl)-4-yl)azo]salicylato(4-)}cuprate(2-); CI Direct Brown 95
- FR: {5-[(4'-((2,6-dihydroxy-3-((2-hydroxy-5-sulphophenyl)azo)phényl)azo)(1,1'-biphenyl)-4-yl)azo]salicylato(4-)}cuprate(2-) de disodium; CI Direct Brown 95
- IT: {5-[(4'-((2,6-diidrossi-3-((2-idrossi-5-solfopenil)azo)fenil)azo)(1,1'-bifenil)-4-il)azo]salicilato(4-)}cuprato(2-) di disodio
- NL: dinatrium-{5-[(4'-((2,6-dihydroxy-3-((2-hydroxy-5-sulfofenil)azo)fenyl)azo)(1,1'-bifenyl)-4-yl)azo]salicylato(4-)}cupraat(2-)
- PT: {5-[(4'-((2,6-dihidroxi-3-((2-hidroxi-5-sulfofenil)azo)fenil)azo)(1,1'-bifenil)-4-il)azo]salicilato(4-)}cuprato(2-) de dissódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

**Carc. Cat. 2; R 45**

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

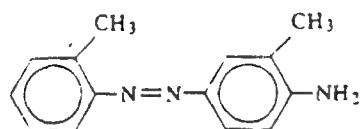
T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97-56-3

EEC No 202-591-2

No 611-006-00-3



- ES - --o-tolilazo-o-toluidina, 4-amino-2',3 dimetilazobenceno, fast garnet GBC base; AAT  
 DA - --o-tolylazo-o-toluidin; 4-amino-2',3-dimethylazobenzen, fast garnet GBC base, AAT  
 DE - --o-Tolylazo-o-toluidin, 4-Amino-2',3-dimethylazobenzol, Ech:granat-GBC-base, AAT  
 EL - --o-τολυλαζω-o-τολουιδίνη 4-αμινο-2',3-διμεθυλαζωβενζόλιο AAT  
 EN - o-tolylazo-o-toluidine, 4-amino-2',3-dimethylazobenzene, fast garnet GBC base, AAT, o aminoazotoluene  
 FR - --o-tolylazo-o-toluidine, 4-amino-2',3 dimethylazobenzene, o aminoazotoluene, base grenat solide GBC  
 IT - --o-tolilazo-o-toluidina; 4-ammino-2',3-dimetilazobenzene, fast garnet GBC base, AAT  
 NL - o-tolylazo-o-toluidine, 4-amino-2',3-dimethylazobenzeen, fast garnet GBC base, AAT  
 PT - --o tolilazo-o-toluidina, 4-amino-2'3 dimetilazobenzeno, granada fixo, GBC base, AAT

Επίσημη Klassificering Einstufung Ταξινόηση Classification Classification Classificazione Indeling Classificacao

Carc. Cat. 2, R 45	R 43
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Επίσημο Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem

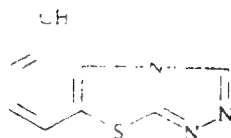
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p> </div> <div style="text-align: right;"> <p>R 45-43</p> <p>S 53-55</p> </div> </div>
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Περιορισμοί, te concentratie Konzentrationsgrenzen, Konzentrationsgrenzuerte Όρια συγκέντρωσης, Concentration limits, Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao


Cas No 41814-78-2

EEC No 255-559-5

No 611-007-00-9



- ES: 5-metil-1,2,4-triazolo(3,4-b)benzo-1,3-tiazol ; tricyclazol  
 DA: 5-methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazol ; tricyclazol  
 DE: 5-Methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazol ; Tricyclazol  
 EL: 5-μεθυλο-1,2,4-τριαζολο(3,4-b)βενζο-1,3-θειαζόλιο · τρικυκλαζόλιο  
 EN: 5-methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazole ; tricyclazole  
 FR: 5-méthyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazole ; tricyclazole  
 IT: 5-metil-1,2,4-triazolo(3,4-b)benzo-1,3-tiazolo ; tricyclazoie  
 NL: 5-methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazool , tricyclazole  
 PT: 5-metil-1,2,4-triazolo(3,4-b)benzo-1,3-tiazolo ; triciclazole

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

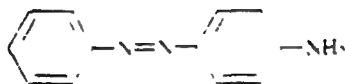
Xn	R : 22
	S : (2)

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 60-09-3

EEC No 200-453-6

No 611-008-00-4



ES: 4-aminoazobenceno  
 DA: 4-aminoazobenzen  
 DE: 4-Aminoazobenzol  
 EL: --αμινοαζωβενζόλιο  
 EN: --aminoazobenzene  
 FR: --aminoazobenzene  
 IT: 4-amminoazobenzene  
 NL: 4-aminoazobenzeen  
 PT: --aminoazobenzeno

Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificazione Including Classification

Carc. Cat 2, R 45

Signalword Linklettering Kennzeichnung Επισήμανση L'etiquetage Etiquetaggio Kenmerken Rotulagem

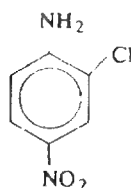
T	
	R 45
	S 53-45

Limits de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Ορία συγκεντρώσεως Concentration limit  
 Limites de concentration Limite di concentrazione Concentrationgrenzen Limites de concentration


Cas No 121-87-9

EEC No 204-502-2

No 610-009-00-7



ES: 2-cloro-4-nitroanilina  
 DA: 2-chlor-4-nitroanilin  
 DE: 2-Chlor-4-nitroanilin  
 EL: 2-χλωρο-4-νιτροανιλίνη  
 EN: 2-chloro-4-nitroaniline  
 FR: 2-chloro-4-nitroaniline  
 IT: 2-cloro-4-nitroanilina  
 NL: 2-chloor-4-nitroaniline  
 PT: 2-cloro-4-nitroanilina  
 FI: 2-kloori-4-nitroaniiliini  
 SV: 2-klor-4-nitroanilin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 22	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinntät, Märkning*

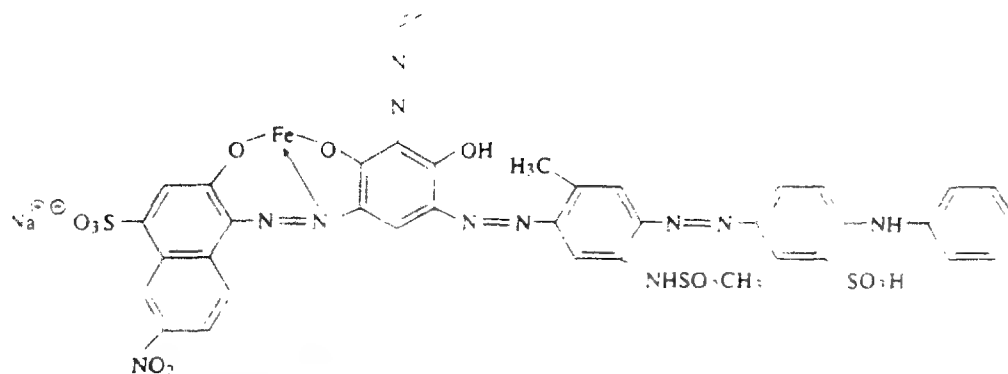
Xn	N	
		R: 22-51/53
		S (2-)22 24-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçã, Pitoisuusraajat, Konzentrationsgrænser*


Cas No

EEC No 401-220-3

No 611-009-00-X



- ES : (1-(5-(4-(4-anilino-3-sulfophenylazo)-2-metil-5-metilsulfonamidofenilazo)-3-fenilazo-4-hidroxi-2-óxidofenilazo)-5-nitro-4-sulfonato-2-naftolato) hierro(II) de sodio
- DA : natrium-(1-(5-(4-(4-anilino-3-sulfophenylazo)-2-methyl-5-methylsulfonamidophenylazo)-4-hydroxy-2-oxido-3-(phenylazo)phenylazo)-5-nitro-4-sulfonato-2-naphtholato)jern(II)
- DE : Natrium-(1-(5-(4-(4-anilino-3-sulfophenylazo)-2-methyl-5-methylsulfonamidophenylazo)-4-hydroxy-2-oxido-3-(phenylazo)phenylazo)-5-nitro-4-sulfonato-2-naphtholato)eisen(II)
- EL : (1-(5-(4-(4-ανιλίνο-3-σουλφοφαινυλαζω)-2-μεθύλο-5-μεθύλοσουλφοναμιδοφαινυλαζω)-2-οξειδο-4-υδροξύ-3-(φαινυλαζω)φαινυλαζω)-5-νίτρο-4-σουλφονατο-2-ναφθολατο)σίδηρος(II) του νατρίου
- EN : sodium (1-(5-(4-(4-anilino-3-sulphophenylazo)-2-methyl-5-methylsulphonamidophenylazo)-4-hydroxy-2-oxido-3-(phenylazo)phenylazo)-5-nitro-4-sulphonato-2-naphtholato)iron(II)
- FR : (1-(5-(4-(4-anilino-3-sulfophénylazo)-2-méthyl-5-méthylsulfonamidophénylazo)-4-hydroxy-2-oxydo-3-(phénylazo)phénylazo)-5-nitro-4-sulfonato-2-naphtolato)fer(II) de sodium
- IT : (1-(5-(4-(4-anilino-3-solfofenilazo)-2-metil-5-metilsolfonamidofenilazo)-3-fenilazo-4-idrossi-2-ossidofenilazo)-5-nitro-4-solfonato-2-naftolato)ferro(II) di sodio
- NL : natrium-(1-(5-(4-(4-anilino-3-sulfofenylazo)-2-methyl-5-methylsulfonamidofenylazo)-3-fenylazo-4-hydroxy-2-oxidofenylazo)-5-nitro-4-sulfonato-2-naftolato)ijzer(II)
- PT : (1-(5-(4-(4-anilino-3-sulfofenilazo)-2-metil-5-metilsulfonamidofenilazo)-3-fenilazo-4-hidroxi-2-oxidofenilazo)-5-nitro-4-sulfonato-2-naftolato)ferro(II) de sódio

Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação

Xn : R 20

R 52-53

Etiquetado. Etikettering. Kennzeichnung. Επισήμανση. Labelling. Etiquetage. Etichettatura. Kenmerken. Rotulagem

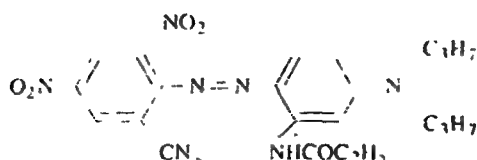
Xn	
	R : 20-52/53
	S : (2-)61

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 106359-94-8

EEC No 403-010-7

No 611-010-00-5



- ES 2'-(2-ciano-4,6-dinitrofenilazo)-5'-(N,N-dipropilamino)propionanilida  
 DA 2'-(2-cyan-4,6-dinitrophenylazo)-5'-(N,N-dipropylamino)propionanilid  
 DE 2'-(2-Cyan-4,6-dinitrophenylazo)-5'-(N,N-dipropylamino)propionanilid  
 EL 5'-(N,N-διπροπυλαμινο)-2'-(2-κυανο-4,6-δινιτροφαινυλαζω)προπιονανιλίδιο  
 EN 2'-(2-cyano-4,6-dinitrophenylazo)-5'-(N,N-dipropylamino)propionanilide  
 FR 2'-(2-cyano-4,6-dinitrophenylazo)-5'-(N,N-dipropylamino)propionanilide  
 IT 2'-(2-ciano 4,6-dinitrofenilazo)-5'-(N,N-dipropilammino)propionanilde  
 NL 2'-(2 cyaan-4,6-dinitrofenylazo)-5'-(N,N-dipropylamino)propionanilide  
 PT 2'-(2-ciano 4,6-dinitrofenilazo)-5'-(N,N-dipropilamino)propionanilida

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificazião

R 43

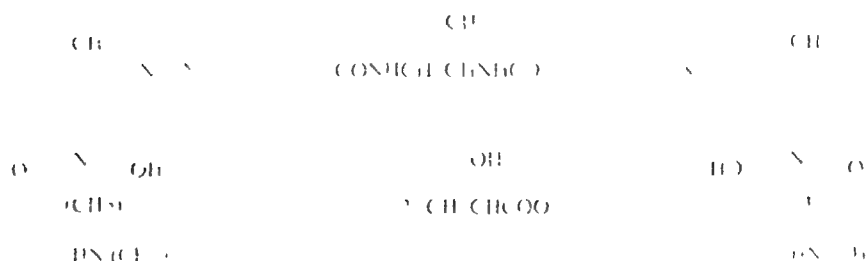
R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

<p>X<sub>1</sub></p>	<p>R · 43-52/53</p> <p>S · (2-)22-24-37-61</p>
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Limits of concentration, Koncentratiegrenzen, Konzentrationsgrenzen, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No	—	LEC No 103 450 1	No 611 011-00 0
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- |    |   |
|----|---|
| FS | dilactato de N,N,N',N'-tetrametil 3,3'-(propilenobis(amino-carbo-1,4,1,6-dicloro-2,4-dicloro-4-metil-6-oxopiridina-3,1-diil))di(propilamoniu)                                       |
| DA | N,N,N',N'-tetrametil 3,3'-(propilenobis(amino-carbo-1,4,1,6-dicloro-2,4-dicloro-4-metil-6-oxopiridina-3,1-diil))di-(propilamoniu)lactat   |
| DE | N,N,N',N'-Tetramethyl 3,3'-(propylenobis(amino-carbo-1,4,1,6-dichloro-2,4-dichloro-4-methyl-6-oxopyridine-3,1-diil))di-(propylamoniu)lactat   |
| LI | amino-carbo-1,4,1,6-dicloro-2,4-dicloro-4-metil-6-oxopiridina-3,1-diil-3,3'-(propilenobis(amino-carbo-1,4,1,6-dicloro-2,4-dicloro-4-metil-6-oxopiridina-3,1-diil))di-(propilamoniu) |
| EN | N,N,N',N'-tetrametil 3,3'-(propilenobis(amino-carbo-1,4,1,6-dicloro-2,4-dicloro-4-metil-6-oxopiridina-3,1-diil))di-(propilamoniu)lactat   |
| FR | dilactate de N,N,N',N'-tetramethyl 3,3'-(propylenobis(amino-carbo-1,4,1,6-dichloro-2,4-dichloro-4-methyl-6-oxopyridine-3,1-diil))di-(propylamonium)                                 |
| IT | dilattato di N,N,N',N'-tetrametil 3,3'-(propilenobis(amino-carbo-1,4,1,6-dicloro-2,4-dicloro-4-metil-6-oxopiridina-3,1-diil))di(propilamonio)                                       |
| NI | N,N,N',N'-tetramethyl 3,3'-(propylenobis(amino-carbo-1,4,1,6-dichloro-2,4-dichloro-4-methyl-6-oxopyridine-3,1-diil))di-(propylamonium)lactat  |
| PT | dilactato de N,N,N',N'-tetrametil 3,3'-(propilenobis(amino-carbo-1,4,1,6-dicloro-2,4-dicloro-4-metil-6-oxopiridina-3,1-diil))di(propilamoniu)                                       |

[illegible]

X1, P 41	N, R 51 53
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[illegible]

X <sub>1</sub>	N		
		R	41 51/53
		S	(2) 26-39-61

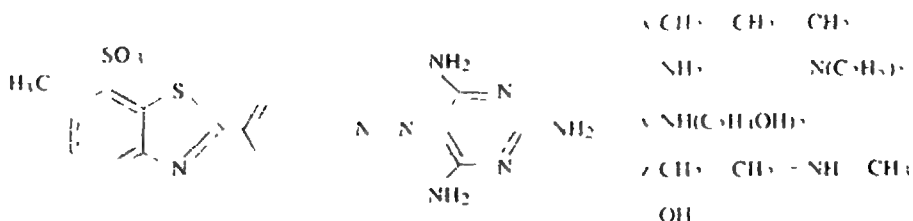
Limites de concentration, Konzentrationsplänze, Konzentrationsgrenzen, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite de concentration, Concentrationgrenzen, Limites de concentration




Cas No 114565-65-0

FEC No 403-410-1

No 611-012-00-6



Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Misclala di, Mengsel van, Mistura de

- ES 6-metil-2-(4-(2,4,6-triaminopirimidin-5-ilazo)fenil)benzotiazol-7-sulfonato de 2,2-iminodietanol  
 DA 2,2-iminodiethanol-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazol-7-sulfonat  
 DE 2,2-Iminodiethanol-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazol-7-sulfonat  
 EL 6-μεθυλο 2-(4-(2,4,6-τριαμινοπυριμιδιν-5-υλαζω)φαινυλο)δενζοθειαζολο-7-σουλφονική 2,2-ιμινοδιαιθανόλη  
 EN 2,2-iminodiethanol-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazole-7-sulfonate  
 FR 6-méthyl-2-(4-(2,4,6-triaminopyrimidine-5-ylazo)phényl)benzothiazole-7-sulfonate de 2,2-iminodiéthanol  
 IT 6-metil-2-(4-(2,4,6-triamminopirimidin-5-ilazo)fenil)benzotiazol-7-solfonato di 2,2-imminodietanolo  
 NL 2,2-iminodiethanol-6-methyl-2-(4-(2,4,6-triaminopyrimidine-5-ylazo)fenyl)benzothiazool-7-sulfonaat  
 PT 6 metil 2 (4-(2,4,6 triaminopirimidina-5-ilazo)fenil)benzotiazole-7-sulfonato de 2,2-iminodietanol

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- ES 6-metil-2-(4-(2,4,6-triaminopirimidin-5-ilazo)fenil)benzotiazol-7-sulfonato de N,N-diethylpropano-1,3-diamina  
 DA N,N-diethylpropan-1,3-diamin-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazol-7-sulfonat  
 DE N,N-Diethylpropan-1,3-diamin-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazol-7-sulfonat  
 EL 6-μεθυλο 2-(4-(2,4,6-τριαμινοπυριμιδιν-5-υλαζω)φαινυλο)δενζοθειαζολο-7-σουλφονική Ν,Ν-διααιθυλοπροπανο-1,3-διαμίνη  
 EN N,N-diethylpropan-1,3-diamine-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazole-7-sulfonate  
 FR 6-méthyl-2-(4-(2,4,6-triaminoprimidine-5-ylazo)phényl)benzothiazole-7-sulfonate de N,N-diéthylpropane-1,3-diamine  
 IT 6-metil-2-(4-(2,4,6-triamminopirimidin-5-ilazo)fenil)benzotiazol-7-solfonato di N,N-diethylpropano-1,3-diamina  
 NL N,N-diethylpropan-1,3-diamine-6-methyl-2-(4-(2,4,6-triaminopyrimidine-5-ylazo)phenyl)benzothiazool-7-sulfonaat  
 PT 6 metil 2 (4-(2,4,6 triaminopirimidina-5-il azo)fenil)benzotiazole-7-sulfonato de N,N-diethylpropano-1,3-diamina

Cas No 114565-65-0

EEC No 403-410-1

No 611-012-00-6

Στοιχείο, und, and, and, et, e, en, e

- ES: 6-metil-2-(4-(2,4,6-triaminopirimidin-5-ilazo)fenil)benzotiazol-7-sulfonato de 2-metilaminoetanol  
 DA: 2-methylaminoethanol-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazol-7-sulfonat  
 DE: 2-Methylaminoethanol-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazol-7-sulfonat  
 EL: 6-μεθυλο-2-(4-(2,4,6-τριαμινοπυριμιδιν-5-υλαζω)φαινυλο)βενζοθιαζόλο-7-σουλφονική 2-μεθυλαμινοαιθανόλη  
 EN: 2-methylaminoethanol-6-methyl-2-(4-(2,4,6-triaminopyrimidin-5-ylazo)phenyl)benzothiazole-7-sulfonate  
 FR: 6-méthyl-2-(4-(2,4,6-triaminopyrimidine-5-ylazo)phényl)benzothiazole-7-sulfonate de 2-méthylaminoéthanol  
 IT: 6-metil-2-(4-(2,4,6-triaminopirimidin-5-ilazo)fenil)benzotiazol-7-solfonato di 2-metilamminoetanol  
 NL: 2-methylaminoethanol-6-methyl-2-(4-(2,4,6-triaminopyrimidine-5-ylazo)fenyl)benzothiazool-7-sulfonaat  
 PT: 6-metil-2-(4-(2,4,6-triaminopirimidina-5-ilazo)fenil)benzotiazole-7-sulfonato de 2-metilaminoetanol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

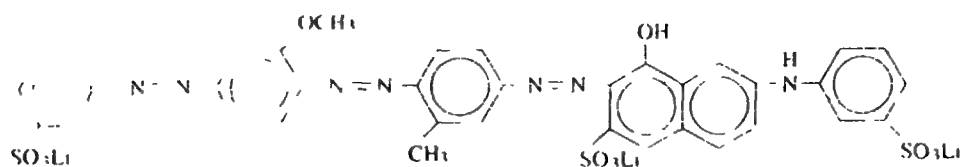
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Limites de concentração, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçao


Cas No 117409-78-6

EEC No 403-650-7

No 611-013-00-1



- ES 4-hidroxi-3-(4-(2-metoxi-4-(3-sulfonatofenilazo)fenilazo)-3-metilfenilazo)-6-(3-sulfonatoanilino)naftaleno-2-sulfonato de trilitio
- DA trilitium-4-hydroxy-3-(4-(2-methoxy-4-(3-sulfonatophenylazo)phenylazo)-3-methylphenylazo)-6-(3-sulfonatoanilino)naphthalen-2-sulfonat
- DE Trilitium-4-hydroxy-3-(4-(2-methoxy-4-(3-sulfonatophenylazo)phenylazo)-3-methylphenylazo)-6-(3-sulfonatoanilino)naphthalin-2-sulfonat
- EL 3-(4-(2-μεθοξυ-4-(3-σουλφονατοφαινυλαζω)φαινυλαζω)-3-μεθυλφαινυλαζω)-6-(3-σουλφονατοανιλινω) - 4-υδροξυ-2-σουλφονατο-2-σουλφονικό τριλίθιο
- EN trilitium 4-hydroxy-3-(4-(2-methoxy-4-(3-sulfonatophenylazo)phenylazo)-3-methylphenylazo)-6-(3-sulfonatoanilino)naphthalene-2-sulfonate
- FR 4-hydroxy-3-(4-(2-methoxy-4-(3-sulfonatophenylazo)phénylazo)-3-méthylphenylazo)-6-(3-sulfonatoanilino)-naphthalene-2-sulfonate de trilitium
- IT 4-idrossi-3-(4-(2-metossi-4-(3-solfonatofenilazo)fenilazo)-3-metilfenilazo)-6-(3-solfonatoanilino)naftalen-2-solfonato di trilitio
- NL trilitium-4-hydroxy-3-(4-(2-methoxy-4-(3-sulfonatofenylazo)fenylazo)-3-methylfenylazo)-6-(3-sulfonatoanilino)-naftaleen-2-sulfonaat
- PT 4-hidroxi-3-(4-(2-metoxi-4-(3-sulfonatofenilazo)fenilazo)-3-metilfenilazo)-6-(3-sulfonatoanilino)naftaleno-2-sulfonato de trilitio

Classification Klassifizierung Einstufung Ταξινόμηση, Classification, Classification, Classificazione, Indeling Classificação

E; R 2

Etiquetado Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem

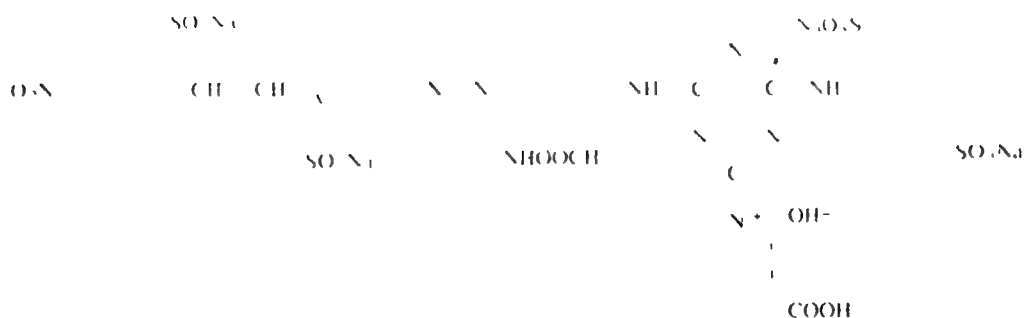
<p>E</p>	<p>R . 2</p> <p>S . (2) 35</p>
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Limits de concentration Konzentrationsgrenzen / Konzentrationsschwellen, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 115099-55-3

EEC No 404-250-5

No 611-014-00-7



- |    |  |
|----|--|
| ES | hidróxido de (1-(4-(3-acetamido-4-(4'-nitro-2,2'-disulfonatoestilben-4-ilizo)anilino)-6-(2,5-disulfonatoanilino)-1,3,5-triazin-2-il)-3-carboxipiridinio de tetrasodio)   |
| DA | (tetranatrium 1-(4-(3-acetamido-4-(4'-nitro-2,2'-disulfonatoestilben-4-ilizo)anilino)-6-(2,5-disulfonatoanilino)-1,3,5-triazin-2-il)-3-carboxypyridinium)hydroxid        |
| DE | (tetranatrium 1-(4-(3-acetamido-4-(4'-nitro-2,2'-disulfonatoestilben-4-ilizo)anilino)-6-(2,5-disulfonatoanilino)-1,3,5-triazin-2-il)-3-carboxypyridinium)hydroxid        |
| EL | υδροχλωρίδιο του (1-(4-(3-ακεταμιδο-4-(4'-νιτρο-2,2'-δισουλφονατοεστιλβεν-4-ιλοζω)ανιλίνο)-6-(2,5-δισουλφονατοεστιλβεν-4-ιλοζω)3-καρβοξυπυριδινίου του τετρανατρίου)     |
| EN | (tetrasodium 1-(4-(3-acetamido-4-(4'-nitro-2,2'-disulfonatoestilben-4-ilizo)anilino)-6-(2,5-disulfonatoanilino)-1,3,5-triazin-2-yl)-3-carboxypyridinium) hydroxide       |
| FR | hydroxyde de (1-(4-(3-acetamido-4-(4'-nitro-2,2'-disulfonatoestilben-4-ilizo)anilino)-6-(2,5-disulfonatoanilino)-1,3,5-triazin-2-yl)-3-carboxypyridinium de tétrasodium) |
| IT | idrossido di (1-(4-(3-acetammido-4-(4'-nitro-2,2'-disulfonatoestilben-4-ilizo)anilino)-6-(2,5-disulfonatoanilino)-1,3,5-triazin-2-il)-3-carbossipiridinio di tetrasodio) |
| NL | (tetranatrium 1-(4-(3-acetamido-4-(4'-nitro-2,2'-disulfonatoestilben-4-ilizo)anilino)-6-(2,5-disulfonatoanilino)-1,3,5-triazin-2-yl)-3-carboxypyridinium)hydroxide       |
| PT | hidróxido de (1-(4-(3-acetamido-4-(4'-nitro-2,2'-disulfonatoestilbeno-4-ilizo)anilino)-6-(2,5-disulfonatoanilino)-1,3,5-triazin-2-il)-3-carboxipiridinio de tetrasódio)  |

Cellular automata K-theory and the von Neumann classification of group C\*-algebras

R 43

*Επιμετάβλητη Πολύπλοκη Λογική Ανάλυση της Επιστημολογικής Επιστήμης της Πολιτικής και της Κοινωνικής Επιστήμης*

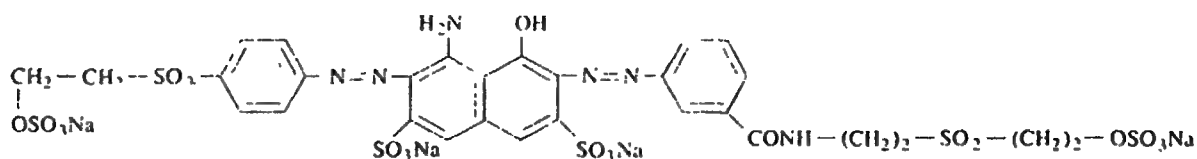
<p>X<sub>1</sub></p> 	<p>R 43</p> <p>S (2) 22 24 37</p>
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Cas No 116899-78-2

EEC No 404-320-5

No 611-015-00-2



- ES : 4-amino-5-hidroxi-6-(3-(2-(2-(sulfonatooxi)etilsulfonyl)etilcarbamoyl)fenilazo)-3-(4-(2-(sulfonatooxi)etilsulfonyl)etilazolo)naftaleno-2,7-disulfonato de tetrasodio
- DA : tetranatrium-4-amino-5-hydroxy-6-(3-(2-(2-(sulfonatooxy)ethylsulfonyl)ethylcarbamoyl)phenylazo)-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)naphthalen-2,7-disulfonat
- DE : Tetranatrium-4-amino-5-hydroxy-6-(3-(2-(2-(sulfonatooxy)ethylsulfonyl)ethylcarbamoyl)phenylazo)-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)naphthalin-2,7-disulfonat
- EL : 4-αμνο-5-υδροξυ-6-(3-(2-(2-(σουλφονατοοξυ)αιθυλοσουλφονυλο)αιθυλκαρβαμoyλo)φαινυλαζω)-3-(4-(2-(σουλφονατοοξυ)αιθυλοσουλφονυλο)φαινυλαζω)ναφθαλενο-2,7-δισουλφονικό τετρανάτριο
- EN : tetrasodium 4-amino-5-hydroxy-6-(4-(2-(2-(sulfonatooxy)ethylsulfonyl)ethylcarbamoyl)phenylazo)-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)naphthalene-2,7-disulfonate
- FR : 3-amino-5-hydroxy-6-(3-(2-(2-(sulfonatooxy)éthylsulfonyl)éthylcarbamoyl)phénylazo)-3-(4-(2-(sulfonatooxy)éthylsulfonyl)phénylazo)naphthalène-2,7-disulfonate de tétrasodium
- IT : 4-ammino-5-idrossi-6-(3-(2-(2-(solfonatoossi)etilsolfonil)etilcarbamoyl)fenilazo)-3-(4-(2-(solfonatoossi)etilsolfonil)etilazolo)naftalen-2,7-disolfonato de tetrasodio
- NL : tetranatrium-4-amino-5-hydroxy-6-(4-(2-(2-(sulfonatooxy)ethylsulfonyl)ethylcarbamoyl)fenylazo)-3-(4-(2-(sulfonatooxy)ethylsulfonyl)fenylazo)naftaleen-2,7-disulfonaat
- PT : 4-amino-5-hidroxi-6-(4-(2-(2-(sulfonatooxi)etilsulfonyl)etilcarbamoyl)fenilazo)-3-(4-(2-(sulfonatooxi)etilsulfonyl)etilazolo)naftaleno-2,7-dissulfonato de tetrassódio

Clasificación Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

R 43

Etiquetado Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem

X<sub>1</sub>

R : 43

S : (2-)22-24-37

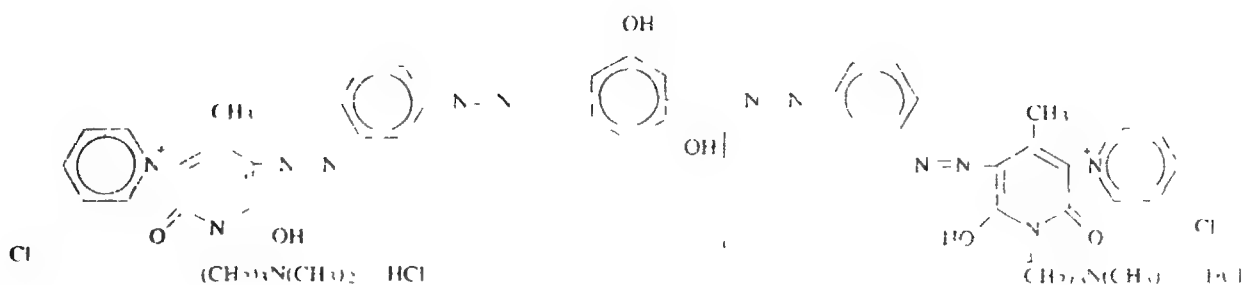
Limites de concentration, Koncentrationsgrenzen, Konzentrationsgrenzen, etc. Ορια συγκεντρώσεως, Concentration limits, Limite di concentrazione, Limite di concentrazione, Concentratiegrenzen, Limite de concentraçào


Cas No

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EEC No 404-540-1

No 611-016-00-8



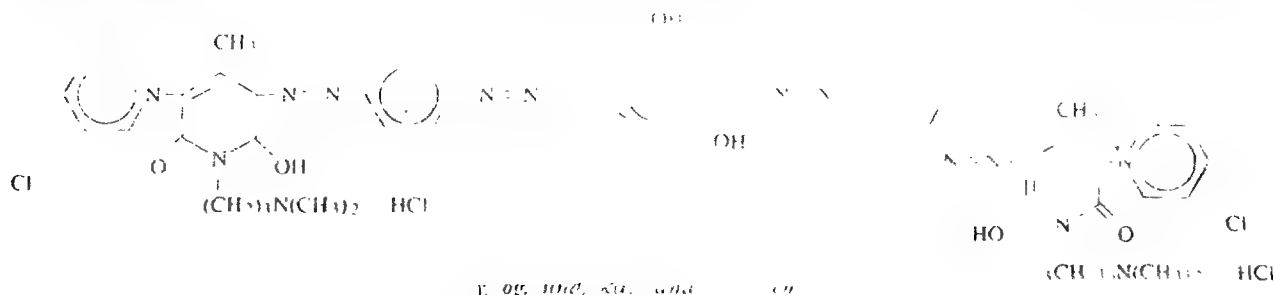
Mixtura de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de

- ES dicloruro de 1,1'-((dihidroxiifenilen)bis(azo-3,1-fenilenazo(1-(3-(dimetilamino)propil)-1,2-dihidro 6 hidroxi 4-metil 2-oxopiridina-5,3-diil)))dipiridinio, diclorhidrato, mezcla de isómeros
- DA 1,1'-((dihydroxyphenylen)bis(azo 3,1 phenylenazo(1-(3-(dimethylamino)propyl)-1,2 dihydro 6 hydroxy 4 methyl 2 oxopyridin 5,3-diyl)))dipyridiniumdichlorid, dihydrochlorid, blanding af isomerer
- DE 1,1'-((Dihydroxyphenylen)bis(azo-3,1-phenylenazo(1-(3 (dimethylamino)propyl)-1,2-dihydro-6 hydroxy 4 methyl 2-oxopyridin 5,3 diyl)))dipyridiniumdichlorid, dihydrochlorid, isomerengemisch
- EL διχλωρίδιο του 1,1'-((διυδροξυφαινυλενο)δισ(αζω-3,1-φαινυλεναζω(1-(3-(διμεθυλαμινο)προπυλο) 1,2 διυδρο 6-υδροξυ-4 μεθυλο 2-οξοπυριδινό-5,3-δισυλο)))διπυριδινίου, διυδροχλωρικό, μείγμα ισομερών
- EN 1,1'-((dihydroxyphenylene)bis(azo 3,1 phenylenazo(1-(3 dimethylaminopropyl)-1,2-dihydro-6-hydroxy 4-methyl 2-oxopyridine 5,3-diyl)))dipyridinium dichloride dihydrochloride, mixed isomers
- FR dichlorure de 1,1'-((dihydroxyphenylene)bis(azo-3,1-phénylnazo(1 (3-(dimethylamino)propyl)-1,2-dihydro-6-hydroxy 4 méthyl 2 oxopyridine 5,3 diyl)))dipyridinium, dichlorhydrate, mélange d'isomères
- IT dicloruro di 1,1'-((dihidroxiifenilen)bis(azo-3,1 fenilenazo(1-(3 (dimetilammino)propil) 1,2 diidro 6 idrossi 4 metil 2-ossopiridin-5,3-diil)))dipiridinio, dicloridrato, miscela di isomeri
- NI 1,1'-((dihydroxyphenylene)bis(azo 3,1 phenylenazo(1 (3 (dimethylamino)propyl) 1,2 dihydro 6 hydroxy 4 methyl 2 oxopyridine 5,3-diyl)))dipyridiniumdichloride, dihydrochloride, mengsel van isomeren
- PT dicloreto de 1,1'-((dihidroxiifenileno)bis(azo 3,1 fenilenazo(1 (3 (dimetilamino)propil) 1,2 dihidro 6 hidroxi 4 metil 2 oxopiridina 5,3 diil)))dipiridinio, dicloridrato, mistura de isómeros

Cas No —

EEC No 404-540-1

No 611-016-00-8



ES: dicloruro de 1-(1-(3-dimetilaminopropil)-5-(3-((4-(1-(3-dimetilaminopropil)-1,6-dihidro-2-hidroxi-4-metil-6-oxo-5H-piridinio-3-piridilazo)fenilazo)-2,4(o2,6 o3,5)-dihidroxifenilazo)fenilazo)-1,2-dihidro-6-hidroxi-4-metil-2-oxo-3-piridil)piridinio, diclor

DA: 1-(1-(3-dimethylaminopropyl)-5-(3-((4-(1-(3-dimethylaminopropyl)-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-5H-pyridinio-3-pyridylazo)phenylazo)-2,4(eller2,6 eller3,5)-dihydroxyphenylazo)phenylazo)-1,2-dihydro-6-hydroxy-4-methyl-2-oxo-3-pyridyl)pyridiniumdichloride

DE: 1-(1-(3-Dimethylaminopropyl)-5-(3-((4-(1-(3-dimethylaminopropyl)-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-5H-pyridinio-3-pyridylazo)phenylazo)-2,4(oder2,6 oder3,5)-dihydroxyphenylazo)phenylazo)-1,2-dihydro-6-hydroxy-4-methyl-2-oxo-3-pyridyl)pyridiniumdichloride

EL: διχλωρίδιο του 1-(1-(3-διμεθυλαμινοπροπυλο)-5-(3-((4-(1-(3-διμεθυλαμινοπροπυλο)-1,6-διυδρο-2-υδροξυ-4-μεθυλ-6-οξο-5-πυριδινιο-3-πυριδυλαζω)φαινυλαζω)-2,4(η2,6 η3,5)-διυδροξυφαινυλαζω)φαινυλαζω)-1,2-διυδρο-6-υδροξυ-4-μεθυλ-2-οξο-3-πυριδυλο)πυριδινίου διυδροχλωρικό

EN: 1-(1-(3-dimethylaminopropyl)-5-(3-((4-(1-(3-dimethylaminopropyl)-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-5H-pyridinio-3-pyridylazo)phenylazo)-2,4(or2,6or3,5)-dihydroxyphenylazo)phenylazo)-1,2-dihydro-6-hydroxy-4-methyl-2-oxo-3-pyridyl)pyridinium dichloride

FR: dichlorure de 1-(1-(3-diméthylaminopropyl)-5-(3-((4-(1-(3-diméthylaminopropyl)-1,6-dihydro-2-hydroxy-4-méthyl-6-oxo-5-pyridinio-3-pyridylazo)phénylazo)-2,4(ou2,6 ou3,5)-dihydroxyphénylazo)phénylazo)-1,2-dihydro-6-hydroxy-4-méthyl-2-oxo-3-pyridyl)pyridini

IT: dicloruro di 1-(1-(3-dimetilamminopropil)-5-(3-((4-(1-(3-dimetilamminopropil)-1,6-diidro-2-idrossi-4-metil-6-osso-5-piridinio-3-piridilazo)fenilazo)-2,4(o2,6 o3,5)-diidrossifenilazo)fenilazo)-1,2-diidro-6-idrossi-4-metil-2-osso-3-piridil)piridinio, diclo

NL: 1-(1-(3-dimethylaminopropyl)-5-(3-((4-(1-(3-dimethylaminopropyl)-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-5H-pyridinio-3-pyridylazo)fenylazo)-2,4(of2,6 of3,5)-dihydroxyfenylazo)fenylazo)-1,2-dihydro-6-hydroxy-4-methyl-2-oxo-3-pyridyl)pyridiniumdichloridedihyd

PT: dicloreto de 1-(1-(3-dimetilaminopropil)-5-(3-((4-(1-(3-dimetilaminopropil)-1,6-dihidro-2-hidroxi-4-metil-6-oxo-5H-piridinio-3-piridilazo)fenilazo)-2,4(ou2,6 ou3,5)-dihidroxifenilazo)fenilazo)-1,2-dihidro-6-hidroxi-4-metil-2-oxo-3-piridil)piridinio, diclo

Cas No

EEC No 404-540-1

No 611-016-00-8

*Classification, Klassifizierung, Classificație, Ταξινόμηση, Classificație, Classificație, Classificație, Classificație, Classificație*

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Bezeichnung*

Xi 	R : 43 S : (2-)22-24-37
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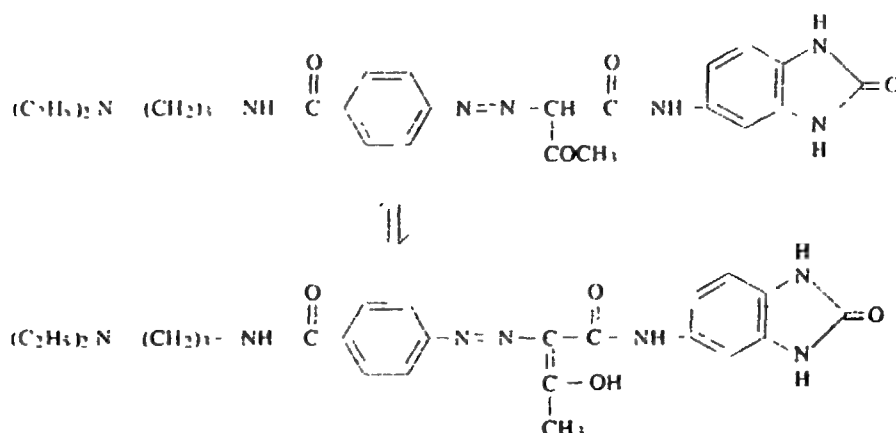
*Limites de concentration, Konzentrationen, Konzentrationen, Ograničenja koncentracije, Ograničenja koncentracije, Ograničenja koncentracije, Ograničenja koncentracije, Ograničenja koncentracije*  
*Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrație*




Cas No

EEC No 404-910-2

No 611-017-00-3



- ES 2-(4-(diethylaminopropylcarbamoyl)fenilazo)-3-oxo-N-(2,3-dihidro-2-oxobenzimidazol-5-il)butiramida  
 DA 2-(4-(diethylaminopropylcarbamoyl)phenylazo)-3-oxo-N-(2,3-dihydro-2-oxobenzimidazol-5-yl)butyramid  
 DE 2-(4-(Diethylaminopropylcarbamoyl)phenylazo)-3-oxo-N-(2,3-dihydro-2-oxobenzimidazol-5-yl)butyramid  
 EL 2-(4-(διαιθυλαμινοπροπυλοκαρβαμύλο)φαινυλαζω)-3-οξο-N-(2,3-διυδρο-2-οξοβενζιμιδαζολ-5-υλο)-  
 βουτυραμίδιο  
 EN 2-(4-(diethylaminopropylcarbamoyl)phenylazo)-3-oxo-N-(2,3-dihydro-2-oxobenzimidazol-5-yl)butyramide  
 FR 2-(4-(diethylaminopropylcarbamoyl)phénylazo)-3-oxo-N-(2,3-dihydro-2-oxobenzimidazole-5-yl)butyramide  
 IT 2-(4-(diethylaminopropylcarbamoyl)fenilazo)-3-osso-N-(2,3-diidro-2-ossobenzimidazol-5-il)butirrammide  
 NL 2-(4-(diethylaminopropylcarbamoyl)fenylazo)-3-oxo-N-(2,3-dihydro-2-oxobenzimidazol-5-yl)butyramide  
 PT 2-(4-(diethylaminopropylcarbamoyl)fenilazo)-3-oxo-N-(2,3-dihidro-2-oxobenzimidazole-5-il)butiramida

Classificação Klassificering Einstufung Ταξινόμηση Classification, Classification Classificazione, Indeling, Classificação

R 43

N; R 51-53

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

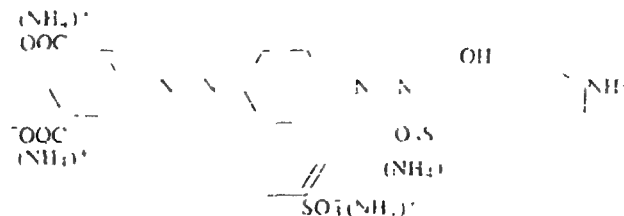


Limiit - Grænsetildækning Konzentrationssgrenze - Konzentration grænset - Όρια συγκεντρώσεως, Concentration limits  
 Limites de concentration Limite di concentrazione, Concentraciões n Limites de concentraçõe


Cas No

EEC. No 405-130 S

No 611-018-00-9



- |      |  |
|------|--|
| ..S  | 5-(4-(7-amino-1-hydroxy-3-sulfonato-2-naftilazo) 6-sulfonato 1-naftilazo)isofthalato de tetraamónio        |
| ..A  | tetraammonium 5-(4-(7-amino-1-hydroxy-3-sulfonato-2-naphthylazo) 6-sulfonato 1-naphthylazo)isophthalat     |
| ..E  | Tetraammonium 5-(4-(7-amino-1-hydroxy-3-sulfonato-2-naphthylazo) 6-sulfonato 1-naphthylazo) isophthalat    |
| ..I  | 5-(4-(7-α-υ-υ-3-συλφονατο 1-υδροξυ 2-ναφθυλαζω) 6-σουλφονατο 1-ναφθυλαζω)ισοφθαλικό τετρααμμώνιο           |
| ..N  | tetraammonium 5-(4-(7-amino-1-hydroxy-3-sulfonato-2-naphthylazo) 6-sulfonato-1-naphthylazo)isophthalate    |
| ..R  | 5-(4-(7-amino-1-hydroxy-3-sulfonato-2-naphthylazo)-6-sulfonato-1-naphthylazo)isophthalate de tetraammonium |
| ..T  | 5-(4-(7-ammino-1-idrossi-3-solfonato-2-naftilazo) 6-solfonato 1-naftilazo)isofthalato di tetraammonio      |
| ..V  | tetraammonium 5-(4-(7-amino-1-hydroxy-3-sulfonato-2-naftilazo)-6-sulfonato 1-naftilazo)isofthalat          |
| ..PT | 5-(4-(7-amino-1-hidroxi-3-sulfonato-2-naftilazo) 6-sulfonato 1-naftilazo)isofthalato de tetraamónio        |

*Classificación Klassifizierung Einstufung Ταξινόμηση Classifcation, Classification, Classificazione Indeling Classificazioe*

R 43

*Et quando* *Intertermo* *Kennzeichnung* *Επισήμανση* *Labelling* *Etiquetage* *Etichettatura* *Keimerker* *Rotulagem*

$X_1$		
	R	43
	S	(2) 24 37

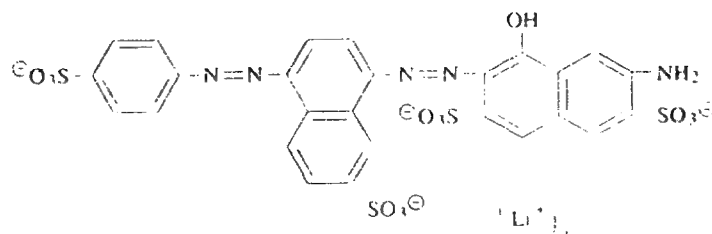
*L' " " " est un acte, Konevitch propose une Konevitch, c'est-à-dire : Que ce soit pour le bien et  
l'intérêt de la concentration. L'intérêt de la concentration. C'est un acte. L'intérêt de la concentration.*

1. Name of the person or organization	2. Address	3. City	4. State	5. Zip
6. Name of the person or organization	7. Address	8. City	9. State	10. Zip
11. Name of the person or organization	12. Address	13. City	14. State	15. Zip
16. Name of the person or organization	17. Address	18. City	19. State	20. Zip
21. Name of the person or organization	22. Address	23. City	24. State	25. Zip
26. Name of the person or organization	27. Address	28. City	29. State	30. Zip
31. Name of the person or organization	32. Address	33. City	34. State	35. Zip
36. Name of the person or organization	37. Address	38. City	39. State	40. Zip
41. Name of the person or organization	42. Address	43. City	44. State	45. Zip
46. Name of the person or organization	47. Address	48. City	49. State	50. Zip
51. Name of the person or organization	52. Address	53. City	54. State	55. Zip
56. Name of the person or organization	57. Address	58. City	59. State	60. Zip
61. Name of the person or organization	62. Address	63. City	64. State	65. Zip
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76. Name of the person or organization	77. Address	78. City	79. State	80. Zip
81. Name of the person or organization	82. Address	83. City	84. State	85. Zip
86. Name of the person or organization	87. Address	88. City	89. State	90. Zip
91. Name of the person or organization	92. Address	93. City	94. State	95. Zip
96. Name of the person or organization	97. Address	98. City	99. State	100. Zip

Cas No 106028-58-4

EEC No 405-150-4

No 611-019-00-4



ES : 6-amino-4-hidroxi-3-(7-sulfonato-4-(4-sulfonatofenilazo)-1-naftilazo)naftaleno-2,7-disulfonato de tetralitio

DA : tetralithium-6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatophenylazo)-1-naphthylazo)naphthalen-2,7-disulfonat

DE : Tetralithium-6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatophenylazo)-1-naphthylazo)naphthalin-2,7-disulfonat

EL : 6-αμνο-4-υδροξυ-3-(7-σουλφονατο-4-(4-σουλφονατοφαινυλαζω)-1-ναφθυλαζω)ναφθαλ.ενο-2,7-δισουλφονικό τετραλίθιο

EN : tetralithium 6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatophenylazo)-1-naphthylazo)naphthalene-2,7-disulfonate

FR : 6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatophénylazo)-1-naphthylazo)naphthalène-2,7-disulfonate de tétralithium

IT : 6-ammino-4-idrossi-3-(7-solfonato-4-(4-solfonatofenilazo)-1-naftilazo)naftalen-2,7-disolfonato di tetralitio

NL : tetralithium-6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatofenylazo)-1-naftylazo)naftaleen-2,7-disulfonaat

PT : 6-amino-4-hidroxi-3-(7-sulfonato-4-(4-sulfonatofenilazo)-1-naftilazo)naftaleno-2,7-dissulfonato de tetralitio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43

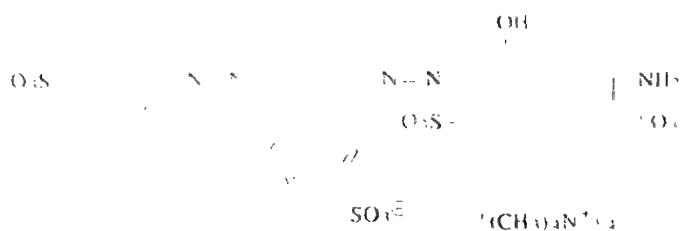
S : (2-)24-37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 116340-05-7

EEC No 405-170-3

No 611-020-00-X



- S : 6-amino-4-hidroxi-3-(7-sulfonato-4-(4-sulfonatofenilazo)-1-naftilazo)naftaleno-2,7-disulfonato de tetrakis (tetrametilamonio)
- DA : tetrakis(tetramethylammonium)-6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatophenylazo)-1-naphthylazo)-naphthalen-2,7-disulfonat
- DE : Tetrakis(tetramethylammonium)-6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatophenylazo)-1-naphthylazo)-naphthalin-2,7-disulfonat
- L : 6-αμινό-4-υδροξύ-3-(7-σουλφονατο-4-(4-σουλφονατοφαινυλαζω)-1-ναφθυλαζω)ναφθαλενο-2,7-δισουλφονικό τετρακίς(τετραμεθυλαμμώνιο)
- N : tetrakis(tetramethylammonium) 6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatophenylazo)-1-naphthylazo)-naphthalene-2,7-disulfonate
- R : 6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatophénylazo)-1-naphthylazo)naphthalène-2,7-disulfonate de tétrakis (tétraméthylammonium)
- T : 6-ammino-4-idrossi-3-(7-solfonato-4-(4-solfonatofenilazo)-1-naftilazo)naftalen-2,7-disolfonato di tetrachise (tetrameulammonio)
- NL : tetrakis(tetramethylammonium)-6-amino-4-hydroxy-3-(7-sulfonato-4-(4-sulfonatofenylazo)-1-naftylazo)naftaleen-2,7-disulfonaat
- PT : 6-amino-4-hidroxi-3-(7-sulfonato-4-(4-sulfonatofenilazo)-1-naftilazo)naftaleno-2,7-dissulfonato de tetraquise (tetrametilamonio)

Classification Klassifisering Einstufung Ταξινόμηση Classification, Classification, Classificazione, Indeling, Classificação

T, R 25

R 43

R 52-53

Etiquetado Etikettering, Kennzeichnung, Επισήμανση Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p>	<p>R : 25-43-52/53</p> <p>S : (1/2-)22-24-37-45-61</p>
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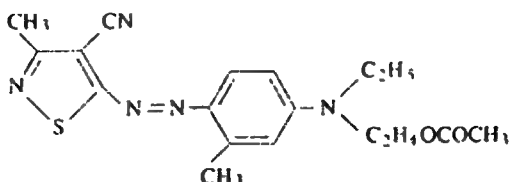
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzweite, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçào


Cas No

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EEC No 405-480-9

No 611-021-00-X



ES: acetato de 2-(4-(4-ciano-3-metilisotiazol-5-ilazo)-N-etil-3-metilanilino)etilo

DA: 2-(4-(4-cyan-3-methylisothiazol-5-ylazo)-N-ethyl-3-methylanilino)ethylacetat

DE: 2-(4-(4-Cyan-3-methylisothiazol-5-ylazo)-N-ethyl-3-methylanilino)ethylacetat

EL: οξικό 2-(4-(4-κυανο-3-εθυλισοθιαζολ-5-υλαζω)-N-αιθυλο-3-μεθυλανιλινο)αιθύλιο

EN: 2-(4-(4-cyano-3-methylisothiazol-5-ylazo)-N-ethyl-3-methylanilino)ethyl acetate

FR: acetate de 2-(4-(4-cyano-3-méthylisothiazole-5-ylazo)-N-éthyl-3-méthylanilino)éthyle

IT: acetato di 2-(4-(4-ciano-3-metilisotiazol-5-ilazo)-N-etil-3-metilanilino)etile

NL: 2-(4-(4-cyaan-3-methylisothiazool-5-ylazo)-N-ethyl-3-methylanilino)ethylacetat

PT: acetato de 2-(4-(4-ciano-3-metilisotiazole-5-ilazo)-N-etil-3-metilanilino)etilo

Classificac  n, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazi  ne, Indeling, Classificac  o

Xn; R 22; R 38-48/22

Xi

R 53

Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling,  tiquette, Etichetatura,  tiquette ken, Rotulagem

Xn



R : 22-38-48/22-53

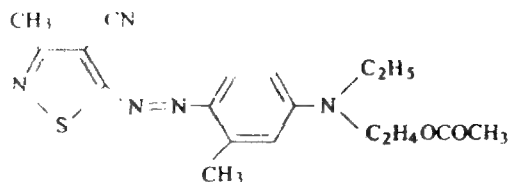
S : (2-)22-36/37-61

  mites de concentraci  n, Konc. indikationsgrenser, Konzentrationsgrenzwerte,   ρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentra  o


Cas No —

EEC No 405-480-9

No 611-021-00-5



- ES acetato de 2-[4-(4-ciano-3-metilisotiazol-5-ilazo)-N-etil-3-metilanilino]etilo  
 DA 2-[4-(4-cyan-3-methylisothiazol-5-ylazo)-N-ethyl-3-methylanilino]ethylacetat  
 DE 2-[4-(4-Cyan-3-methylisothiazol-5-ylazo)-N-ethyl-3-methylanilino]ethylacetat  
 EL οξικό 2-[4-(4-κυανο-3-εθυλισοθειαζολ-5-υλαζο)-N-αιθυλο-3-μεθυλανιλινο]αιθύλιο  
 EN 2-[4-(4-cyano-3-methylisothiazol-5-ylazo)-N-ethyl-3-methylanilino]ethyl acetate  
 FR acetate de 2-[4-(4-cyano-3-methylisothiazole-5-ylazo)-N-éthyl-3-méthylanilino]éthyle  
 IT acetato di 2-[4-(4-ciano-3-metilisotiazol-5-ilazo)-N-etil-3-metilanilino]etile  
 NL 2-[4-(4-cyaan-3-methylisothiazool-5-ylazo)-N-ethyl-3-methylanilino]ethylacetaat  
 PT acetato de 2-[4-(4-ciano-3-metilisotiazole-5-ilazo)-N-etil-3-metilanilino]etilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatien, Classificazione, Indeling, Classificação

Xn ; R 22-48/22

Xi ; R 38

R 53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-38-48/22-53

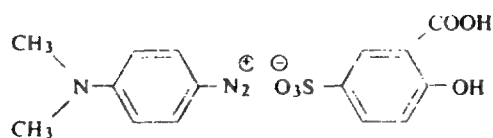
S : (2-)22-36/37-61

Limites de concentração, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration; Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 404-980-4

No 611-922-00-0



- ES : 3-carboxi-4-idroxibenzensulfonato de 4-dimetilaminobenzendiazonio  
 DA : 4-dimethylaminobenzendiazonium-3-carboxy-4-hydroxybenzensulfonat  
 DE : 4-Dimethylaminobenzoldiazonium-3-carboxy-4-hydroxybenzolsulfonat  
 EL : 3-καρβοξύ-4-υδροξύβενζολοσουλφονικό 4-διμεθυλαμινοβενζολαδιαζόνιο  
 EN : 4-dimethylaminobenzenediazonium 3-carboxy-4-hydroxybenzenesulfonate  
 FR : 3-carboxy-4-hydroxybenzènesulfonate de 4-diméthylaminobenzènediazonium  
 IT : 3-carbossi-4-idrossibenzensolfonato di 4-dimetilamminobenzendiazonio  
 NL : 4-dimethylaminobenzeendiazonium-3-carboxy-4-hydroxybenzeendisulfonaat  
 PT : 3-carboxy-4-idroxibenzenodissulfonato de 4-dimetilaminobenzendiazonio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

E ; R 2	T ; R 23/25	Xn ; R 21-48/22	Xi ; R 41	R 43	N ; R 50/53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

E	T	N	
			R : 2-21-23/25-41-43-48/22-50/53
			S : (1/2)-3-12-26-35-36/37/39-45-61

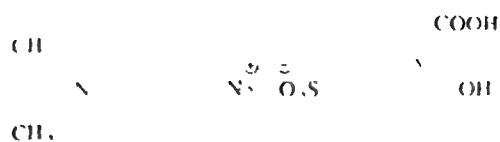
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No

—

EEC No 404-980-4

No 611-022-00 5






- ES 3-carboxy-4-hydroxybenzensulfonato de 4-dimetilaminobenzendiazonio  
 DA 4-dimethylaminobenzendiazonium-3-carboxy-4-hydroxybenzensulfonat  
 DE 4-Dimethylaminobenzoldiazonium-3-carboxy-4-hydroxybenzolsulfonat  
 EL 3-καρβοξύ-4-υδροξύβενζολοσουλφονικό 4-διμεθυλαμινοβενζολοδiazonio  
 EN 4-dimethylaminobenzenediazonium 3-carboxy-4-hydroxybenzenesulfonate  
 FR 3-carboxy-4-hydroxybenzenesulfonate de 4-diméthylaminobenzenediazonium  
 IT 3-carbossi 4-idrossibenzenosolfonato di 4-dimetilamminobenzendiazonio  
 NL 4 dimethylaminobenzeendiazonium 3-carboxy 4 hydroxybenzeendisulfonaat  
 PT 3-carboxy-4-hydroxybenzenodissulfonato de 4-dimetilaminobenzenodiazonio

Clasificación: *Classifying* *Enclufament* *Taxinómηση* *Classification* *Classification* *Clasificación* *Indefinizione* *Clasificación*

E, R 2	T R 25/25	Xn, R 21 48/22	Xn, R-41	R 43	N R 50 53
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Labels: *Etiquetas* *Κατατάξεις* *Επισημείωση* *Labelling* *Etiquetas* *Etichettature* *Κατατάξεις* *Βεβαιώσεις*

E	T	N	
			
			R 21 2 25 41 43 49, 22 50/53 S (1/2-) 17 26 33 36/37/39 45 61

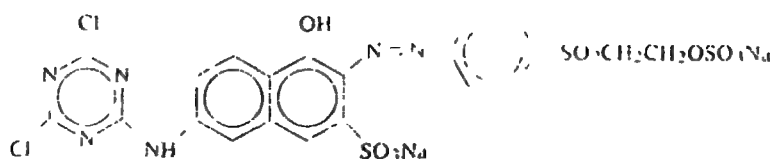
Concentrations: *Concentration* *Συγκεντρώσεις* *Κατατάξεις συγκεντρώσεων* *Concentrations* *Concentrations* *Concentrations* *Concentrations* *Concentrations*




Cas No —

EEC No 404-600-7

No 611-023-00-0



- ES 7-(4,6-dicloro-1,3,5-triazin-2-ilamino)-4-idrossi-3-(4-(2-(sulfonatoossi)etilsulfonil)fenilazo)naftaleno-2-sulfonato de disodio
- DA dinatrium-7-(4,6-dichlor-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)-naphthalen-2-sulfonat
- DE Dinatrium-7-(4,6-dichlor-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)-naphthalin-2-sulfonat
- EL 7-(4,6-διχλωρο-1,3,5-τριαζινο-2-υλαμινο)-4-υδροξυ-3-(4-(2-(σουλφονατοοξυ)αιθυλοσουλφονυλο)φαινυλαζω)-ναφθαλενο-2-σουλφονικό δινάτριο
- EN disodium 7-(4,6-dichloro-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)-naphthalene-2-sulfonate
- FR 7-(4,6-dichloro-1,3,5-triazine-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)éthylsulfonyl)phénylazo)naphthalène-2-sulfonate de disodium
- IT 7-(4,6-dicloro-1,3,5-triazin-2-ilammino)-4-idrossi-3-(4-(2-(sulfonatoossi)etilsulfonil)fenilazo)naftalen-2-sulfonato di disodio
- NL dinatrium-7-(4,6-dichloor-1,3,5-triazine-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)fenylazo)-naftaleen-2-sulfonaat
- PT 7-(4,6-dicloro-1,3,5-triazina-2-ylamino)-4-hidroxi-3-(4-(2-(sulfonatooxi)etilsulfonil)fenilazo)naftaleno-2-sulfonato de dissodio

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

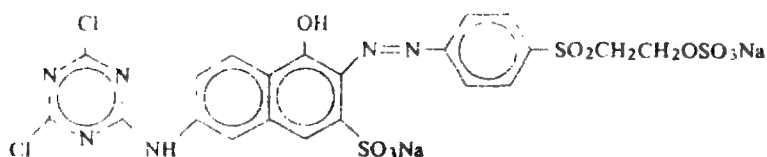
Xi	
	R : 43
	S : (2) 22-24-37

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzen, i. Oprei si concentrații, Concentration Limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrações


Cas No —

EEC No 404-600-7

No 611-023-00-6



- ES : 7-(4,6-dicloro-1,3,5-triazin-2-ilamino)-4-hidroxi-3-(4-(2-(sulfonatooxi)etilsulfonyl)fenilazo)naftaleno-2-sulfonato de disodio
- DA : dinatrium-7-(4,6-dichlor-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)-naphthalen-2-sulfonat
- DE : Dinatrium-7-(4,6-dichlor-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)-naphthalin-2-sulfonat
- EL : 7-(4,6-διχλωρο-1,3,5-τριαζινο-2-υλαμινο)-4-υδροξυ-3-(4-(2-σουλφονατοοξυ)αιθυλοσουλφονυλο)φαινυλαζω)-ναφθαλενο-2-σουλφονικό δινάτριο
- EN : disodium 7-(4,6-dichloro-1,3,5-triazin-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phenylazo)-naphthalene-2-sulfonate
- FR : 7-(4,6-dichloro-1,3,5-triazine-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)phénylazo)naphthalène-2-sulfonate de disodium
- IT : 7-(4,6-dicloro-1,3,5-triazin-2-ilammino)-4-idrossi-3-(4-(2-(solfonatoossi)etilsolfonyl)fenilazo)naftalen-2-solfonato di disodio
- NL : dinatrium-7-(4,6-dichloor-1,3,5-triazine-2-ylamino)-4-hydroxy-3-(4-(2-(sulfonatooxy)ethylsulfonyl)fenylazo)-naftaleen-2-sulfonaat
- PT : 7-(4,6-dicloro-1,3,5-triazina-2-ylamino)-4-hidroxi-3-(4-(2-(sulfonatooxi)etilsulfonyl)fenilazo)naftaleno-2-sulfonato de dissodio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

X <sub>1</sub>	
	R : 43
	S : (2-)22-24-37

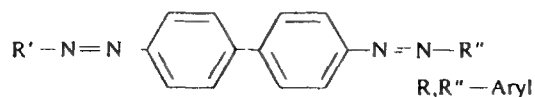
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

EEC No

No 611-024-00-1

NOTA A



- ES Colorantes azoicos derivados de la bencidina, colorantes 4,4'-diarilazobifenilos, excepto aquellos específicamente expresados en este Anexo
- DA Benzidinbaserede azofarvestoffer, 4,4'-diarylazobiphenyl farvestoffer, undtagen sådanne nævnt andetsteds i dette bilag
- DE Azofarbstoffe auf Benzidinbasis, 4,4'-Diarylazobiphenyl-Farbstoffe, mit Ausnahme der namentlich in diesem Anhang bezeichneten
- EL αζωτούχες χρωστικές με βάση βενζιδίνη, 4,4'-διαρυλαζωδιφαινυλο-χρωστικές εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος
- EN Benzidine based azo dyes, 4,4'-diarylazobiphenyl dyes, with the exception of those specified elsewhere in this Annex
- FR Colorants azoïques dérivant de la benzidine, colorants de 4,4'-diarylazobiphényle à l'exception de ceux nommés dans cette annexe
- IT Azocoloranti della benzidina; coloranti del 4,4'-diarilazobifenile, esclusi quelli espressamente indicati in questo allegato
- NL Azo kleurstoffen op basis van benzidine, 4,4'-diarylazobifenylkleurstoffen, met uitzondering van de in deze bijlage met name genoemde
- PT Corantes azoicos derivados da benzidina, corantes 4,4'-diarilazobifenil, com excepção dos expressamente referidos no presente anexo
- FI bentsidiinipohjaiset atsovaraineet, 4,4'-diaryyliatsobifenyyli varaineet, paitsi muualla tässä liitteessä mainittut
- SV benzidinbaserade azofärger, 4,4'-diarylazobifenylfärger med undantag för föreningar som är upptagna på annat ställe i bilagan

Cas No —

EEC No —

No 611 024-00-1

NOTA A

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T



R: 45

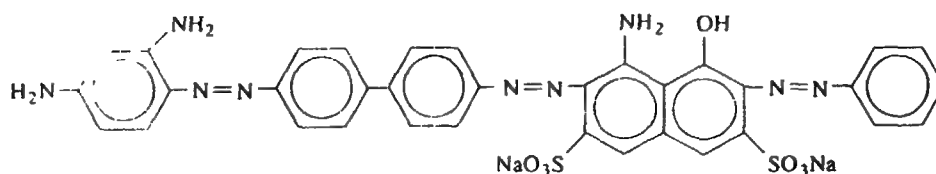
S: 53-45

*Límites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentraçã, Pitoisuusraajat, Konzentrationsgrænser*


Cas No 1937-37 7

EEC No 217-710-3

No 611-025-00-7



- ES 4-amino-3-[[4'-[(2,4-diaminofenil)azo][1,1'-bifenil]-4-il]azo]-6-(fenilazo)-5-idrossinaftaleno-2,7-disulfonato de disodio
- DA dinatrium-4-amino-3-[[4'-[(2,4-diaminofenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalen-2,7-disulfonat
- DE Dinatrium-4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalin-2,7-disulfonat; C.I. Direct Black 38
- EL 4-αμνο-3-[[4'-[(2,4-διαμνοφαινυλ)αζω][1,1'-διφαινυλ]-4-υλ]αζω]-5-υδροξυ-6-(φαινυλαζω)ναφθαλενο-2,7-δισουλφονικό δινάτριο
- EN disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate, C.I. Direct Black 38
- FR 4-amino-3-[[4'-[(2,4-diaminophényl)azo][1,1'-biphényl]-4-yl]azo]-5-hydroxy-6-(phénylazo)naphthalène-2,7-disulfonate de disodium; C.I. Direct Black 38
- IT 4-amino-3-[[4'-[(2,4-diaminofenil)azo][1,1'-bifenil]-4-il]azo]-6-(fenilazo)-5-idrossinaftalen-2,7-disolfonato di disodio; C.I. Direct Black 38
- NL dinatrium-4-amino-3-[[4'-[(2,4-diaminofenyl)azo][1,1'-biphenyl]-4-yl]azo]-6-(fenylazo)-5-hydroxynaftaleen-2,7-disulfonaat
- PT 4-amino-3-[[4'-[(2,4-diaminofenil)azo][1,1'-bifenil]-4-il]azo]-6-(fenilazo)-5-idrossinaftaleno-2,7-dissulfonato de dissódio
- FI dinatrium-4-amino-3-[[4'-[(2,4-diaminofenyyl)atso][1,1'-bifenyyl]-4-yyli]atso]-5-hydroksi-6-(fenyyliatso)naftaleeni-2,7-disulfonaatti, C.I. Direct Black 38
- SV dinatrium-4-amino-3-[[4'-[(2,4-diaminofenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(fenylazo)naftalen-2,7-disulfonat; C.I. Direct Black 38

Cas No 1937-37-7


EEC No 217-710-3

No 611-025-00-7

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
clasificación, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45	Repr. Cat. 3; R 63
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

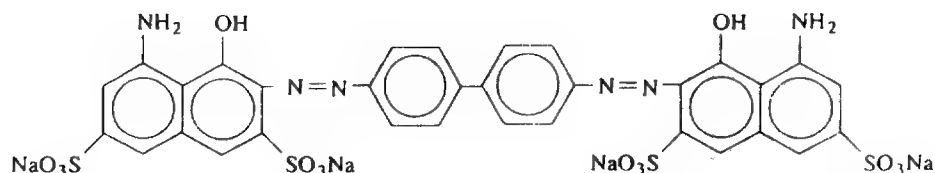
<p>T</p> 	<p>R: 45-63</p> <p>S: 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentraçã, Pitoisuuksrajat, Konzentrationsgrænser*


Cas No 2602-46-2

EEC No 220-012-1

No 611-026-00-2



- ES: 3,3'-[[1,1'-bifenil]-4,4'-diilbis(azo)]bis[5-amino-4-idrossinaftaleno-2,7-disulfonato] de tetrasodio
- DA: tetranatrium-3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis[5-amino-4-hydroxynaphthalen-2,7-disulfonat]
- DE: Tetranatrium-3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis[5-amino-4-hydroxynaphthalin-2,7-disulfonat]; C.I. Direct Blue 6
- EL: 3,3'-[[1,1'-διφαινυλο]-4,4'-διυλοδιζ(αζω)]bis[5-αμινο-4-υδροξυναφθαλενο-2,7-δισουλφονικό] τετρανάτριο
- EN: tetrasodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate]; C.I. Direct Blue 6
- FR: 3,3'-[[1,1'-biphényl]-4,4'-diylbis(azo)]bis[5-amino-4-hydroxynaphtalène-2,7-disulfonate] de tétrasodium; C.I. Direct Blue 6
- IT: 3,3'-[[1,1'-bifenil]-4,4'-diilbis(azo)]bis[5-amino-4-idrossinaftalen-2,7-disolfonato] di tetrasodio; C.I. Direct Blue 6
- NL: tetranatrium-3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis[5-amino-4-hydroxynaftaleen-2,7-disulfonaat]
- PT: 3,3'-[[1,1'-bifenil]-4,4'-diilbis(azo)]bis[5-amino-4-idrossinaftaleno-2,7-dissulfonato] de tetrassódio
- FI: tetranatrium-3,3'-[[1,1'-bifenyyl]-4,4'-diyylibis(atso)]bis[5-amino-4-hydroksinaftaleeni-2,7-disulfonaatti]; C.I. Direct Blue 6
- SV: tetranatrium-3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis[5-amino-4-hydroxynaftalen-2,7-disulfonat]; C.I. Direct Blue 6

Cas No 2602-46-2

EEC No 220-012-1

No 611-026-00-2

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc Cat 2, R 45

Repr. Cat. 3; R 63

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

I



R: 45-63

S: 53-45

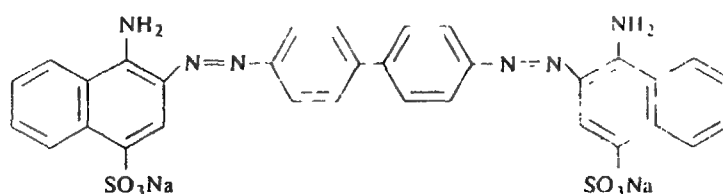
*Límites de concentración, Koncentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoissuusraajat, Koncentrationsgränser*




Cas No 573-58-0

EEC No 209-358-4

No 611-027-00-8



- ES: 3,3'-[[1,1'-bifenil]-4,4'-diylbis(azo)]bis(4-aminonaftaleno-1-sulfonato) de disodio  
 DA: dinatrium-3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalen-1-sulfonat)  
 DE: Dinatrium-3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalin-1-sulfonat), C.I. Direct Red 28  
 EL: 3,3'-[[1,1'-διφαινυλο]-4,4'-διυλοδιζ(αζω)]διζ(4-αμινοναφθαλενο-1-σουλφονικό) δινάτριο  
 EN: disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate), C.I. Direct Red 28  
 FR: 3,3'-[[1,1'-biphényl]-4,4'-diylbis(azo)]bis(4-aminonaphtalène-1-sulfonate) de disodium, C.I. Direct Red 28  
 IT: 3,3'-[[1,1'-bifenil]-4,4'-diilbis(azo)]bis(4-aminonaftalen-1-solfonato) di disodio, C.I. Direct Red 28  
 NL: dinatrium-3,3'-[[1,1'-bifenyl]-4,4'-diylbis(azo)]bis(4-aminonaftaleen-1-sulfonaat)  
 PT: 3,3'-[[1,1'-bifenil]-4,4'-diilbis(azo)]bis(4-aminonaftaleno-1-sulfonato) de dissódio  
 FI: dinatrium-3,3'-[[1,1'-bifenyyli]-4,4'-diylbis(atso)]bis(4-aminonaftaleeni-1-sulfonaatti), C.I. Direct Red 28  
 SV: dinatrium-3,3'-[[1,1'-bifenyl]-4,4'-diylbis(azo)]bis(4-aminonaftalen-1-sulfonat), C.I. Direct Red 28

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat 2, R 45

Repr. Cat. 3, R 63

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T



R: 45-63

S: 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*


Cas No 74-89-5 [1]  
124 40 3 [2]  
75 50 3 [3]

EEC No 200-820-0 [1]  
204 697 4 [2]  
200 875 0 [3]

No 612-001-00-9



$\text{CH}_3\text{NH}_2$  [1]  
 $(\text{CH}_3)_2\text{NH}$  [2]  
 $(\text{CH}_3)_3\text{N}$  [3]

ES metilamina (mono-[1], di-[2] y tri [3])  
DA methylamin (mono [1], di [2] y tri [3])  
DE Methylamin (mono-[1], di [2] und tri-[3])  
EL μεθυλαμίνη (μονο-[1], δι-[2] και τρι [3])  
EN methylamine (mono-[1] di-[2] and tri [3])  
FR methylamine (mono [1], di-[2] et tri-[3])  
IT metilamina (mono [1], di-[2] e tri [3])  
NL methylamine (mono-[1], di-[2] en tri-[3])  
PT metilamina (mono-[1], di-[2] e tri [3])  
FI metyylamiini (mono-[1], di-[2] ja tri [3])  
SV metylamin (mono-[1], di-[2] och tri [3])

*Classification Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification Classificazione Indeling, Classificação, Luokitus Klassifisering*

F +, R 12	Xn, R 20	Xi, R 37/38 41
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*Etiquetado Etikettering Kennzeichnung, Επισημάνση, Labelling,  
Etiquetage Etichettatura Kenmerken, Rotulagem, Merkinnat Markning*

F +	Xn	R 12 20 37/38 41
		S (2) 16 26 39

*Límites de concentración Konzentrationsgrenser Konzentrationsgrenzwerte Όρια συγκεντρώσεως,  
Concentration limits Limites de concentration Limiti di concentrazione Concentrationsgrenzen  
Limites de concentração Pitoamisrajat, Konzentrationsgrænser*

C > 5 %	Xn, R 20 37/38 41
0,5 % < C < 5 %	Xi, R 36

NOTA 5

Cas No 74-89-5 [1]  
124-40-3 [2]  
75-50-3 [3]

EEC No 200-820-0 [1]  
204-697-4 [2]  
200-870-0 [3]

No 612-001-01-6

NOTA B



$\text{CH}_3\text{NH}_2$  ... % [1]  
 $(\text{CH}_3)_2\text{NH}$  ... % [2]  
 $(\text{CH}_3)_3\text{N}$  ... % [3]

ES: metilamina (mono-[1], di-[2] y tri-[3]) ... %  
DA: methylamin (mono-[1], di-[2] og tri-[3]) ... %  
DE: Methylamin (mono-[1], di-[2] und tri-[3]) ... %  
EL: μεθυλαμίνη (μονο-[1], δι-[2] και τρι-[3]) ... %  
EN: methylamine (mono-[1], di-[2] and tri-[3]) ... %  
FR: methylamine (mono-[1], di-[2] et tri-[3]) ... %  
IT: metilamina (mono-[1], di-[2] e tri-[3]) ... %  
NL: methylamine (mono-[1], di-[2] en tri-[3]) ... %  
PT: metilamina (mono-[1], di-[2] e tri-[3]) ... %  
FI: metyyliamiini (mono-[1], di-[2] ja tri-[3]) ... %  
SV: metylamin (mono-[1], di-[2] och tri-[3]) ... %

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassifisering*

F+; R 12	Xn; R 20/22	C; R 34
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

F+	C	
		
		R: 12-20/22-34
		S: (1/2)-3-16 26-29-36/37/39-45

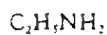
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentraçào, Pitoisumsrajat, Konzentrationsgrænser*

$C \geq 15 \%$	C; R 20/22-34
$10 \% \leq C < 15 \%$	C, R 34
$5 \% \leq C < 10 \%$	Xi; R 36/37/38

Cas No 75-04-7

EEC No 200-834-7

No 612-002-00-4



ES: etilamina  
 DA: etnylamin  
 DE: Ethylamin  
 EL: αιθυλαμίνη  
 EN: ethylamine  
 FR: ethylamine  
 IT: etilamina  
 NL: ethylamine  
 PT: etilamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F+ ; R 12	Xi ; R 36/37
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

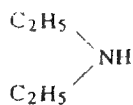
F+	Xi	
		R : 12-36/37
		S : (2-)16-26-29

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 109-89-7

EEC No 203-716-3

No 612-003-00-X





ES: dietilamina  
 DA: diethylamin  
 DE: Diethylamin  
 EL: διαιθυλαμίνη  
 EN: diethylamine  
 FR: diéthylamine  
 IT: dietilamina  
 NL: diethylamine  
 PT: dietilamina  
 FI: dietyyliamiini  
 SV: dietylamín

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	Xn; R 20/21/22	C; R 35
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

F	C	<p>R: 11-20/21/22-35</p> <p>S: (1/2-3-16-26-29-36/37/39-45</p>
		

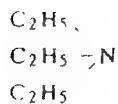
*Límites de concentración, Koncentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Koncentrationsgränser*

C ≥ 25 %	C; R 20/21/22-35
10 % ≤ C < 25 %	C; R 35
5 % ≤ C < 10 %	C; R 34
1 % ≤ C < 5 %	Xi; R 36/37/38

Cas No 121-44-8

EEC No 204-469-4

No 612-004-00-5





ES: trietilamina  
 DA: triethylamin  
 DE: Triethylamin  
 EL: τριαιθυλαμίνη  
 EN: triethylamine  
 FR: triethylamine  
 IT: trietilamina  
 NL: triethylamine  
 PT: trietilamina  
 FI: trietyyliamini  
 SV: trietylamın

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	Xn; R 20/21/22	C; R 35
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

F	C	<p>R: 11-20/21/22-35</p> <p>S: (1/2-)-3-16-26-29-36/37/39-45</p>
		

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçã, Pitoisuusrajat, Koncentrationsgrænser*

C ≥ 25 %	C; R 20/21/22-35
10 % ≤ C < 25 %	C; R 35
5 % ≤ C < 10 %	C; R 34
1 % ≤ C < 5 %	Xi; R 36/37/38

Cas No 109-73-9

EEC No 203-699-2

No 612-005-00-0



ES: butilamina

DA: butylamin

DE: Butylamin; 1-Amino-butan

EL: δουτυλαμίνη

EN: butylamine

FR: butylamine

IT: butilamina

NL: butylamine

PT: butilamina



FI: butyyliamiini

SV: butylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	Xn; R 20/21/22	C; R 35
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

F	C	
		
		R: 11-20/21/22-35
		S: (1/2-)3-16-26-29-36/37/39-45

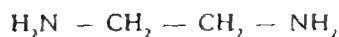
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisusrajat, Konzentrationsgrænser*

C ≥ 25 %	C; R 20/21/22-35
10 % ≤ C < 25 %	C; R 35
5 % ≤ C < 10 %	C; R 34
1 % ≤ C < 5 %	Xi; R 36/37/38

Cas No 107-15-3

EEC No 203-468-6

No 612-006-00-6




ES: etilendiamina  
 DA: ethylendiamin  
 DE: Ethylendiamin; 1,2-Diamino-ethan  
 EL: αιθυλενοδιαμίνη  
 EN: ethylenediamine; 1,2-diaminoethane  
 FR: éthylènediamine  
 IT: etilendiamina  
 NL: ethyleendiamine  
 PT: etilenodiamina  
 FI: etyleenidiamiini; 1,2 diamiinoetaani  
 SV: etylendiamin; 1,2-diaminoetan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 10	Xn; R 21/22	C; R 34	R 42/43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

<p>C</p> 	R: 10-21/22-34-42/43
	S: (1/2-)23-26-36/37/39-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*

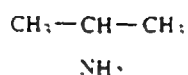
C ≥ 25 %	C; R 21/22-34-42/43
10 % ≤ C < 25 %	C; R 34-42/43
2 % ≤ C < 10 %	Xn; R 36/38-42/43
1 % ≤ C < 2 %	Xn; R 42/43



Cas No 75-31-0

EEC No 200-860-9

No 612-007-00-1



ES 2-aminopropano ; isopropilamina  
 DA 2 propanamin , isopropylamin  
 DE 2 Amino-propan , Isopropylamin  
 EL 2-αμινοπροπάνιο ισοπροπυλαμίνη  
 EN 2 aminopropane , isopropylamine  
 FR 2 aminopropane , isopropylamine  
 IT 2-amino-propano , isopropilamina  
 NL 2-aminopropan , isopropylamine  
 PT 2 aminopropano , isopropilamina

Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificatie

F + : R 12

Xi , R 36, 37, 38

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etiketatus Kenmerken Rotulagem

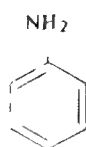
F +	Xi	
		R 12-36, 37, 38
		S (2-)16-26-29

Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Ορια συγκεντρώσεως Concentration limit  
 Limites de concentration Limite di concentrazione Concentrationsgrenzen Limites de concentration


Cas No 62-53-3

EEC No 200-539-3

No 612-008-00-7



ES : anilina

DA : anilin

DE : Anilin

EL : ανιλίνη

EN : aniline

FR : aniline

IT : anilina

NL : aniline

PT : anilina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 3 ; R 40	T ; R 48/23/24/25	Xn ; R 20/21/22	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	N	
		
		R : 20/21/22-40-48/23/24/25-50
		S : (1/2-)28-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

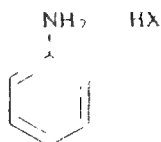
C ≥ 1 %	T ; R 20/21/22-40-48/23/24/25
0,2 % ≤ C < 1 %	Xn ; R 48/20/21/22

Cas No

EEC No

No 612-009-00-2

NOTA A



ES: sales de anilina  
 DA: salte af anilin  
 DE: Salze von Anilin  
 EL: αλατα ανιλίνης  
 EN: salts of aniline  
 FR: sels d'aniline  
 IT: salj di anilina  
 NL: zouten van aniline  
 PT: sais de anilina  
 FI: aniliinin suolat  
 SV: anilin, salter

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3; R 40	T; R 48/23/24/25	Xn; R 20/21/22	N; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinäät, Märkning*

T	N	
		R: 20/21/22-40-48/23/24/25-50
		S: (1-2-)28-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrazíesgrænser, Limites de concentraçáo, Pitoisusrajat, Konzentrationsgrænser*

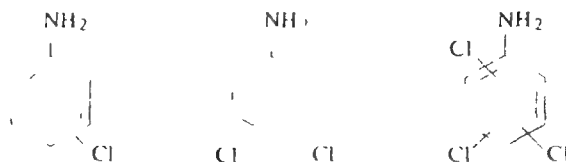
C ≥ 1 %	T; R 20/21/22-40-48/23/24/25
0,2 % ≤ C < 1 %	Xn; R 48/20/21/22

Cas No

EEC No

No 612-010-00 8

NOTA C



ES cloroanilina (mono-, di-, tri-)

DA chloranilin (mono-, di- og tri-)

DE Chloranilin (mono-, di- und tri-)

EL χλωροανιλίνη (μονο-, δι- και τρι-)

EN chloroaniline (mono-, di- and tri-)

FR chloroaniline (mono-, di- et tri-)

IT cloroanilina (mono-, di- e tri-)

NL chlooraniline (mono-, di- en tri-)

PT cloroanilina (mono-, di- e tri-)

FI kloorianiliini (mono-, di- ja tri-)

SV kloranilin (mono-, di- och tri-) klorbenzenamin (mono-, di- och tri-)

Classification Klassifisering Einstufung Ταξινόμηση Classification  
 Classificazione Classificazione Indeling Classificazione Luokitus Klassifisering

T, R 23/24/25	R 33	N, R 50/53
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Etiquetado Etikettering Kennzeichnung Ταξινόμηση Etichettatura  
 Etiketage Etichettatura Kenmerken Rotulagem Merkinnat Märkning

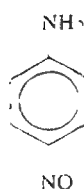
T	N	
		R 23/24/25 33 50/53
		S (1-2) 28 36/37 45 60 61

Limits de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκέντρωσης  
 Concentration limits Limites de concentration Limiti di concentrazione Concentratiegrenzen,  
 Limites de concentração Pitoisuusraajat Konzentrationsgrenzen


Cas No 659-49-4

EEC No 211-535-6

No 612-011-00-3



ES: 4-nitrosoanilina; p-nitrosoanilina

DA: 4-nitrosoanilin

DE: 4-Nitrosoanilin

EL: 4-νιτροξοανιλίνη · p-νιτροξοανιλίνη

EN: 4-nitrosoaniline

FR: 4-nitrosoaniline; p-nitrosoaniline

IT: 4-nitrosoanilina

NL: 4-nitrosoaniline

PT: 4-nitrosoanilina; p-nitrosoanilina

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificazioe*

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20/21/22
	S : (2-)25-28

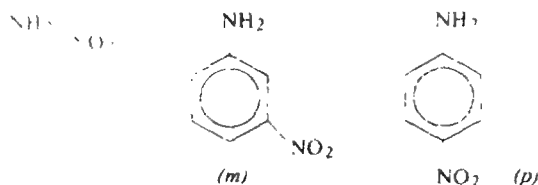
*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas-No 88-74-4 (o)  
99-09-2 (m)  
100-01-6 (p)

EEC No 201-855-4 (o)  
202-729-1 (m)  
202-810-1 (p)

No 612-012-00-9

NOTA C



ES: nitroanilina (o,m,p)  
DA: nitroanilin (o,m,p)  
DE: Nitroanilin (o,m,p)  
EL: νιτροανιλίνη (o,m,p)  
EN: nitroaniline (o,m,p)  
FR: nitroaniline (o,m,p)  
IT: nitroanilina (o,m,p)  
NL: nitroaniline (o,m,p)  
PT: nitroanilina (o,m,p)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T; R 23/24/25 R 33 R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

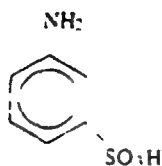
T	
	
	R : 23/24/25-33-52/53
	S : (1/2)-28-36/37-45-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 121-47-1

EEC No 204-473-6

No 612-013-00-4



ES. ácido 3-aminobencenosulfónico ; ácido metanílico

DA. 3-aminobenzénsulfonsyre ; metanilsyre

DE. 3-Amino-benzolsulfonsäure ; Metanilsäure

EL. 3-αμινοβενζολοσουλφονικό οξύ ; μετανιλικό οξύ

EN. 3-aminobenzene sulphonie acid ; metanilic acid

FR. acide 3-aminobenzènesulfonique ; acide mécanilique

IT. acido-3-amino-benzensolfonico ; acido metanilico

NL. 3-aminobenzeensulfonzuur

PT. ácido 3-aminobenzenossulfónico ; ácido metanílico

Classification Klassificering, Einstufung Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 20/21/22

Labeling Etikettering, Kennzeichnung Επισήμανση, Labelung Etiquetage Etichettatura, Kenmerken Rotulagem

Xn	
	R 20/21/22 S : (2-)25-28

Limits of concentration Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 121-57-3

EEC No 204-482-5

No 612-014-00-X



ES: acido sulfanílico

DA: sulfanilsyre

DE: Sulfanilsäure; 4-Amino-benzolsulfonsäure

EL: σουλφανιλικό οξύ

EN: sulphanilic acid; 4-aminobenzenesulphonic acid

FR: acide sulfanilique

IT: acido solfanilico; 4-aminobenzensolfonico

NL: sulfanilzuur

PT: acido sulfanílico


FI: sulfaniilihappo; 4-aminobentseenisulfoni happo

SV: sulfanilinsyra; 4-aminobenzensulfonsyra

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/38	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

Xi 	R: 36/38-43  S: (2) 24-37
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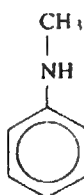
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Οριαί συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgrænser*




Cas No 100-61-8

EEC No 202-870-9

No 612-015-00-5





ES	N-metilanilina
DA	N-methylanilin
DE	N-Methylanilin
EL	N-μεθυλανιλίνη
EN	N-methylaniline
FR	N-méthylaniline
IT	N-metilanilina
NL	N-methylaniline
PT	N-metilanilina
FI	N-metyylanilini
SV	N-metylanilin, N-metylbenzenamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T, R 23/24/25	R 33	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

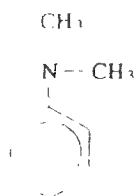
		R: 23/24/25-33-50/53
		S: (1/2-)28-36/37 45 60-61

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*


Cas No 121-69-7

EEC No 204-493-5

No 612-016-00-0





ES: N,N-dimetilanilina  
 DA: N,N-dimethylanilin  
 DE: N,N-Dimethylanilin  
 EL: N,N-διμεθυλανιλίνη  
 EN: N,N-dimethylaniline  
 FR: N,N-diméthylaniline  
 IT: N,N-dimetilanilina  
 NL: N,N-dimethylaniline  
 PT: N,N-dimetilanilina  
 FI: N,N-dimetyylianiilini  
 SV: N,N-dimetylanilin, N,N-dimetylbenzenamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3; R 40	T: R 23/24/25	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem, Merkinäät, Märkning*

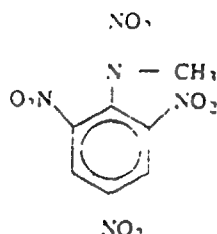
T	N	
		
		R: 23/24/25-40-51/53
		S: (1/2-)28-36/37-45-61

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào, Pitoaismaarajat, Konzentrationsgrænser*


Cas No 479-45-8

EEC No 207-531-9

No 612-017-00-6



- ES N-metil-N-2,4,6-tetranitroanilina ; tetryl  
 DA N-methyl-2,4,6-N-tetranitroanilin ; tetryl  
 DE N-Methyl-2,4,6-N-tetranitro-anilin ; Tetryl  
 EL Ν-μεθυλο-Ν-2,4,6-τετρανιτροανιλίνη tetryl  
 EN N-methyl-N-2,4,6-tetranitroaniline ; tetryl  
 FR N-méthyl-2,4,6-N-tetranitroaniline , tetryl  
 IT N-metil-N-2,4,6-tetranitroanilina , tetryle  
 NL trinitrotenylmethylnitramine ; tetryl  
 PT N-metil-N-2,4,6-tetranitroanilina ; tetrylo

Classificacão Klassificering Einstufung Ταξινόηση Classification Classification Classificazione Indefining Classificacão

E ; R 2	T , R 23/24/25	R 33
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Etiquetado Etikettering Kennzeichnung, Επισήμανση Labelling Etiquetage Etichettatura, Kenmerken Rotulagem

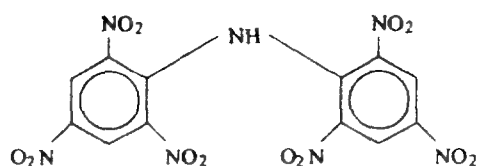
E	T	
		R 2 23/24 25 33
		S : (1/2-)35-45

Limites de concentración, Konzentrationsgrenzen Konzentrationsgrenzuerte, Όρια συγκεντρώσεως Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen Limites de concentração


Cas No 131-73-7

EEC No 205-037-8

No 612-018-00-1



ES : bis(2,4,6-trinitrofenil)amina ; hexil

DA : bis(2,4,6-trinitrophenyl)amin ; hexyl

DE : Bis(2,4,6-trinitro-phenyl)-amin ; Hexyl

EL : δις(2,4,6-τρινιτροφαινυλ)αμίνη· εξύλη

EN : bis(2,4,6-trinitrophenyl)amine ; hexyl

FR : bis(2,4,6-trinitrophényl)amine ; hexanitrodiphénylamine ; hexyl

IT : bis(2,4,6-trinitrofenil)amina ; esanitrodifenilamina

NL : hexanitrodifenylamine ; hexyl

PT : bis(2,4,6-trinitrofenil)amina , hexanitrodifenilamina ; hexil

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

E ; R 2	T+ ; R 26/27/28	R 33	N ; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

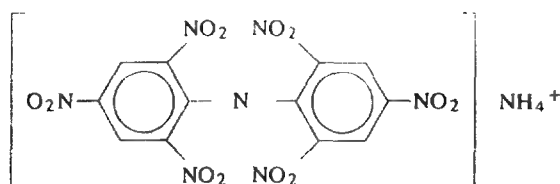
E	T+	N	
			R : 2-26/27/28-33-51/53
			S : (1/2-)35-36-45-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 2844-92-0

EEC No 220-639-0

No 612-019-00-7



ES: dipicrilamina, sal amónica

DA: dipicrylamin, ammoniumsalt

DE: Dipikrylamin, Ammoniumsalz; Ammonium-bis(2,4,6-trinitrophenyl)amin

EL: διπικρυλαμίνη, το άλας με αμμώνιο

EN: dipicrylamine, ammonium salt

FR: dipicrylamine, sel d'ammonium

IT: dipicrilamina, sale di ammonio

NL: dipicrylamine, ammoniumzout

PT: dipicrilamina, sal de amónio

FI: dipikryyliamiini, ammonium suola

SV: ammoniumbis(2,4,6-trinitrofenyl)amin

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

E	R 1	T+; R 26/27/28	R 33	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

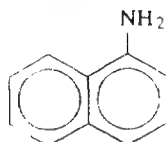
E	T+	N	
			R: 1-26/27/28-33-51/53
			S: (1/2-)28-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*


Cas No 134-32-7

EEC No 205-138-7

No 612-020-00-2



ES: 1-naftilamina  
 DA: 1-naphthylamin  
 DE: 1-Naphthylamin  
 EL: 1-ναφθυλαμίνη  
 EN: 1-naphthylamine  
 FR: 1-naphtylamine  
 IT: 1-naftilamina  
 NL: 1-naftylamine  
 PT: 1-naftilamina  
 FI: 1-nafttyylamiini  
 SV: 1-naftylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 22

N, R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinntät, Märkning*

Xn



N



R: 22-51/53

S: (2)24-61

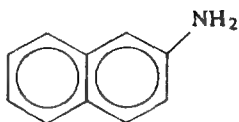
*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçao, Pitoisuusraajat, Konzentrationsgränser*


Cas No 91-59-8

EEC No 202-080-4

No 612-022-00-3

NOTA E



ES: 2-naftilamina  
 DA: 2-naphthylamin  
 DE: 2-Naphthylamin  
 EL: 2-ναφθυλαμίνη  
 EN: 2-naphthylamine  
 FR: 2-naphtylamine  
 IT: 2-naftilamina  
 NL: 2-naftylamine  
 PT: 2-naftilamina  
 FI: 2-naftyyliamiini  
 SV: 2-naftylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 1; R 45	Xn; R 22	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinndt, Märkning*

T	N	
		R: 45-22-51/53
		S: 53-45-61

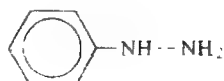
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã, Pitoisuusrajat, Konzentrationsgrænser*

C ≥ 25 %	T, R 45-22
0,01 % ≤ C < 25 %	T, R 45

Cas No 100-63-0

EEC No 202-873-5

No 612-023-00-9



ES fenilhidracina  
 DA : phenylhydrazin  
 DE : Phenylhydrazin  
 EL φαινυλιδραζίνη  
 EN phenylhydrazine  
 FR phénylhydrazine  
 IT fenilidrazina  
 NL : fenylhydrazine  
 PT fenilidrazina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T ; R 23/24/25	Xi ; R 36	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	N	
		R : 23/24/25-36-50
		S : (1/2-)28-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

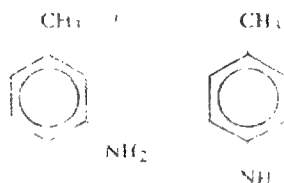



Cas No 108-44-1 [1]  
106-49-0 [2]

FEC No 203-583-1 [1]  
203-403-1 [2]

No 612-024-00-4

NOTA C



ES: m-toluidina [1]; p-toluidina [2]  
DA: m-toluidin [1]; p-toluidin [2]  
DE: m-Toluidin [1]; p-Toluidin [2]  
EL: μ-τολουιδίνη [1]; π-τολουιδίνη [2]  
EN: m-toluidine [1]; p-toluidine [2]  
FR: m-toluidine [1]; p-toluidine [2]  
IT: m-toluidina [1]; p-toluidina [2]  
NL: m-toluidine [1]; p-toluidine [2]  
PT: m-toluidina [1]; p-toluidina [2]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/24/25 R 33 N; R 50

Ετικεταδο, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		R : 23/24/25-33-50
		S : (1/2-)28-36/37-45-61

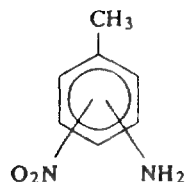
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limstes de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 612-025-00-X

NOTA C



ES: nitrotoluidina

DA: nitrotoluidin

DE: Nitrotoluidin

EL: νιτροτολουιδίνη

EN: nitrotoluidine

FR: nitrotoluidine

IT: nitrotoluidina

NL: nitrotoluidine

PT: nitrotoluidina

FI: nitrotoluidiini

SV: nitrotoluidin; aminometylnitrobenzen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23/24/25	R 33	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinndäi, Märkning*

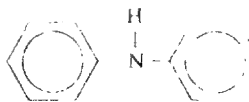
T	N	
		R: 23/24/25-33-51/53
		S: (1/2-)28-36/37-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã, Pitoisuusrajat, Konzentrationsgrænser*


Cas No 122-39-4

EEC No 204-539-4

No 612-026-00-5





ES: difenilamina  
 DA: diphenylamin  
 DE: Diphenylamin  
 EL: διφαινυλαμίνη  
 EN: diphenylamine  
 FR: diphénylamine  
 IT: difenilamina  
 NL: difenylamine  
 PT: difenilamina  
 FI: difenyyliamiini  
 SV: difenylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23/24/25	R 33	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T	N	
		
		R: 23/24/25-33-50/53
		S: (1/2-)28-36/37-45-60-61

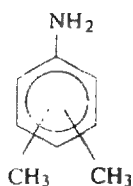
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazioni, Concentratiegrenzen,  
 Limites de concentraçao, Pitoisuusrajat, Koncentrationsgrænser*


Cas No —

EEC No —

No 612-027-00-0

NOTA C



ES: xilidina

DA: xylidin

DE: Xylidin

EL: ξυλιδίνη

EN: xylidine

FR: xyridine

IT: xilidina

NL: xylidine

PT: xilidina

FI: ksylidiini

SV: xylidin, aminodimetylbenzen

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23/24/25	R 33	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

<p>T</p>	<p>N</p>	R: 23/24/25-33-51/53
		S: (1/2)-28-36/37-45-61

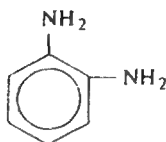
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*


Cas No 95-54-5 [1]  
108-45-2 [2]  
106-50-3 [3]

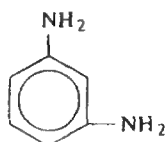
EEC No 202-430-6 [1]  
203-584-7 [2]  
203-404-7 [3]

No 612-028-00-6

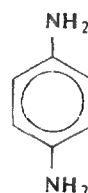
NOTA C



[1]



[2]



[3]

- ES: *o*-fenilendiamina [1]; *m*-fenilendiamina [2]; *p*-fenilendiamina [3]  
DA: *o*-phenylendiamin [1]; *m*-phenylendiamin [2]; *p*-phenylendiamin [3]  
DE: *o*-Phenylendiamin [1]; *m*-Phenylendiamin [2]; *p*-Phenylendiamine [3]  
EL: *o*-φαινυλενοδιαμίνη [1]; *μ*-φαινυλενοδιαμίνη [2]; *π*-φαινυλενοδιαμίνη [3]  
EN: *o*-phenylenediamine [1]; *m*-phenylenediamine [2]; *p*-phenylenediamine [3]  
FR: *o*-phénylènediamine [1]; *m*-phénylènediamine [2]; *p*-phénylènediamine [3]  
IT: *o*-fenilendiamina [1]; *m*-fenilendiamina [2]; *p*-fenilendiamina [3]  
NL: *o*-fenyleendiamine [1]; *m* fenyleendiamine [2]; *p*-fenyleendiamine [3]  
PT: *o*-fenilenodiamina [1]; *m*-fenilenodiamina [2]; *p*-fenilenodiamina [3]  
FI: *o*-fenyleenidiamiini [1]; *m*-fenyleenidiamiini [2]; *p*-fenyleenidiamiini [3]  
SV: *o*-fenylendiamin [1]; *m*-fenylendiamin [2]; *p*-fenylendiamin [3]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23/24/25 R 43 N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*



R: 23/24/25-43-50/53

S: (1/2-)28-36/37-45-60-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*

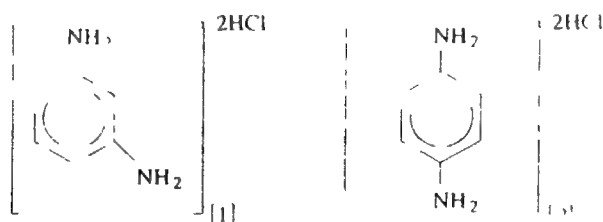
C ≥ 5 %	T; R 23/24/25-43
1 % ≤ C < 5 %	Xn; R 20/21/22-43

Cas No 541-69-5 [1]  
624-18-0 [2]

EEC No 208-790 0 [1]  
210-834 9 [2]

No 612-029-00-1

NOTA C



- ES *m*-fenilenodiamina, diclorhidrato [1], benceno 1,4-diamina, diclorhidrato [2]  
 DA *m*-phenylenediaminedihydrochlorid [1], benzen 1,4 diaminedihydrochlorid [2]  
 DE *m*-Phenylenediaminedihydrochlorid [1], Benzol-1,4-diaminedihydrochlorid [2] 1,3-Phenylenediamindihydrochloride [1], 1,4-Phenylenediamin-dihydrochloride [2]  
 EL  $\mu$ -φαινυλενοδιαμίνη, διυδροχλωρική [1] δενζόλο 1,4 διαμίνη διυδροχλωρική [2]  
 EN *m*-phenylenediamine dihydrochloride [1], benzene-1,4 diamine dihydrochloride [2], benzene 1,3 diamine hydrochloride [1], *p*-phenylenediamine, dihydrochloride [2]  
 FR *m*-phénylènediamine, dichlorhydrate [1], benzène-1,4-diamine, dichlorhydrate [2]  
 IT *m*-fenilendiamina, dicloridrato [1], benzen 1,4 diamina, dicloridrato [2]  
 NL *m*-fenyleendiaminedihydrochloride [1], benzeen 1,4 diaminedihydrochloride [2]  
 PT *m*-fenilenodiamina, dicloridrato [1], benzeno 1,4 diamina, dicloridrato [2]  
 FI *m*-fenylenidiamiinidihydrokloridi [1], *p*-fenylenidiamiinidihydrokloridi [2]  
 SV *m*-fenylenediamindihydroklorid [1], *p*-fenylenediamindihydroklorid [2]

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering

T, R 23/24/25 R 43 N, R 50/53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning

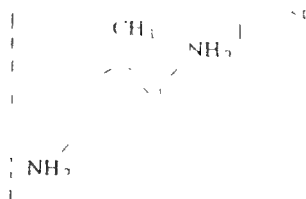
T	N	
		R 23/24/25 43 50/53
		S (1/2) 28 36/37 45 60 61

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoajuvirgatai, Konzentrationsgrenser


Cas No 615-50-9  
6369-59-1

EEC No 210-431-8  
228-871-4

No 612-030-00-7



- ES: sulfato de 2-metil-*p*-fenilendiamina  
 DA: 2-methyl-*p*-phenylendiaminsulfat  
 DE: 2-Methyl-*p*-phenylendiaminsulfat; Toluylen-2,5-diaminsulfat  
 EL: θειική 2-μεθυλο-π-φαινυλενοδιαμίνη  
 EN: 2-methyl-*p*-phenylenediamine sulphate  
 FR: sulfate de 2-méthyl-*p*-phénylènediamine; sulfate de 2,5-diaminotoluène  
 IT: solfato di 2-metil-*p*-fenilendiamina; 2,5-diaminotoluene solfato  
 NL: 2-methyl-*p*-fenyleendiaminesulfaat  
 PT: sulfato de 2-metil-*p*-fenilenodiamina  
 FI: 2-metyyli-*p*-fenyleenidiamiinisulfaatti  
 SV: 2-metyl-*p*-fenylendiaminsulfat; 2-metyl-1,4-benzendiaminsulfat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 25	Xn; R 20/21	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinntä, Märkning*

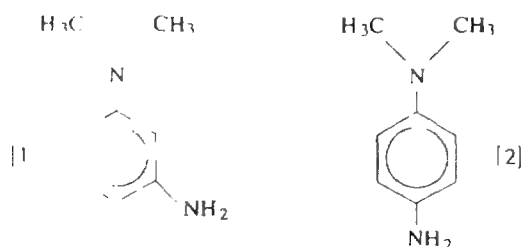
T	N	
		R: 20/21-25 43-50, 53
		S: (1/2-)24 37-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*


Cas No 2836-04-6 [1]  
99-98-9 [2]EEC No 220-623-3 [1]  
202-807-5 [2]

No 612-031-00-2

NOTA C



- ES: *N,N*-dimetilbenceno-1,3-diamina [1]; 4-amino-*N,N*-dimetilaniлина [2]  
 DA: *N,N*-dimethylbenzen-1,3-diamin [1]; 4-amino-*N,N*-dimethylanilin [2]  
 DE: *N,N*-Dimethylbenzol-1,3-diamin [1]; 4-Amino-*N,N*-dimethylanilin [2]; *N,N*-Dimethylphenylendiamin (*m,p*)  
 EL: *N,N*-διμεθυλοδενζολο-1,3-διαμίνη [1]; 4-αμινο-*N,N*-διμεθυλανιλίνη [2]  
 EN: *N,N*-dimethylbenzene-1,3-diamine [1]; 4-amino-*N,N*-dimethylaniline [2]; 3-amino-*N,N'*-dimethylaniline [1]; *N,N'*-dimethylbenzene-1,4-diamine  
 FR: *N,N*-diméthylbenzène-1,3-diamine [1]; 4-amino-*N,N*-diméthylaniline [2]  
 IT: *N,N*-dimetilbenzen-1,3-diamina [1]; 4-amino-*N,N*-dimetilaniлина [2]  
 NL: *N,N*-dimethylbenzeen-1,3-diamine [1]; 4-amino-*N,N*-dimethylaniline [2]  
 PT: *N,N*-dimetilbenzeno-1,3-diamina [1]; 4-amino-*N,N*-dimetilaniлина [2]  
 FI: *N,N*-dimetyylibentseeni-1,3-diamiini [1]; 4-amino-*N,N*-dimetyylaniliini [2]  
 SV: *N,N*-dimetyl-1,3-benzendiamin [1]; *N,N*-dimetyl-1,4-benzendiamin [2]; *N,N*-dimetylphenylendiamin (*m, p*)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23/24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*



R: 23/24/25

S: (1/2-)28-45

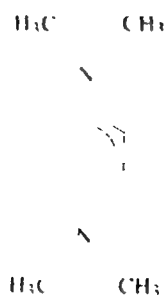
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisusrajat, Konzentrationsgrænser*




Cas No 100-22-1

EEC No 202-831-6

No 612-032-00-8



- ES . *N,N,N',N'*-tetrametil-*p*-fenilendiamina  
 DA *N,N,N',N'*-tetramethyl-*p*-phenylendiamin  
 DE *N,N,N',N'*-Tetramethyl-*p*-phenylendiamin  
 EL *N,N,N',N'*-τετραμεθυλο-*p*-φαινυλενοδιαμίνη  
 EN *NNN',N'*-tetramethyl-*p*-phenylenediamine  
 FR *N,N,N',N'*-tétraméthyl-*p*-phénylènediamine  
 IT *N,N,N',N'*-tetrametil-*p*-fenilendiamina  
 NL *N,N,N',N'*-tetramethyl-*p*-fenyleendiamine  
 PT *N,N,N',N'*-tetrametil-*p*-fenilenodiamina

*Classificação Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificatie*

Xn , R 20/21/22

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kennzeichen Rotulagem*

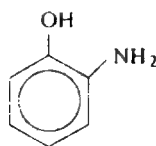
Xn	
	R 20/21/22
	S (2 )28

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκέντρωσης Concentration limit*  
*Limites de concentration, Limite de concentration Concentratiegrenzen Limites de concentration*


Cas No 95-55-6

EEC No 202-431-1

No 612-033-00-3



ES: 2-aminofenol  
 DA: 2-aminophenol  
 DE: 2-Aminophenol  
 EL: 2-αμινοφαινόλη  
 EN: 2-aminophenol  
 FR: 2-aminophénol  
 IT: 2-aminofenolo  
 NL: 2-aminofenol  
 PT: 2-aminofenol  
 FI: 2-aminofenoli  
 SV: 2-aminofenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn, R 20/22

Muta. Cat. 3; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

Xn



R: 20/22-40

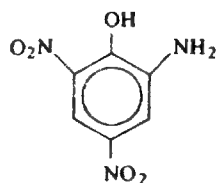
S: (2-)28-36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*


Cas No 96-91-3

EEC No 202-544-6

No 612-034-00-9



ES : 2-amino-4,6-dinitrofenol ; ácido picramico

DA : 2-amino-4,6-dinitrophenol ; picraminsyre

DE : 2-Amino-4,6-dinitro-phenol ; Pikraminsäure

EL : 2-αμινό-4,6-δινιτροφαινόλη· πικραμικό οξύ

EN : 2-amino-4,6-dinitrophenol ; picramic acid

FR : 2-amino-4,6-dinitrophénol ; acide picramique

IT : 2-amino-4,6-dinitrofenolo ; acido picrammico

NL : 2-amino-4,6-dinitrofenol ; pikraminezuur

PT : 2-amino-4,6-dinitrofenol ; ácido picramico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E	R 1	Xn ; R 20/21/22	R 52-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E	Xn	
		R : 1-20/21/22-52/53
		S : (2-)35-61

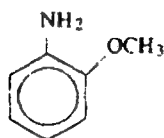
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 90-04-0

EEC No 201-963-I (o)

No 612-035-00-4

NOTA E



ES : 2-metoxianilina ; o-anisidina,  
 DA : 2-methoxyanilin ; o-anisidin,  
 DE : 2-Methoxy-anilin ; o-Anisidin,  
 EL : 2-μεθοξυανιλίνη ο-ανισιδίνη,  
 EN : 2-methoxyaniline ; o-anisidine,  
 FR : 2-méthoxyaniline ; o-anisidine,  
 IT : 2-metossi-anilina ; o-anisidina,  
 NL : 2-methoxy-aniline ; o-anisidine,  
 PT : 2-metoxianilina ; o-anisidina,

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2 ; R 45	T+ ; R 26/27/28	R 33	N ; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	N	
		
		R : 45-26/27/28-33-51/33
		S : 53-45-61

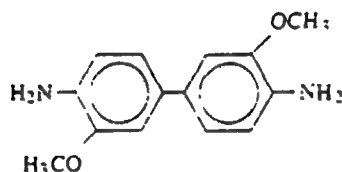
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 119-90-4

EEC No 204-355-4

No 612-036-00-X

NOTA E



ES: 3,3'-dimetoxibencidina; o-dianisidina

DA: 3,3'-dimethoxybenzidin; o-dianisidin

DE: 3,3'-Dimethoxybenzidin; o-Dianisidin

EL: 3,3'-διμεθοξυβενζιδίνη · ο-διανισιδίνη

EN: 3,3'-dimethoxybenzidine; o-dianisidine

FR: 3,3'-diméthoxybenzidine; o-dianisidine

IT: 3,3'-dimetossibenzidina; o-dianisidina

NL: 3,3'-dimethoxybenzidine; o-dianisidine

PT: 3,3'-dimetoxibenzidina; o-dianisidina

Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificație en Indeling Classificação

Carc. Cat. 2; R 45

Xn; R 22

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem

T	
	R: 45-22
	S: 53-45

Límites de concentración Konzentrationsgrenzen Konzentrationsgrenzuerte. Ορια συγκεντρώσεως Concentration limits  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 612-037-00-5

NOTA A

NOTA E

ES : sales de 3,3'-dimetoxibencidina ; sales de o-dianisidina  
 DA : salte af 3,3'-dimethoxvbenzidin ; salte af o-dianisidin  
 DE : Salze von 3,3'-Dimethoxvbenzidin ; Salze von o-Dianisidin  
 EL : άλατα της 3,3'-διμεθοξυβενζιδίνης ; άλατα της ο-διανισιδίνης  
 EN : salts of 3,3'-dimethoxvbenzidine ; salts of o-dianisidine  
 FR : sels de 3,3'-dimethoxvbenzidine ; sels de o-dianisidine  
 IT : 3,3'-dimetossibenzidina sali ; o-dianisidina sali  
 NL : zouten van 3,3'-dimethoxvbenzidine ; zouten van o-dianisidine  
 PT : sais de 3,3'-dimetoxibenzidina ; sais de o-dianisidina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 22
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

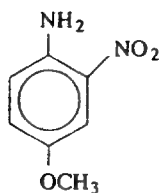
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 45-22</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraç3o*


Cas No 96-96-8

EEC No 202-547-2

No 612-038-00-0

ES: 2-nitro-*p*-anisidinaDA: 2-nitro-*p*-anisidinDE: 2-Nitro-*p*-anisidin; 4-Methoxy-2-nitro-anilin

EL: 2-νιτρο-π-ανισιδίνη

EN: 2-nitro-*p*-anisidine; 4-methoxy-2-nitroanilineFR: 2-nitro-*p*-anisidineIT: 2-nitro-*p*-anisidina; 2-nitro-4-metossianilinaNL: 2-nitro-*p*-anisidinePT: 2-nitro-*p*-anisidinaFI: 2-nitro-*p*-anisiidiini; 4-metoksi-2-nitroaniliiniSV: 2-nitro-*p*-anisidin; 4-metoxi-2-nitro-anilin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T+; R 26/27/28	R 33	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäät, Märkning*

T+



R: 26/27/28-33-52/53

S: (1/2-)28-36/37-45-61

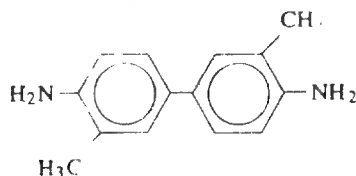
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã, Pitoisnusrajat, Konzentrationsgrænser*


Cas No 119-93-7

EEC No 204-358-0

No 612-041-00-7

NOTA E

ES: 4,4'-bi-*o*-toluidinaDA: 4,4'-bi-*o*-toluidinDE: 4,4'-Bi-*o*-toluidin; 3,3'-DimethylbenzidinEL: 4,4'-δι-*o*-τολουδίνηEN: 4,4'-bi-*o*-toluidineFR: 4,4'-bi-*o*-toluidineIT: 4,4'-bi-*o*-toluidina; 3,3'-dimetilbenzidinaNL: 4,4'-bi-*o*-toluidinePT: 4,4'-bi-*o*-toluídinaFI: 4,4'-bi-*o*-toluidiiniSV: 4,4'-bi-*o*-toluidin; 3,3'-dimetylbenzidin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45

Xn; R 22

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnä, Märkning*



R: 45-22-51/53

S: 53-45-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*

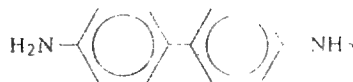



Cas No 92-87-5

EEC No 202-199-1

No 612-042-00-2

NOTA E





ES: benzidina  
 DA: benzidin  
 DE: Benzidin  
 EL: βενζιδίνη  
 EN: benzidine  
 FR: benzidine  
 IT: benzidina; 1,1'-bifenil-4,4' diamina  
 NL: benzidine  
 PT: benzidina  
 FI: bentsidiini  
 SV: benzidin; 1,1'-bifenyl-4,4'-diamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 1; R 45	Xn; R 22	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

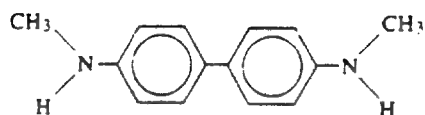
<p>T</p> 	<p>N</p> 	R: 45-22-50/53
		S: 53-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoissuusrajat, Konzentrationsgrænser*


Cas No 2810-74-4

EEC No —

No 612-043-00-8



ES : N,N'-dimetilbencidina

DA : N,N'-dimethylbenzidin

DE : N,N'-Dimethyl-benzidin

EL : N,N'-διμεθυλοβενζιδίνη

EN : N,N'-dimethylbenzidine

FR : N,N'-diméthylbenzidine

IT : N,N'-dimetilbenzidina

NL : N,N'-dimethylbenzidine

PT : N,N'-dimetilbenzidina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

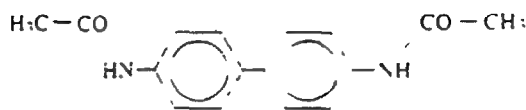
Xn	
	R : 20/21/22 S : (2-)22-36

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 613-35-4

EEC No 210-338-2

No 612-044-00-3



- ES . N.N'-diacetilbencidina  
 DA . N.N'-diacetylbenzidin  
 DE . N.N'-Diacetyl-benzidin  
 EL . Ν.Ν'-διακετυλοδενζιδίνη  
 EN . N.N'-diacetylbenzidine  
 FR . N.N'-diacétylbenzidine , 4,4'-diacetamidobiphenyle  
 IT . N.N'-diacetilbenzidina  
 NL . N,N'-diacetylbenzidine  
 PT . N,N'-diacetilbenzidina

Classification Klassifizierung Einstufung Ταξινόηση Classification Classificazione Including Classificação

Xn , R 20/21/22

Labeling Etiketierung Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kennzeichen Rotulagem

Xn	
	R 20/21/22
	S (2-)22-36

Limit of concentration Konzentrationsgrenze, Konzentrationsgrenzwert. Όρια συγκέντρωσης Concentration limits  
 Limites de concentration Limite de concentration Concentraziongrenzen Limites de concentração


Cas No 107-11-9

EEC No 203-463-9

No 612-046-00-4






ES: alilamina  
 DA: allylamin  
 DE: Allylamin  
 EL: αλκυλαμίνη  
 EN: allylamine  
 FR: allylamine  
 IT: alilamina  
 NL: allylamine  
 PT: alilamina  
 FI: alkyylamiini  
 SV: allylamin, 2-propen-1-amin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	T; R 23/24/25	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnt, Märkning*

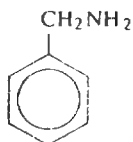
F	T	N	
			
			R: 11-23/24/25-51/53
			S: (1/2)-9-16-24/25-45-61

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*


Cas No 100-46-9

EEC No 202-854-I

No 612-047-00-X




ES: bencilamina  
 DA: benzylamin  
 DE: Benzylamin  
 EL: βενζυλαμίνη  
 EN: benzylamine  
 FR: benzylamine  
 IT: benzilamina  
 NL: benzylamine  
 PT: benzilamina  
 FI: bentsyylamiini  
 SV: benzylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 21/22    C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnit, Märkning*

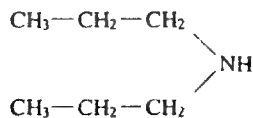
<p>C</p> 	<p>R: 21/22-34            S: (1/2-)26-36/37/39-45</p>
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*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*


Cas No 142-84-7

EEC No 205-565-9

No 612-048-00-5





ES: dipropilamina  
 DA: dipropylamin  
 DE: Dipropylamin  
 EL: διπροπυλαμίνη  
 EN: dipropylamine  
 FR: dipropylamine  
 IT: dipropilamina  
 NL: dipropylamine  
 PT: dipropilamina  
 FI: dipropyylamiini  
 SV: dipropylamin

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassifisering*

F, R 11	*Xn, R 20/21/22	C, R 35
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

F	C	
		R 11-20/21/22 35
		S (1/2)16 26 36/37/39 45

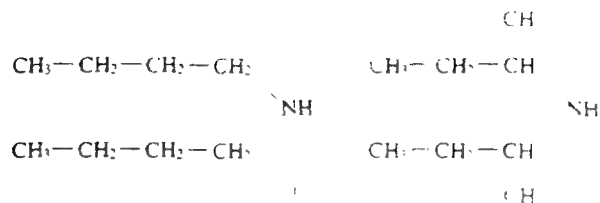
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*

C ≥ 25 %	C, R 20/21/22 35
10 % ≤ C < 25 %	C, R 35
5 % ≤ C < 10 %	C, R 34
1 % ≤ C < 5 %	Xi, R 36/37/38

Cas No 111-92-2 [1]  
626-23-3 [2]

EEC No 203-921-8 [1]  
210-937-9 [2]

No 612-049-00-0



ES: di-*n*-butilamina [1], di-*sec*-butilamina [2]  
 DA: dibutylamin [1], di-*sec*-butylamin [2]  
 DE: Di-*n*-butylamin [1], Di-*sec*-butylamin [2]  
 EL: δι-*n*-βουτυλαμίνη [1], δι-δευτεροταγής-βουτυλαμίνη [2]  
 EN: di-*n*-butylamine [1], di-*sec*-butylamine [2]  
 FR: di-*n*-butylamine [1], di-*sec*-butylamine [2]  
 IT: di-*n*-butilamina [1], di-*sec*-butilamina [2]  
 NL: di-*n*-butylamine [1], di-*sec*-butylamine [2]  
 PT: di-*n*-butilamina [1], di-*sec*-butilamina [2]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indéling, Classificaçõe

R 10

Xn ; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagen

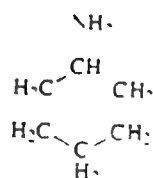
Xn	
	R : 10-20/21/22
	S : (2)

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçõe


Cas No 108-91-8

EEC No 203-629-0

No 612-050-00-6



ES: ciclohexilamina  
 DA: cyclohexylamin  
 DE: Cyclohexylamin  
 EL: κυκλοεξυλαμίνη  
 EN: cyclohexylamine  
 FR: cyclohexylamine  
 IT: cicloesilamina  
 NL: cyclohexylamine  
 PT: cicloesilamina

Classification: Klassifisering: Einstufung: Ταξινόμηση: Classificazione: Clasificare: Clasificare: Clasificare: Clasiificare

R 10

Xn, R 21/22

C, R 34

Precaution: Forhåttelse: Kennzeichnung: Επισήμανση: Labeling: Etiketler: Precaution: Kennzeichen: Rotulage

C



R 10/21/22/34

S (1/2-)36/37/39/45

Limits of concentration: Konzentrationsgrenzen: Konzentration-grenzuur: Ορια συγκεντρώσεως: Concentration limits: Limites de concentration: Limite di concentrazione: Concentratiegrenzen: Limites de concentracão

C ≥ 25 %	C, R 21/22-34
10 % ≤ C < 25 %	C, R 34
2 % ≤ C < 10 %	Xn, R 36/38

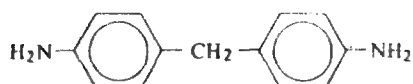


Cas No 101-77-9

EEC No 202-974-4

No 612-051-00-1

NOTA E



ES : 4,4'-metilendianilina ; 4,4'-diaminodifenilmetano

DA : 4,4'-diaminodiphenylmethan

DE : 4,4'-Diamino-diphenyl-methan

EL : 4,4'-διαμινοδιφαινυλομεθάνιο· 4,4'-μεθυλενοδιανιλίνη

EN : 4,4'-diaminodiphenylmethane ; 4,4'-methylenedianiline

FR : 4,4'-diaminodiphénylméthane ; 4,4'-méthylènedianiline

IT : 4,4'-diaminodifenilmetano

NL : 4,4'-diaminodifenylmethaan

PT : 4,4'-diaminodifenilmetano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação

Carc. Cat. 2 ; R 45

Xn ; R 20/21/22-48/20/21

R 43

N ; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

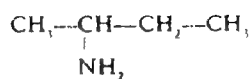
T	N	
		R : 45-20/21/22-48/20/21-43-51/53
		S : 53-45-61

Limites de concentração, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 13952-84-6

EEC No 237-732-7

No 612-052-00-7






ES : sec-butilamina  
 DA : sec-butylamin  
 DE : Sec-Butylamin  
 EL : sec-βουτυλαμίνη  
 EN : sec-butylamine  
 FR : sec-butylamine  
 IT : sec-butylammina  
 NL : sec-butylamine  
 PT : sec-butilamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

F ; R 11	Xn ; R 20/22	C ; R 35	N ; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

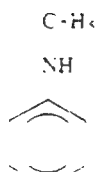
F	C	N	
			R : 11-20/22-35-50 S : (1/2-)9-16-26-28-36/37/39-45-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 103-69-5

EEC No 203-135-5

No 612-053-00-2



ES: N-etilanilina  
 DA: N-ethylanilin  
 DE: N-Ethylanilin  
 EL: Ν-αιθυλανιλίνη  
 EN: N-ethylaniline  
 FR: N-éthylaniline  
 IT: N-etilanilina  
 NL: N-ethylaniline  
 PT: N-etilanilina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T: R 23/24/25	R 33
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

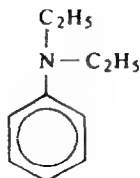
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 23/24/25-33</p> <p>S : (1/2-)28-37-45</p> </div> </div>	
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 91-66-7

EEC No 202-088-8

No 612-054-00-8



ES : *N,N*-dietilanilina  
 DA : *N,N*-diethylanilin  
 DE : *N,N*-Diethylanilin  
 EL : *N,N*-διαιθυλανιλίνη  
 EN : *NN*-diethylaniline  
 FR : *N,N*-diéthylaniline  
 IT : *N,N*-dietilanilina  
 NL : *N,N*-diethylaniline  
 PT : *N,N*-dietilanilina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T ; R 23/24/25    R 33    N ; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	N	
		R : 23/24/25-33-51/53 S : (1/2-)28-37-45-61

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

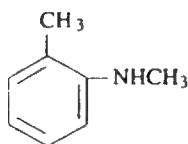
C ≥ 5 %	T ; R 23/24/25-33
1 % ≤ C < 5 %	Xn ; R 20/21/22-33

Cas No 611-21-2 [1]  
696-44-6 [2]  
623-08-5 [3]

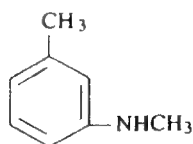
EEC No 210-260-9 [1]  
211-795-0 [2]  
210-769-6 [3]

No 612-055-00-3

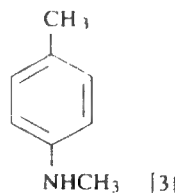
NOTA C



[1]



[2]



[3]

- ES: N-metil-o-toluidina [1]; N-metil-m-toluidina [2]; N-metil-p-toluidina [3]  
DA: N-methyl-o-toluidin [1]; N-methyl-m-toluidin [2]; N-methyl-p-toluidin [3]  
DE: N-Methyl-o-toluidin [1]; N-Methyl-m-toluidin [2]; N-Methyl-p-toluidin [3]  
EL: Ν-μεθυλο-ο-τολουιδίνη [1]; Ν-μεθυλο-μ-τολουιδίνη [2]; Ν-μεθυλο-π-τολουιδίνη [3]  
EN: N-methyl-o-toluidine [1]; N-methyl-m-toluidine [2]; N-methyl-p-toluidine [3]  
FR: N-méthyl-o-toluidine [1]; N-méthyl-m-toluidine [2]; N-méthyl-p-toluidine [3]  
IT: N-metil-o-toluidina [1]; N-metil-m-toluidina [2]; N-metil-p-toluidina [3]  
NL: N-methyl-o-toluidine [1]; N-methyl-m-toluidine [2]; N-methyl-p-toluidine [3]  
PT: N-metil-o-toluidina [1]; N-metil-m-toluidina [2]; N-metil-p-toluidina [3]  
FI: N-metyyli-o-toluidiini [1]; N-metyyli-m-toluidiini [2]; N-metyyli-p-toluidiini [3]  
SV: N-metyl-o-toluidin [1]; N-metyl-m-toluidin [2]; N-metyl-p-toluidin [3]; N,2-dimetylbenzenamin [1]; N,3-dimetylbenzenamin [2]; N,4-dimetylbenzenamin [3]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering

T; R 23/24/25 R 33 R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning

T



R: 23/24/25-33-52/53

S: (1/2-)28-36/37-45-61

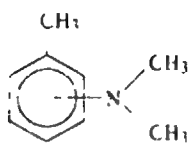
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentraçã, Pitoisuusrajat, Konzentrationsgrænser


Cas No —

EEC No —

No 612-056-00-9

NOTA C




ES N,N-dimetiltoluidina  
 DA N,N-dimethyltoluidin  
 DE N,N-Dimethyl-toluidin  
 EL Ν,Ν-διμεθυλοτολουιδίνη  
 EN N,N-dimethyltoluidine  
 FR N,N-diméthyltoluidine  
 IT N,N-dimetiltoluidina  
 NL N,N-dimethyltoluidine  
 PT N,N-dimetiltoluidina

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T, R 23/24/25 R 33 R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 23/24/25-33-52/53            S : (1/2-)28-36/37-45-61</p>
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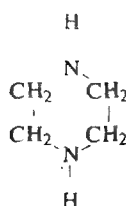
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçao

C ≥ 5 %	T ; R 23/24/25-33
1 % ≤ C < 5 %	Xn ; R 20/21/22-33

Cas No 110-85-0

EEC No 203-808-3

No 612-057-00-4



ES: piperazina  
 DA: piperazin  
 DE: Piperazin  
 EL: πιπεραζίνη  
 EN: piperazine  
 FR: piperazine  
 IT: piperazina  
 NL: piperazine  
 PT: piperazina  
 FI: piperatsiini  
 SV: piperazin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

C; R 34	R 42/43	R 52/53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinäät, Märkning*

C



R: 34-42/43-52/53

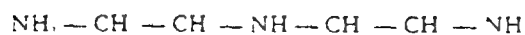
S: (1/2-122-26-36/37/39-45-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*


Cas No 111-40-0

EEC No 203-865-4

No 612-058-00-X



- ES 1,5-diamino-3-azopentano, dietilentriammina  
 DA 1,5-azapentan-1,5-diamin, diethylentriamin  
 DE 3-Azapentan-1,5-diamin, Diethylentriamin  
 EL 2,2'-αινοδιαθυλαμίνη διαθυλενοτριαμίνη  
 EN 2,2'-iminodiethylamine, diethylenetriamine  
 FR 1,5-azapentane-1,5-diamine, diethylenetriamine  
 IT 1,5-Azapentano-1,5-diamina, dietilenetriamina  
 NL 1,5-diamino-3-azapentaaan, diethyleentriamine  
 PT 1,5-azapentano-1,5-diamina, dietilenotriamina


Classification Klassificering Einstufung Ταξινόμηση Classification Classificazione Indeling Classificazioe

Xn, R 21/22

C, R 34

R 43

Etiquetado Etikettering Kennzeichnung Επισήμανση Etiketado Etikettatur Keimerken Rotulagem

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>C</p>  </div> <div style="text-align: right;"> <p>R 21/22/34/43</p> <p>S (1/2)26-36/37/39-45</p> </div> </div>
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Limites de concentration Konzentrationsgrænser Konzentrationsgrenzuerte Ορια συγκεντρώσεως Concentration limits  
 Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao

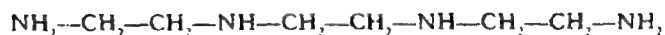
C ≥ 25 %	C, R 21/22/34-43
10 % ≤ C < 25 %	C, R 34-43
5 % ≤ C < 10 %	Xn, R 36/38-43
1 % ≤ C < 5 %	Xn, R 43



Cas No 112-24-3

EEC No 203-950-6

No 612-059-00-5




- ES : 3,6-diazaoctano-1,8-diamina ; trietilentetramina  
 DA : 3,6-diazaoctan-1,8-diamin ; triethylentetramin  
 DE : 3,6-diazaoctan-1,8-diamin ; Triethylentetramin  
 EL : 3,6-διαζαοκτανο-1,8-διαμίνη ; τριαιθυλενοτετραμίνη  
 EN : 3,6-diazaoctanethylenediamin ; triethylenetetramine  
 FR : 3,6-diazaoctane-1,8-diamine ; triéthylènetétramine  
 IT : 3,6-diazaottano-1,8-diamina ; trietilentetramina  
 NL : 1,8-diamino-3,6-diazaoctaan ; triethyleentetramine  
 PT : 3,6-diazaoctano-1,8-diamina ; trietilenotetramina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 21	C ; R 34	R 43	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

C	
	<p>R : 21-34-43-52/53</p> <p>S : (1/2-)26-36/37/39-45-61</p>

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 25%	C ; R 21-34-43
10 % ≤ C < 25 %	C ; R 34-43
5 % ≤ C < 10 %	Xi ; R 36/38-43
1 % ≤ C < 5 %	Xi ; R 43

Cas No. 112-57-2

EEC No 203-986-2

No 612-060-00-0





- ES : 3,6,9-triazaundecano-1,11-diamina ; tetraetilenpentamina  
 DA : 3,6,9-triazaundexan-1,11-diamin ; tetraethylene pentamin  
 DE : 3,6,9-Triazaundecan-1,11-diamin ; Tetraethylenpentamin  
 EL : 3,6,9-τριαζαενδεκανο-1,11-διαμίνη· τετρααιθυλενοπενταμίνη  
 EN : 3,6,9-triazaundecamethylenediamine ; tetraethylenepentamine  
 FR : 3,6,9-triazaundécane-1,11-diamine ; tétraéthylènepentamine  
 IT : 3,6,9-triazaundecano-1,11-diamino ; tetraetilenepentamina  
 NL : 1,11-diamino-3,6,9-triazaundecaan ; tetraethyleenpentamine  
 PT : 3,6,9-triazaundecano-1,11-diamino ; tetraetilenopentamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn ; R 21/22	C ; R 34	R 43	N ; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

C	N	
		R : 21/22-34-43-51/53 S : (1/2-)26-36/37/39-45-61

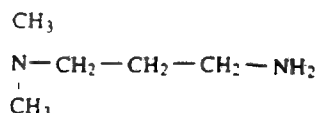
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 25 %	C ; R 21/22-34-43
10 % ≤ C < 25 %	C ; R 34-43
5 % ≤ C < 10 %	Xi ; R 36/38-43
1 % ≤ C < 5 %	Xi ; R 43

Cas No 109-55-7

EEC No 203-680-9

No 612-061-00-6



ES: N,N-dimetil-1,3-diaminopropano ; 3-(dimetilamino)propilamina  
 DA: N,N-dimethyl-1,3-diaminopropan ; 3-(dimethylamino)propylamin  
 DE: N,N-Dimethyl-1,3-diaminopropan ; 3-Dimethylamino-propylamin  
 EL: N,N-διμεθυλο-1,3-διαμινοπροπάνιον  
 EN: 3-aminopropyldimethylamine ; N,N-dimethyl-1,3-diaminopropane  
 FR: N,N-diméthyl-1,3-propanediamine ; 3-(diméthylamino)propylamine  
 IT: N,N-dimetile-1,3-diaminopropano ; 3-(dimetilamino) propilamina  
 NL: N,N-dimethyl-1,3-diaminopropaan ; 3-(dimethylamino)propylamine  
 PT: N,N-dimetil-1,3-diaminopropano ; 3-(dimetilamino) propilamina

Classificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 10

Xn ; R 22

C ; R 34

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C



R : 10-22-34-43

S : (1/2)-26-36/37/39-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 25 \%$	C ; R 22-34-43
$10 \% \leq C < 25 \%$	C ; R 34-43
$5 \% \leq C < 10 \%$	Xi ; R 36/38-43
$1 \% \leq C < 5 \%$	Xi ; R 43

Cas No 104-78-9

EEC No 203 230 4

No 0062 00 1

 $C_2H_5$  $N-CH_2-CH_2-CH_2-NH$  $C_2H_5$ 

- ES N,N-dietyl-1,3-diaminopropano 3-(dietylamino)propilamina  
 DA N,N-diethyl-1,3-diaminopropan 3-(diethylamino)propylamine  
 DE N,N-Diethyl-1,3-diaminopropan 3-Diethylamino propylamin  
 EL Ν,Ν-διαεθυλο-1,3-διαμινολπροπανιον  
 EN N-aminopropyl-diethylamine N,N-diethyl-1,3-diamino propylamine  
 FR N,N-diethyl-1,3-propanediamine 3-(diethylamino)propylamine  
 IT N,N-dietyl-1,3-diaminopropano 3-(dietylamino) propilamina  
 NL N,N-diethyl-1,3-diaminopropan 3-(diethylamino)propylamine  
 PT N,N-dietyl-1,3-diaminopropano 3-(dietylamino)propilamina

Classification: K13/13/13/13 Einstufung: Toxizität (Classification: C) Einstufung: C

R 10	Xn R 21/22	C R 34	R 43
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Label: 10 Etiketterung Kennzeichnung Einstufung: 1

Label: 10 Etiketterung Kennzeichnung: 1

C	R 10, R 21/22, R 34, R 43
	S (10) - 0,501, 0,501, 0,501

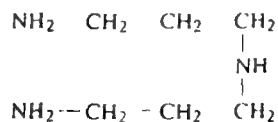
Limites de concentration: Konzentrationsgrenzen Konzentrationsgrenzen Oria di concentrazione Concentration /  
 Limites de concentration Limite di concentrazione Concentrationgrenzen / limite de concentration

$C \geq 25\%$	C, R 21, 22, 34, 43
$10\% \leq C < 25\%$	C, R 34, 43
$5\% \leq C < 10\%$	Xn, R 36/38-43
$1\% \leq C < 5\%$	Xn, R 43

C85 No 56-18-8

EEC No 200 261 2

No 612-063-00-7





- ES 3,3'-iminodi(propilamina)  
 DA 3,3'-iminodi(propylamin)  
 DE 3,3'-Iminodi(propylamin); Dipropylentriamin  
 EL 3,3'-ιμινοδι(προπυλαμίνη)  
 EN 3,3'-iminodi(propylamine), dipropylene triamine  
 FR 3,3'-iminodi(propylamine), dipropylène triamine  
 IT 3,3'-iminodi(propilamina), dipropilene triamina  
 NL 3,3'-iminodi(propylamine)  
 PT 3,3'-iminodi(propilamina)  
 FI 3,3'-iminodi(propyyliamiini), dipropyleenitriamiini  
 SV 4-azaheptan-1,7-diamin, dipropylentriamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T+, R 26	T, R 24	Xn, R 22	C, R 35	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

T+	C	
		R 22 24-26-35-43
		S (1/2)-26 28 36/37/39-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoiustarajad, Konzentrationsgrenzen*


Cas No 4067-16-7

EEC No 223-775-9

No 612-064-00-2



ES : 3,6,9,12-tetraazatetradecano-1,14-diamina ; pentaetilenhexamina

DA : 3,6,9,12-tetraazatetradecan-k,4-diamin ; pentaethylenhexamin

DE : 3,6,9,12-Tetraazatetradecan-1,14-diamin ; Pentaethylenhexamin

EL : πεντααιθυλενοεξαμίνη 3,6,9,12-τετρααζαδεκατετρανο-1,4-διαμίνη

EN : 3,6,9,12-tetra-azatetradecamethylenediamine ; pentachylenhexamine

FR : 3,6,9,12-tétraazatétradécane-1,14-diamine ; pentaéthylénchexamine

IT : 3,6,9,12-tetraazatetradecano-1,14-diamina ; pentactileneesamina


NL : 1,14-diamine-3,6,9,12-tetraazatetradecan ; pentaethylenhexamine

PT : 3,6,9,12-tetraazatetradecano-1,14-diamina ; pentaetilenohexamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C ; R 34    R 43    N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	N	
		
		R : 34-43-50/53
		S : (1/2-)26-36/37/39-45-60-61

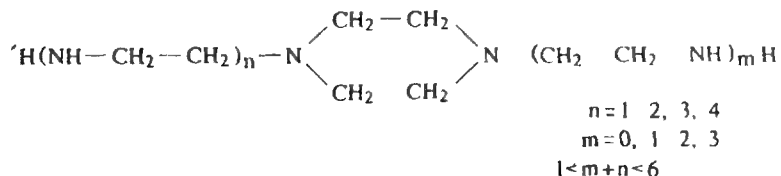
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	C ; R 34-43
5 % ≤ C < 10 %	Xi ; R 36/38-43
1 % ≤ C < 5 %	Xi ; R 43

Cas No —

EEC No —

No 612-065-00-8





- ES: polietilenpolyaminas excepto aquellos específicamente expresados en este Anexo
- DA: polyethylenpolyaminer undtagen sådanne nævnt andetsteds i dette bilag
- DE: Polyethylenpolyamine mit Ausnahme der namentlich in diesem Anhang bezeichneten
- EL: πολυαιθυλενοπολυαμίνες, εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος
- EN: polyethylenepolyamines with the exception of those specified elsewhere in this Annex
- FR: polyéthylènepolyamines, à l'exception de ceux nommément désignés dans cette annexe
- IT: polietilenpoliamine escluse quelle espressamente indicate in questo allegato
- NL: polyethyleenpolyamine met uitzondering van de in deze bijlage met name genoemde
- PT: polietilenopoliaminas com excepção dos expressamente referidos no presente anexo
- FI: polyetyleenipolyamiinit paitsi muualla tässä liitteessä mainitut
- SV: polyetylenpolyaminer med undantag för de foreningar som är upptagna på annat ställe i bilagan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassifizierung*

Xn, R 21/22	C, R 34	R 43	N, R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

C	N	
		
		R: 21/22-34-43-50/53
		S: (1/2)-26-36/37/39-45 60-61

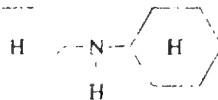
*Límites de concentración, Konzentrationgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao, Pitoisum-rajat, Konzentrationsgrenzen*

$C \geq 25 \%$	C, R 21/22-34-43
$10 \% \leq C < 25 \%$	C, R 34-43
$5 \% \leq C < 10 \%$	X1, R 36/38-43
$1 \% \leq C < 5 \%$	X1, R 43

Cas No 101-83-7

EEC No 202-980-7

No 612-066-00-3



ES dicitclohexilamina  
 DA dicyclohexylamin  
 DE Dicyclohexylamin  
 EL δικυκλοεξυλαμίνη  
 EN dicyclohexylamine  
 FR dicyclohexylamine  
 IT dicitcloesilamina  
 NL dicyclohexylamine  
 PT dicitclohexilamina  
 FI disykloheksyyliamiini  
 SV dicyklohexylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 22	C; R 34	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem, Merkinnt, Märkning*

<p>C</p>	<p>N</p>	<p>R: 22-34-50/53</p> <p>S: (1/2)-26-36/37/39-45-60-61</p>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao, Pitoisuusraajat, Konzentrationsgrænser*

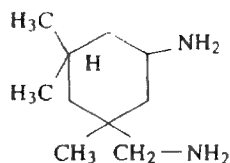
C ≥ 25 %	C; R 22-34
10 % ≤ C < 25 %	C; R 34
2 % ≤ C < 10 %	Xi; R 36/38



Cas No 2855-13-2

EEC No 220-666-8

No 612-067-00-9



ES: 3-aminometil-3,5,5-trimetilciclohexilamina

DA: 3-aminomethyl-3,5,5-trimethylcyclohexylamin

DE: 3-Aminomethyl-3,5,5-trimethylcyclohexylamin

EL: 3-αμινομεθυλο-3,5,5-τριμεθυλοκυκλοεξυλαμίνη

EN: 3-aminomethyl-3,5,5-trimethylcyclohexylamine

FR: 3-aminométhyl-3,5,5-triméthylcyclohexylamine; isophoronediamine

IT: 3-aminometil-3,5,5-trimetilcicloesilamina

NL: 3-aminomethyl-3,5,5-trimethylcyclohexylamine

PT: 3-aminometil-3,5,5-trimetilciclohexilamina

FI: 3-aminometyyli-3,5,5-trimetyylisykloheksyyliamiini; isofoironidiamiini

SV: 3-aminometyl-3,5,5-trimetylcycklohexylamino; isofofondiamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Luokitus, Klassificering*

Xn; R 21/22	C; R 34	R 43	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

C



R: 21/22-34-43-52/53

S: (1/2-)26-36/37/39-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào, Pitoisuusraajat, Konzentrationsgrænser*

C ≥ 25 %	C; R 21/22-34-43
10 % ≤ C < 25 %	C; R 34-43
5 % ≤ C < 10 %	Xi; R 36/38-43
1 % ≤ C < 5 %	Xi; R 43

Cas No 91 94 1

EEC No 202 16 4



ES 3,3' diclorobencidina

DA 3,3' dichlorbenzidin

DE 3,3' Dichlorbenzidin

EL 3,3' διχλωροβενζιδίνη

EN 3,3' dichlorobenzidine (3,3'-dichloro-4,4'-biphenyl-4,4'-di-amine)

FR 3,3' dichlorobenzidine

IT 3,3' diclorobenzidina

NL 3,3' dichloorbenzidine

PT 3,3' diclorobenzidina

Classification: Rischio, Pericolo, Ταξινόμηση: Classificazione, Pericolo, Rischio

Carc. Cat. 2, R 45	Xn, R 21	R 43	N, R 50/53
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Etiquetage: Etikettering, Kennzeichnung, Επισήμανση, Etichettatura, Etiketado

I		N		
				R 45/21/43/50/
				S 53/43/60/61

Limite de concentration: Konzentrationsgrenze, Concentrazione limite, Όριο, Percepe  
 Limites de concentration: Limiti di concentrazione, Concentraciões limite, Όριο


Cas No 612-83-9  
64969-34-2  
74332-73-3

EEC No 210-323-0  
265-293-1  
277-822-3

No 612-069-00-X



NOTA A  
NOTA E

ES: sales de 3,3'-diclorobencidina  
DA: salte af 3,3'-dichlorbenzidin  
DE: Salze von 3,3'-Dichlorbenzidin  
EL: αλατα της 3,3'-διχλωροβενζιδίνης  
EN: salts of 3,3'-dichlorobenzidine; salts of 3,3'-dichlorobiphenyl-4,4'-ylenediamine  
FR: sels de 3,3'-dichlorobenzidine  
IT: 3,3'-diclorobenzidina sali  
NL: zouten van 3,3'-dichloorbenzidine  
PT: sais de 3,3'-diclorobenzidina  
FI: 3,3'-diklooribentsidiinin suolat  
SV: 3,3'-diklorbenzidin salter 3,3'-diklor[1,1'-bifenyl]-4,4'-diamin, salter

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45	Xn; R 21	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinntät, Märkning*

T	N	
		R: 45-21-43-50/53
		S: 53-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Koncentrationsgrænser*


Cas No 531-85-1  
531-86-2  
21136-70-9  
36341-27-2

EEC No 208-519-6  
208-520-1  
244-236-4  
252-984-8

No 612-070-00-5

NOTA A  
NOTA E

ES: sales de bencidina

DA: salte af benzidin

DE: Salze von Benzidin

EL: αλατα της βενζιδίνης

EN: salts of benzidine

FR: sels de benzidine

IT: benzidina sali

NL: zouten van benzidine

PT: sais de benzidina


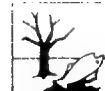
FI: bentsidiinin suolat

SV: benzidin salter; [1,1'-bifenyl] 4,4'-diamin, salter

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 1; R 45	Xn; R 22	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

T	N	
		
		R: 45-22-50/53
		S: 53-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusrajat, Konzentrationgrænser*


Cas No 553-00-4  
612-52-2

EEC No 209-030-0  
210-313-6

No 612-071-00-0



NOTA A  
NOTA E

ES: sales de 2-naftilamina  
DA: salte af 2-naftylamin  
DE: Salze von 2-Naphthylamin  
EL: αλατα της 2-ναφθυλαμίνης  
EN: salts of 2-naphthylamine  
FR: sels de 2-naphtylamine  
IT: 2-naftilamina sali  
NL: zouten van 2-naftylamine  
PT: sais de 2-naftilamina  
FI: 2-naftyyliamiinin suolat  
SV: 2-naftylamin, salter

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 1; R 45	Xn; R 22	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

T	N	
		
		R: 45-22-51/53
		S: 53 45-61

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusrajat, Koncentrationsgränser*


Cas No 92 67-1

EEC No 20-1771

72 09 6



ES 4-aminobifenilo  
 DA 4-aminobiphenyl  
 DE 4-aminobiphenyl  
 EL 4-αμινοδιφαινύλιο  
 EN 4-phenyl-4-ylamine 4-aminobiphenyl  
 FR 4-aminobiphenyle 4-biphenylamine  
 IT 4-aminobifenile  
 NL 4-aminobifenyl  
 PT 4-aminobifenilo 4-bifenilamina

Classification Klassifisering Einstufung Ταξινόηση Classification Classification Classificação Classificação

Carc. Cat. 1 R 45	Xn R 22
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Etiquetado Etikettering Kennzeichnung Επισήμανση Etiketare Etikettierung Etiketieren Etiketieren

T	
	R 22
	S 22

Limits de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκέντρωσης Concentration limits  
 Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao


Cas No —

EEC No —

No 612-073-00-1

NOTA A

NOTA E

ES: sales de 4-aminobifenilo

DA: salte af 4-aminobiphenyl

DE: Salze von 4-Aminobiphenyl

EL: άλατα του 4-αμινοδιφαινυλίου

EN: salts of biphenyl-4-ylamine; salts of xenylamine; salts of 4-aminobiphenyl

FR: sels de 4-aminobiphényle; sels de 4-aminobiphénylamine

IT: 4-aminobifenile sali

NL: zouten van 4-aminobifenyl

PT: sais de 4-aminobifenilo; sais de 4-bifenilamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 1; R 45

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R: 45-22

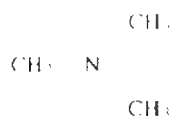
S: 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 103-83-3

EEC No 203-149-1

No 612-074-00-7



ES: benzildimetilamina  
 DA: benzyldimethylamin  
 DE: Benzyldimethylamin, N,N-Dimethylbenzylamin  
 EL: βενζυλοδιμεθυλαμίνη  
 EN: benzyldimethylamine  
 FR: benzyldiméthylamine  
 IT: benzildimetilamina; N,N-dimetilbenzilamina  
 NL: benzyldimethylamine  
 PT: benzildimetilamina  
 FI: bentsyylidimetyyliamiini  
 SV: benzyldimetylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 10

Xn; R 20/21/22

C; R 34

R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*



R: 10-20/21/22-34 52/53

S: (1/2-)26 36 45 61

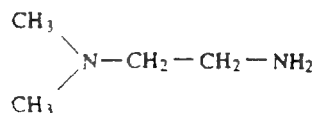
*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisnustrajat, Konzentrationsgranzer*




Cas No 108-00-9

EEC No 203-541-2

No 612-075-00-2



ES : 2-aminoetildimetilamina ; 2-dimetilaminoetilamina  
 DA : 2-aminoethyldimethylamin ; 2-dimethylaminoethylamin  
 DE : 2-Aminoethyldimethylamin ; 2-Dimethylaminoethylamin  
 EL : 2-αμινοαιθυλοδιμεθυλαμίνη · 2-διμεθυλαμινοαιθυλαμίνη  
 EN : 2-aminoethyldimethylamine ; 2-dimethylaminoethylamine  
 FR : 2-aminoethyldiméthylamine ; 2-diméthylaminoéthylamine  
 IT : 2-aminoetildimetilamina ; 2-dimetilaminoetilamina  
 NL : 2-aminoethyldimethylamine ; 2-dimethylaminoethylamine  
 PT : 2-aminoetildimetilamina ; 2-dimetilaminoetilamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F ; R 11	Xn ; R 21/22	C ; R 35
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

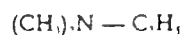
F	C	
		
		R : 11-21/22-35
		S : (1/2-)16-23-26-28-36-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 598-56-1

EEC No 209 940-8

N. 61 0 6 00 8



ES	etilidimetilamina
DA	ethyldimethylamin
DE	Ethyldimethylamin
EL	αιθυλοδιμεθυλαμίνη
EN	ethyldimethylamine
FR	ethyldimethylamine N,N-dimethylethylamine
IT	etilidimetilamina
NL	ethyldimethylamine
PT	etilidimetilamina

Classification Klassifizierung, Einstufung Ταξινόηση Classification Classification, Classificazione Indeling Classificação

F+ , R 12

Xn , R 20/22

C , R 34

Labeling Etikettering Kennzeichnung Επισήμανση Labelling Étiquetage, Etichettatura Kenmerken Rotulagem

F+	C	
		
		R 12 20/22-34
		S (1/2-)3-16-26-36-45

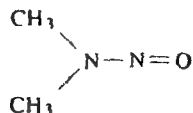
Limits of concentration Konzentrationsgrenser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limite di concentrazione, Concentratiegrenzen Limites de concentração


Cas No 62-75-9

EEC No 200-549-8

No 612-077-00-3

NOTA E





ES	dimetilnitrosoamina
DA	dimethylnitrosoamin
DE	Dimethylnitrosoamin
EL	διμεθυλονιτροδοαμίνη
EN	dimethylnitrosoamine
FR	diméthylnitrosoamine
IT	dimetilnitrosoamina, N-nitrosodimetilamina
NL	dimethylnitrosoamine
PT	dimetilnitrosoamina
FI	dimetyylinitrosamiini
SV	dimetylnitrosamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2, R 45	T+, R 26	T; R 25-48/25	N, R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T+	N	
		R: 45-25-26-48/25-51/53
		S: 53-45-61

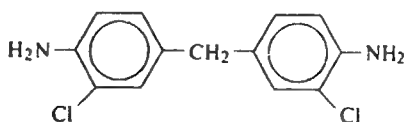
*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Koncentrationsgrænser*


Cas No 101-14-4

EEC No 202-918-9

No 612-078-00-9

NOTA E



ES : 2,2'-dicloro-4,4'-metilendianilina ; 4,4'-metilenbis(2-cloroanilina)

DA : 2,2'-dichlor-4,4'-methylendianilin ; 4,4'-methylenbis(2-chloranilin)

DE : 2,2'-Dichlor-4,4'-methylendianilin ; 4,4'-Methylen-bis(2-chloroanilin)

EL : 2,2'-διχλωρο-4,4'-μεθυλενοδιανιλίνη ; 4,4'-μεθυλενοδις(2-χλωροανιλίνη)

EN : 2,2'-dichloro-4,4'-methylenedianiline ; 4,4'-methylene bis(2-chloroaniline)

FR : 2,2'-dichloro-4,4'-méthylènedianiline ; 4,4'-méthylènebis(2-chloroaniline)

IT : 2,2'-dicloro-4,4'-metilendianilina ; 4,4'-metilenbis(2-cloroanilina)

NL : 2,2'-dichloor-4,4'-methyleendianiline ; 4,4'-methyleenbis(2-chlooraniline)

PT : 2,2'-dicloro-4,4'-metilenodianilina ; 4,4'-metileno-bis(2-cloroanilina)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2 ; R 45    Xn ; R 22    N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	N	
		R : 45-22-50/53
		S : 53-45-60-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

EEC No

No 612-079-00-4

NOTA A

NOTA E

- ES: sales de 2,2'-dicloro-4,4'-metilendianilina; sales de 4,4'-metilenbis(2-cloroanilina)
- DA: salte af 2,2'-dichlor-4,4'-methylenedianilin; salte af 4,4'-methylenbis(2-chloranilin)
- DE: Salze von 2,2'-Dichlor-4,4'-methylenedianilin; Salze von 4,4'-Methylen-bis(2-chloranilin)
- EL: αλατα της 2,2'-διχλωρο-4,4'-μεθυλενοδιανιλίνης; αλατα της 4,4'-μεθυλενοδι(2-χλωροανιλίνης)
- EN: salts of 2,2'-dichloro-4,4'-methylenedianiline; salts of 4,4'-methylenebis(2-chloroaniline)
- FR: sels de 2,2'-dichloro-4,4'-méthylènedianiline; sels de 4,4'-méthylènebis(2-chloraniline)
- IT: 2,2'-dicloro-4,4'-metilendianilina sali; 4,4'-metilenbis(2-cloroanilina) sali
- NL: zouten van 2,2'-dichloor-4,4'-methyleendianiline; zouten van 4,4'-methyleenbis(2-chlooraniline)
- PT: sais de 2,2'-dicloro-4,4'-metilenodanilina; sais de 4,4'-metileno-bis(2-cloroanilina)
- FI: 2,2'-dikloori-4,4'-metyleenidianiliini suolat; 4,4'-metyleenibis(2-kloorianiliini):n suolat
- SV: 2,2'-diklor-4,4'-metylendianilin, salter



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45

Xn; R 22

N; R 50-53

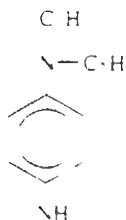
*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

T	N	
		R: 45-22-50/53
		S 53 45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoajusgrajai, Konzentrationsgrænser*


Cas No 93-05-0

EEC No 202 214-1



ES	4-amino-N,N-diethylanilina	N,N-diethyl-p-tensilenodiamina
DA	4-amino-N,N-diethylanilin	N,N-diethyl-4-aminoanilin
DE	4-Amino-N,N-diethylanilin	N,N-Diethyl-p-phenylendiamin
EL	4-αμνο-N,N'-διαιθυλανιλίνη	N,N-διαιθυλ-ο-π-φαινυλενοδιαμίνη
EN	4-amino-N,N-diethylaniline	N,N-diethyl-p-phenylenediamine
FR	4-amino-N,N-diethylaniline	N,N-diethyl-p-phenylenediamine
IT	4-amino-N,N-diethylanilina	N,N-diethyl-p-tenilendiamina
NL	4-amino-N,N-diethylaniline	N,N-diethyl-p-tensleendiamine
PT	4-amino-N,N-diethylanilina	N,N-diethyl-p-tensilenodiamina

*Classification Klassifizierung Einstufung Ταξινόμηση Classificazione Classificazione Classificazione In classe 3403*

T. R 25

C. R 34

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiketovanje Etikettatura Kenmerken Rotulagem*

T	
	R 25/34
	S (1/2) 26-36-45

*Limits de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκέντρωσης Concentration limits*  
*Limites de concentration, Limite di concentrazione Concentrationsgrenzen Limites de concentraçao*


Cas No 612-82-8  
64969-36-4  
74753-18-7

EEC No 210-322-5  
265-294-7  
277-985-0

No 612-081-00-5



NOTA A  
NOTA E

ES: sales de 3,3'-dimetilbencidina; sales de o-tolidina  
DA: salte af 3,3'-dimethylbenzidin; salte af o-tolidin  
DE: Salze von 3,3'-Dimethyl-benzidin; Salze von o-Tolidin  
EL: αλατα της 3,3'-διμετυλοβενζιδίνης; αλατα της ο-τολιδίνης  
EN: salts of 3,3'-dimethylbenzidine; salts of o-tolidine  
FR: sels de 3,3'-diméthylbenzidine; sels de o-tolidine  
IT: 3,3'-dimetilbenzidina sali; o-tolidina sali  
NL: zouten van 3,3'-dimethylbenzidine; zouten van o-tolidine  
PT: sais de 3,3'-dimetilbenzidina; sais de o-tolidina  
FI: 4,4'-bi-*o*-toluidiinin suolat  
SV: 4,4'-bi-*o*-toluidin, salter; 3,3'-dimetylbenzidin, salter

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45 Xn; R 22 N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

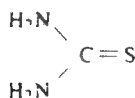
T	N	
		R: 45-22-51/53
		S: 53-45-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Koncentrationsgränser*


Cas No 62-56-6

EEC No 200-543-5

No 612-082-00-0





ES tiourea tiocarbamida  
 DA thiourinstof, thiocarbamid  
 DE Thioharnstoff; Thiocarbamid  
 EL θειουρία θειοκαρβαμίδιο  
 EN thiourea, thiocarbamide  
 FR thiouree, thiocarbamide  
 IT tiourea, tiocarbamide  
 NL thioureum, thiocarbamide  
 PT tiourea, tiocarbamida

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 3; R 40	Xn; R 22	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	N	
		R : 22-40-51/53 S : (2-)22-24-36/37-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

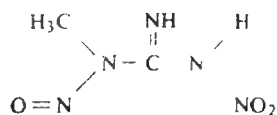



Cas No 70-25-7

EEC No 200-730-1

No 612-083-00-6

NOTA E



ES : 1-metil-3-nitro-1-nitrosoguanidina  
 DA : 1-methyl-3-nitro-1-nitrosoguanidin  
 DE : 1-Methyl-3-nitro-1-nitroso-guanidin  
 EL : 1-μεθυλο-3-νιτρο-νιτροζογουανιδίνη  
 EN : 1-methyl-3-nitro-1-nitrosoguanidine  
 FR : 1-méthyl-3-nitro-1-nitrosoguanidine  
 IT : 1-metil-3-nitro-1-nitrosoguanidina  
 NL : 1-methyl-3-nitro-1-nitrosoguanidine  
 PT : 1-metil-3-nitro-1-nitrosoguanidina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 20	Xi ; R 36/38	N ; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

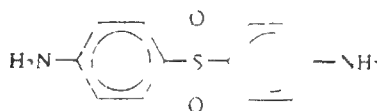
T	N	
		
		R : 45-20-36/38-51/53
		S : 53-45-61

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 80-08-0

EEC No 201 248

62



- ES dapsone 4,4'-diaminodifenilsulfona 4,4'-sulfonildianilina  
 DA dapsone 4,4'-diaminodiphenylsulfon  
 DE Dapsone 4,4'-Diaminodiphenylsulfon  
 EL dapsone 4,4' διαμινωδιφαινυλοσουλφονη  
 EN dapsone 4,4'-diamino diphenyl sulfone  
 FR dapsone 4,4'-diaminodiphenylsulfone 4,4'-sulfoniydianiline  
 IT dapsone 4,4'-diaminodifenilsulfone 4,4'-sulfonildianilina  
 NL dapsone 4,4'-diaminodifenylsulfon 4,4'-sulfonyldianiline  
 PT dapsone 4,4'-diaminodifenilssulfona 4,4'-sulfonildianilina

Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Classificazione Classificazione

Xn R 22

Etiquetado Etikettering Kennzeichnung Επισήμανση Etiquetage Etiketierung Etiketierung Etiketierung Etiketierung Etiketierung

Xn	
	R 22
	S (2)2-

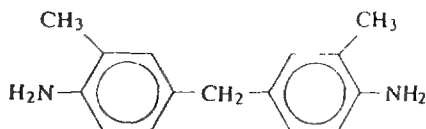
Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως Concentration limits  
 Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao


Cas No 838-88-0

EEC No 212-658-8

No 612-085-00-7

NOTA E



ES: 4,4'-metilendi-*o*-toluidina  
 DA: 4,4'-methylendi-*o*-toluidin  
 DE: 4,4'-Methylendi-*o*-toluidin  
 EL: 4,4'-μεθυλενοδι-*ο*-τολουιδίνη  
 EN: 4,4'-methylenedi-*o*-toluidine  
 FR: 4,4'-méthylènedi-*o*-toluidine  
 IT: 4,4'-metilendi-*o*-toluidina  
 NL: 4,4'-methyleendi-*o*-toluïdine  
 PT: 4,4'-metilenodi-*o*-toluídina  
 FI: 4,4'-metyleenidi-*o*-toluidiini  
 SV: 4,4'-metylendi-*o*-toluidin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45	Xn; R 22	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäät, Märkning*

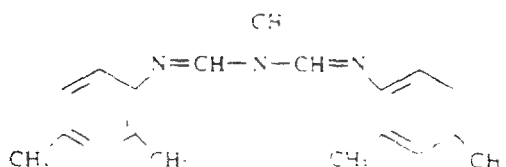
T	N	
		R: 45-22-43-50/53
		S: 53-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã, Pitoisuusrajat, Konzentrationsgrænser*


Cas No 33089-61-1

EEC No 251-375-4

No 612-086-00-2



ES: amitraz (ISO) ; N,N-bis(2,4-xililiminometil) metilamina

DA: amitraz (ISO) ; N,N-bis(2,4-xylyliminometil) methylamin

DE: Amitraz (ISO) ; N,N-Bis(2,4-xylyliminometil) methylamin

EL: amitraz (ISO) ; N,N-δισ(2,4-ξύλυλιμινομεθύλο)μεθύλαμιν

EN: amitraz (ISO) ; N,N-bis(2,4-xylyliminometil) methylamine

FR: amitraz (ISO) ; N,N-bis(2,4-xylyliminométhylmethylamine

IT: amitraz (ISO) ; N,N-bis(2,4-xililiminometil) metilamina

NL: amitraz (ISO) ; N,N-bis(2,4-xylyliminometil) methylamine

PT: amitraz (ISO) ; N,N-bis(2,4-xililiminometil) metilamina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

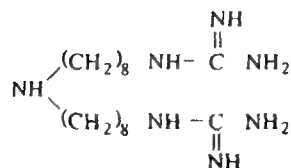
Xn	
	R 22
	S : (2-)22

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 13516-27-3

EEC No 236-855-3

No 612-087 00-8





- ES guazatina  
 DA guazatin  
 DE Guazatin  
 EL guazatine  
 EN guazatine  
 FR guazatine  
 IT guazatina, 1,1'-iminobis(ottametileno)diguanidina  
 NL guazatine  
 PT guazatina  
 FI guatsatini  
 SV guazatin; N,N''-(iminodi-8,1-oktandiyl)bisanidina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn, R 21/22	Xi, R 36/38	N, R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn	N	
		
		R: 21/22 36/38-50/53
		S: (2-)36/37-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisumsrajai, Koncentrationsgrænser*


Cas No 122-34-9

EEC No 204-535-2

No 612-088-00-3

H-CH<sub>2</sub>-N<sup>+</sup>H-CH<sub>2</sub>-CH<sub>2</sub>

-C simazina  
 DA simazin  
 DE simazin  
 EL simazine 6-χλωρο-N,N'-διαιθυλο-1,3,5-τριαιζολο-2,4-διαμίνη  
 EN simazine 6-chloro-N,N'-diethyl-1,3,5-triazine-2,4-diamine  
 FR simazine 6-chloro-N,N'-diéthyl-1,3,5-triazine-2,4-diamine  
 GR simazina  
 NL simazine  
 PT simazina

Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificazione interna, Classificação

Carc. Cat. 3; R 40

Etikett, Etikettering, Kennzeichnung, Σήμανση, Labeling, Etiquetage, Etiketatura, Aankomsten, Kotulagem

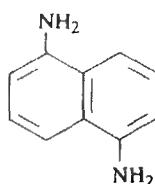
	<p>R 40</p> <p>S 2, 3 or 37</p>
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Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits,  
 limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2243-62-1

EEC No 218-817-8

No 612-089-00-9



ES: 1,5-naftilenediamina

DA: 1,5-naphthylendiamin

DE: 1,5-Naphthylendiamin

EL: 1,5-ναφθυλένιοδιαμίνη

EN: 1,5-naphthylenediamine

FR: 1,5-naphtylènediamine

IT: 1,5-naftilenediamina

NL: 1,5-naftyleendiamine

PT: 1,5-naftilenediamina

PL: 1,5-naftyleenidiamiini

SV: 1,5-naftalendiamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3, R 40

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn

N



R. 40-50/53

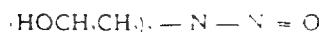
S: (2-)36/37-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao, Pitoissuusraajat, Koncentrationsgränser*


Cas No 1116-54-7

EEC No 214-237-4

No 612-090-00-4



ES : 2,2'-(nitrosoimino)bisetanol

DA : 2,2'-(nitrosoimino)bisetanol

DE : 2,2'-(Nitrosoimino)bisetanol

EL : 2,2'-διηποσοιμινολιζαιβανολη

EN : 2,2'-(nitrosoimino)bisetanol

FR : 2,2'-(nitrosoimino)bisetanol ; 2,2'-(nitrosoiminodiéthanol

IT : 2,2'-(nitrosoimino)bisetanolo


NL : 2,2'-(nitrosoimino)bisetanol

PT : 2,2'-(nitrosoimino)bisetanol

Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem

	R : 45
	S : 53-45

Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração

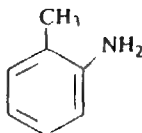



Cas No 95-53-4

EEC No 202-429-0

No 612-091 00-X

NOTA L



ES o-toluidina  
 DA o-toluidin  
 DE o-Toluidin  
 EL ο-τολουιδίνη  
 EN o-toluidine, 2-aminotoluene  
 FR o-toluidine  
 IT o-toluidina  
 NL o-toluidin  
 PT o-toluidina  
 FI o-toluidiini, 2-aminotolueeni  
 SV o-toluidin, 2-metylbenzenamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc Cat. 2; R 45	T; R 23/25	Xi; R' 36	N, R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

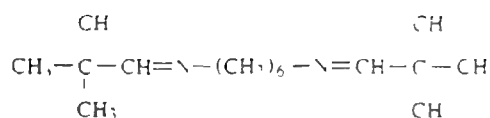
T	N	
		R: 45-23/25-36-50
		S: 53-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Konzentrationsgrænser*


Cas No 1000-78 8

FEC No 401 660-6

No 617 092 00



- |    |  |
|----|--|
| ES | N N'-(2,2 dimetilpropiliden)hexametilendiamina     |
| DA | N N' (2,2 dimetylpropyliden)hexamethylendiamin     |
| DE | N N' (2,2 Dimethylpropyliden)hexamethylendiamin    |
| EL | N N' (2,2 διμεθυλοπρoπυλιδενo)εξαμεθυλενοδιαμινη   |
| EN | N N' (2,2 dimethylpropylidene)hexamethylenediamine |
| FR | N N'-(2,2 diméthylpropylidène)hexaméthylènediamine |
| IT | N N'-(2,2 dimetilpropiliden)esametilendiammina     |
| NL | N N' (2,2 dimethylpropyliden)hexamethylendiamin    |
| PT | N N' (2,2 dimetilpropiliden)hexametileno-diamina   |

Classification Αλυσίδων Επιστήμης Ταξινομήση Classification Classification Classification Classification

X <sub>1</sub>	R 38	R 43
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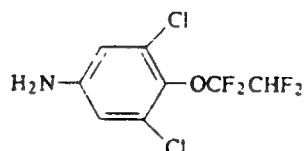
[illegible]

11.6) *de* concentration Konzentrationsgränser Konzentrationsgrenzuerte Ορια συγκεντρώσεως Concentration limit, Limites de concentration Limite di concentrazione Concentrationsgrenzen Limite de concentrati<sub>o</sub>


Cas No 104147-32-2

EEC No 401-790-3

No 612-093-00-0



- ES 3,5-dicloro-4-(1,1,2,2-tetrafluoroetoxi)anilina  
 DA 3,5-dichlor-4-(1,1,2,2-tetrafluorethoxy)anilin  
 DE 3,5-Dichlor-4-(1,1,2,2-tetrafluorethoxy)anilin  
 EL 3,5-διχλωρο-4-(1,1,2,2-τετραφθοροαιθοξυ)ανιλίνη  
 EN 3,5-dichloro-4-(1,1,2,2-tetrafluoroethoxy)aniline  
 FR 3,5-dichloro-4-(1,1,2,2-tétrafluoroéthoxy)aniline  
 IT 3,5-dicloro-4-(1,1,2,2-tetrafluoroetossi)anilina  
 NL 3,5-dichloor-4-(1,1,2,2-tetrafluorethoxy)aniline  
 PT 3,5-dicloro-4-(1,1,2,2-tetrafluoroetoxi)anilina

*Clasificación, Klassificering, Einstufung Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 22

N, R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισημανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	N	
		R : 22-50/53 S : (2-)24/25-26-57-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No - 102 104

} , (



111 41

ES	4-chloro-4-(trifluoromethyl)phenoxy-2-fluorobenzotrifluoride
DE	4-chlor-4-(trifluormethyl)phenoxv-2-fluorobenzotrifluorid
DE	4-chlor-4-(trifluormethyl)phenoxv-2-fluorobenzotrifluorid
EL	α-chloro-4-(trifluoromethyl)phenoxy-2-fluorobenzotrifluoride
E	4-chloro-4-(trifluoromethyl)phenoxy-2-fluorobenzotrifluoride
FR	4-chloro-4-(trifluoromethyl)phenoxy-2-fluorobenzotrifluoride
IT	4-chloro-4-(trifluoromethyl)fenossi-2-fluorobenzotrifluoride
NL	4-chlor-4-(trifluormethyl)fenoxv-2-fluorobenzotrifluoride
PT	4-chloro-4-(trifluoromethyl)fenoxi-2-fluorobenzotrifluoride

u. A. auf einer Einstufung Taxivouros (Klassen) von C<sup>1</sup>, C<sup>2</sup>, C<sup>3</sup>, C<sup>4</sup>, C<sup>5</sup>, C<sup>6</sup>, C<sup>7</sup>, C<sup>8</sup>, C<sup>9</sup>, C<sup>10</sup>.

T R 48/25	Xn, R 22	Y F +1	R 43	N R 50
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10. Bei Kettierung Kennzeichnung E-IGRAUVERI 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83.84.85.86.87.88.89.90.91.92.93.94.95.96.97.98.99.100.

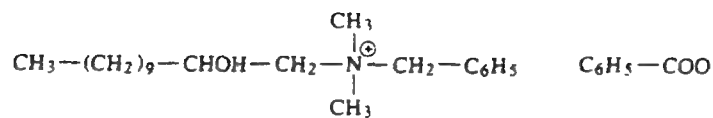
T	N	
		
		R 22 41 43 45 48 50/55
		S (1 2)26 30/3 39 41 60 e

concentration Konzentrationsgränser Konzentrationsgrenzwerte Определяющая концентрация  
Limites de concentration Limite di concentrazione Concentrationsgrenzen Limite


Cas No 113694-52-3

EEC No 402-610-6

No 612-095-00-1





- ES: benzoato de bencil-2-hidroxidodecildimetilamonio  
 DA: benzyl-2-hydroxydodecyldimethylammoniumbenzoat  
 DE: Benzyl-2-hydroxydodecyldimethylammoniumbenzoat  
 EL: βενζοϊκό βενζυλ-2-υδροξυδεκαδεδυλοδιμεθυλαμμώνιο  
 EN: benzyl-2-hydroxydodecyldimethylammonium benzoate  
 FR: benzoate de benzyl-2-hydroxydodécyldiméthylammonium  
 IT: benzoato di benzil-2-idrossidodecildimetilammonio  
 NL: benzyl-2-hydroxydodecyldimethylammoniumbenzoaat  
 PT: benzoato de benzil-2-hidroxidodecildimetilamónio

Clasificación. Klassificering. Einstufung. Ταξινόμηση. Classification. Classificazione. Indeling Classificação

C; R 34	Xn; R 22	N; R 50-53
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Etiquetado. Etikettering. Kennzeichnung. Επισήμανση. Labelling. Étiquetage. Etichettatura. Kenmerken. Rotulagem

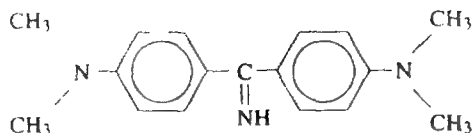
C	N	
		
		R : 22-34-50/53
		S : (1/2-)26-28-36/37/39 -45-60-61

Límites de concentración. Koncentrationsgrænser. Konzentrationsgrenzwerte. Όρια συγκέντρωσης. Concentration limits.  
 Limites de concentration. Limite di concentrazione. Concentratiegrenzen. Limites de concentração


Cas No 492-80-8

EEC No 207-762-5

No 612-096-00-7



- ES: 4,4'-carbonimidoilbis[*N,N*-dimetilanilina];  
 DA: 4,4'-carbonimidoylbis[*N,N*-dimethylanilin];  
 DE: 4,4'-Carbonimidoylbis[*N,N*-dimethylanilin];  
 EL: 4,4'-καρβονιμιδοϋλοδις *N,N*-διμεθυλανιλίνη;  
 EN: 4,4'-carbonimidoylbis[*N,N*-dimethylaniline];  
 FR: 4,4'-carbonimidoylbis[*N,N*-diméthylaniline]; auramine  
 IT: 4,4'-carbonimidoilbis[*N,N*-dimetilanilina]; auramina  
 NL: 4,4'-carbonimidoylbis[*N,N*-dimethylaniline];  
 PT: 4,4'-carbonimidoilbis[*N,N*-dimetilanilina];  
 FI: 4,4'-karbonimidoylibis[*N,N*-dimetyylianiiliini]; auramiini  
 SV: 4,4'-karbonimidoylbis[*N,N*-dimetylanilin]; C.I. Solvent Yellow 34

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3; R 40	Xn; R 22	Xi; R 36	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinntät, Märkning*

Xn	N	
		R: 22-36-40-51/53
		S: (2-)36/37-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgrænser*


Cas No

—

EEC No

—

No 612-097-00-2

NOTA A

- ES sales de 4,4'-carbonimidobis[*N,N*-dimetilaniлина]
- DA. salte af 4,4'-carbonimidoylbis[*N,N*-dimethylanilin]
- DE. Salze von 4,4'-Carbonimidoylbis[*N,N*-dimethylanilin]
- EL. αλατα της 4,4'-καρβονιμιδουλοδισ[*N,N*-διμεθυλανιλίνη]
- EN salts of 4,4'-carbonimidoylbis[*N,N*-dimethylaniline]
- FR sels de 4,4'-carbonimidoylbis[*N,N*-diméthylaniline]; sels d'auramine
- IT sali di 4,4'-carbonimidoilbis[*N,N*-dimetilaniлина]; auramina sali
- NL zouten van 4,4'-carbonimidoylbis[*N,N*-dimethylaniline]
- PT sais de 4,4'-carbonimidoylbis[*N,N*-dimetilaniлина]
- FI 4,4'-karbonimidoylbis[*N,N*-dimetyylianiiliini] suolat
- SV 4,4'-karbonimidoylbis[*N,N*-dimetylanilin], salter

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 3; R 40

Xn; R 22

Xi; R 36

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

Xn

N



R: 22-36-40-51/53

S: (2-)36/37-61

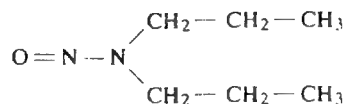
*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*


Cas No 621-64-7

EEC No 210-698-0

No 612-098-00-8

NOTA E



ES: nitrosodipropilamina

DA: nitrosodipropylamin

DE: Nitrosodipropylamin

EL: νιτροδοδιπροπυλαμίνη

EN: nitrosodipropylamine

FR: nitrosodipropylamine

IT: nitrosodipropilamina

NL: nitrosodipropylamine

PT: nitrosodipropilamina

FI: nitrosodipropyliamiini

SV: nitrosodipropylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45

Xn; R 22

N; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

T



N



R: 45-22-51/53

S: 53-45-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgrænser*

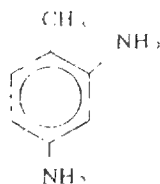



Cas No 95-80-7

EEC No 202-453-1

No 612-099-00-3

NOTA E



- ES: 4-metil-*m*-fenilendiamina  
 DA: 4-methyl-*m*-phenylendiamin  
 DE: 4-Methyl-*m*-phenylendiamin, Toluylen-2,4-diamin  
 EL: 4-μεθυλο-μ-φαινολενοδιαμίνη  
 EN: 4-methyl-*m*-phenylenediamine  
 FR: 4-méthyl-*m*-phénylènediamine; toluène-2,4-diamine  
 IT: 4-metil-*m*-fenilendiamina  
 NL: 4-methyl-*m*-fenyleendiamine  
 PT: 4-metil-*m*-fenilenodiamina  
 FI: 4-metyyli-*m*-fenyleenidiamiini  
 SV: 4-metyl-*m*-fenylendiamin; 4-metyl 1,3-benzendiamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassifisering*

Carc. Cat. 2, R 45	T; R 25	Xn; R 21	Xi; R 36	R 43	N, R 50/53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merksinnat, Markning*

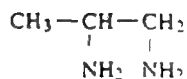
<p>T</p>	<p>N</p>	<p>R: 45-21-25-36-43-50/53          S: 1-45-60-61</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όριοι συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, koncentrationsgrænzer,  
 Limites de concentração, Pitoaisusirajat, Konzentrationsgrænser*


Cas No 78-90-0

EEC No 201-155-9

No 612-100-00-7



ES: propilendiamina

DA: propylendiamin

DE: 1,2-Propylendiamin

EL: προπυλενοδιαμίνη

EN: propylenediamine

FR: propylenediamine

IT: propilendiammina; 1,2-diamminopropano

NL: propyleendiamine

PT: propilenodiamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indéling, Classificação*

R 10

Xn; R 21/22

C; R 35

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennzeichen, Rotulagem*

C



R 10-21/22-35

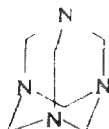
S: (1/2-)26-37/39-45

*Límites de concentración, Koncentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 100-97-0

EEC No 202-905-8

No 612-101-00-2



ES: metenamina

DA: methenamin

DE: Methenamin; Hexamethylentetramin

EL: μεθεναμίνη

EN: methenamine; hexamethylenetetramine

FR: methenamine; hexaméthylènetétramine

IT: metenamina; esametilentetramina

NL: methenamine

PT: metenamina

FI: meteenamiini; heksametyleenitetramiini

SV: metenamin; hexametylentetramin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11

R 42/43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

F

Xn



R: 11-42/43

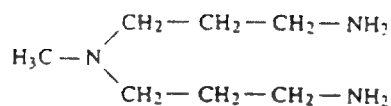
S: (2-)16-22-24-37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisusrajal, Konzentrationsgrænser*


Cas No 105-83-9

EEC No 203-336-8

No 612-102-00-8



ES : N,N-bis(3-aminopropil)metilamina

DA : N,N-bis(3-aminopropyl)methylamin

DE : N,N-Bis(3-aminopropyl)methylamin

EL : N,N-δισ(3-αμινοπροπυλο)μεθυλαμίνη

EN : N,N-bis(3-aminopropyl)methylamine

FR : N,N-bis(3-aminopropyl)methylamine

IT : N,N-bis(3-amminopropil)metilamina ; 3-3'-diammino-N-metildipropilamina

NL : N,N-bis(3-aminopropyl)methylamine

PT : N,N-bis(3-aminopropil)metilamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T ; R 23/24

Xn ; R 22

C ; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

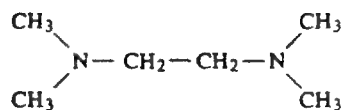
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Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 110-18-9

EEC No 203-744-6

No 612-103-00-3



ES: N,N,N',N'-tetrametiletilendiamina  
 DA: N,N,N',N'-tetramethylethylendiamin  
 DE: N,N,N',N'-Tetramethylethylendiamin  
 EL: N,N,N',N'-τετραμεθυλαιθυλενοδιαμίνη  
 EN: N,N,N',N'-tetramethylethylenediamine  
 FR: N,N,N',N'-tétraméthyléthylènediamine  
 IT: N,N,N',N'-tetrametiletilendiammina  
 NL: N,N,N',N'-tetramethylethyleendiamine  
 PT: N,N,N',N'-tetrametiletilenodiamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11	Xn; R 20/22	C; R 34
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

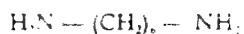
F	C	
		
		R : 11-20/22-34
		S : (1/2-)16-26-36/37/39-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 124-09-4

EEC No 204-679-6

No 612-104-00-9



ES: hexametilendiamina

DA: hexamethylendiamin

DE: Hexamethylendiamin

EL: εξαμεθυλενοδιαμίνη

EN: hexamethylenediamine

FR: hexaméthylènediamine

IT: esametilendiammina, 1,6-diamminoesano

NL: hexamethyleendiamine

PT: hexametilenodiamina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, indeling, Classificação

Xn, R 21/22	Xn, R 37	C, R 34
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Etiketado, Etiketado, Kennzeichen, Kötulagem

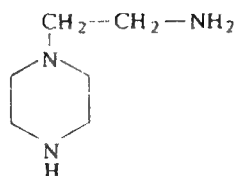


Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzen, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentrație


Cas No 140-31-4

EEC No 205-411-0

No 612-105-00-4



ES: 2-piperazin-1-iletilamina  
 DA: 2-piperazin-1-ylethylamin  
 DE: 2-Piperazin-1-ylethylamin  
 EL: 2-(πιπεραζιν-1-υλ)αιθυλαμίνη  
 EN: 2-piperazin-1-ylethylamine  
 FR: 2-pipérazine-1-yléthylamine  
 IT: 2-piperazin-1-iletilamina  
 NL: 2-piperazine-1-ylethylamine  
 PT: 2-(1-piperazinil)etilamina  
 FI: 2-piperatsiini-1-yylietyyliamiini  
 SV: 2-piperazin-1-yletylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificaçã, Luokitus, Klassificering*

Xn; R 21/22	C; R 34	R 43	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

C



R: 21/22-34-43-52/53

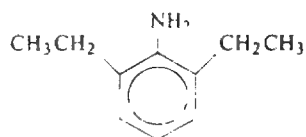
S: (1/2-)26-36/37/39-45-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã, Pitoisuusrajat, Koncentrationsgrænser*


Cas No 579-66-8

EEC No 209-445-7

No 612-106-00-X



ES	2,6-dietilaniлина
DA	2,6-diethylanilin
DE	2,6-Diethylanilin
EL	2,6-διαεθυλανιλιν
EN	2,6-diethylaniline
FR	2,6-diethylaniline
IT	2,6-dietilaniлина ; 2,6-dietilbenzenammina
NL	2,6-diethylaniline
PT	2,6-dietilaniлина

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2-)23-24

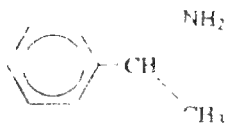
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 98-84-0 [1]  
618-36-0 [2]

EEC No 202-706-6 [1]  
210-545-8 [2]

No 612-107-00-5



- ES: 1-feniletilamina [1]; DL- $\alpha$ -metilbencilamina [2]  
 DA: 1-phenylethylamin [1]; DL- $\alpha$ -methylbenzylamin [2]  
 DE: 1-Phenylethylamin [1]; DL- $\alpha$ -Methylbenzylamin [2]  
 EL: 1-φαινολαιθυλαμίνη-μεθυλοδενζυλαμίνη [1]; DL- $\alpha$ -μεθυλοδενζυλαμίνη [2]  
 EN: 1-phenylethylamine [1]; DL- $\alpha$ -methylbenzylamine [2]  
 FR: 1-phényléthylamine [1]; DL- $\alpha$ -méthylbenzylamine [2]  
 IT: 1-feniletilamina [1]; DL- $\alpha$ -metilbencilamina [2]  
 NL: 1-fenylethylamine [1]; DL- $\alpha$ -methylbenzylamine [2]  
 PT: 1-feniletilamina [1]; DL- $\alpha$ -metilbencilamina [2]  
 FI: 1-fenyylietyyliamiini [1]; DL- $\alpha$ -metyylibenssyyliamiini [2]  
 SV: 1-fenyletylamin [1]; DL- $\alpha$ -metylbensylamin [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 21/22 C; R 34

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

C



R: 21/22-34

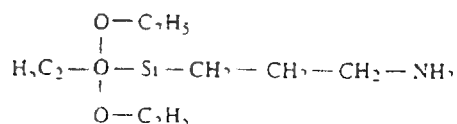
S: (1/2)-26-28-36/37/39-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen  
Limites de concentração, Pitoisuusrajat, Koncentrationsgrænser*


Cas No 919-30-2

EEC No 213 048-4

No 612-108-00 0




- ES 3-aminopropiltrietoxisilano  
 DA 3-aminopropyltriethoxysilan  
 DE 3-Aminopropyltriethoxysilan  
 EL 3-αμινοπρόπυλοτριαιθοξυσιλάνιο  
 EN 3-aminopropyltriethoxysilane  
 FR 3-aminopropyltriethoxysilane  
 IT 3-aminopropiltrietossisilano 3-(trietossisilil)-1-propanamina  
 NL 3-aminopropyltriethoxysilaan  
 PT 3-aminopropiltrietoxissilano

Κατηγοριοποίηση Klassifizierung Einstufung Ταξινόμηση Classification Classificazione Classificazione Indeling Classificação

Xn, R 22

C, R 34

Ετικέτα Etikettering Kennzeichnung Επισήμανση Labelling Etiketazje Etichettatura Kenmerken Rótulagem

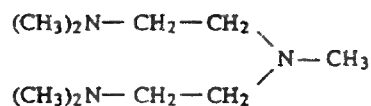
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Όρια συγκέντρωσης Concentrationsgrenzen Konzentrationsgrenzuerte Όρια συγκεντρώσεως Concentration limits Limites de concentration Limite di concentrazione Concentratiegrenzen, Limites de concentração


Cas No 3030-47-5

EEC No 221-201-1

No 612-109-00-6



ES: bis(2-dimetilaminoetil)(metil)amina

DA: bis(2-dimethylaminoethyl)(methyl)amin

DE: Bis(2-dimethylaminoethyl)methylamin

EL: δις(2-διμεθυλαμινοαιθυλο)(μεθυλ)αμίνη

EN: bis(2-dimethylaminoethyl)(methyl)amine

FR: bis(2-diméthylaminoéthyl)(méthyl)amine

IT: bis(2-dimetilamminoetil)(metil)ammina; 1,1,4,7,7-pentametilentriammina

NL: bis(2-dimethylaminoethyl)(methyl)amine

PT: bis(2-dimetilaminoetil)(metil)amina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24

Xn; R 22

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T



R: 22-24-34

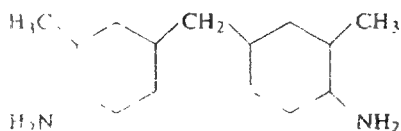
S: (1/2-)26-36/37/39-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites di concentrazione, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 6864-37-5

EEC No 229-962-I

No 612-110-00-1






- ES: 2,2'-dimetil-4,4'-metilenbis(ciclonexilamina)  
 DA: 2,2'-dimethyl-4,4'-methylenbis(cyclohexylamin)  
 DE: 2,2'-Dimethyl-4,4'-methylenbis(cyclohexylamin)  
 EL: 2,2'-διμεθυλο-4,4'-μεθυλενοδι(κυκλοεξυλαμίνη)  
 EN: 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)  
 FR: 2,2'-diméthyl-4,4'-méthylènebis(cyclohexylamine)  
 IT: 2,2'-dimetil-4,4'-metilenbis(cicloesilamina)  
 NL: 2,2'-dimethyl-4,4'-methyleenbis(cyclohexylamine)  
 PT: 2,2'-dimetil-4,4'-metilenobis(ciclohexilamina)  
 FI: 2,2'-dimetyyli-4,4'-metyleenbis(sykloheksyyliamiini)  
 SV: 2,2'-dimetyl-4,4'-metylenbis(cyklohexylamin)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 23/24	Xn; R 22	C; R 35	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

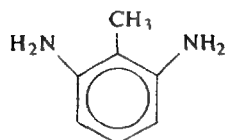
T 	C 	N 	R: 22-23/24-35-51/53 S: (1/2-)26-36/37/39-45-61
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçào, Pitoisuusrajat, Koncentrationsgrænser*


Cas No 823-40-5

EEC No 212-513-9

No 612-111-00-7



- ES: 2-metil-*m*-fenilenodiamina  
 DA: 2-methyl-*m*-phenylendiamin  
 DE: 2-Methyl-*m*-phenylendiamin; Toluylen-2,6-diamin  
 EL: 2-μεθυλο-μ-φαινυλενοδιαμίνη  
 EN: 2-methyl-*m*-phenylenediamine  
 FR: 2-méthyl-*m*-phénylènediamine; toluène-2,6-diamine  
 IT: 2-metil-*m*-fenilendiamina; toluene-2,6-diamina  
 NL: 2-methyl-*m*-fenyleendiamine  
 PT: 2-metil-*m*-fenilenodiamina  
 FI: 2-metyyli-*m*-fenylenidiamiini  
 SV: 2-metyl-*m*-fenylendiamin; 2-metyl-1,3-benzendiamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Muta. Cat. 3; R 40	Xn; R 21/22	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

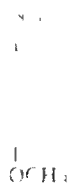
Xn	N	
		R: 21/22-40-43-50/53 S: (2-)24-36/37-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào, Pitoisuusraajat, Konzentrationgrænser*


Cas No 104-94-9

EEC No 203-254-2

No 612-112-00-2



ES	<i>p</i> -anisidina
DA	<i>p</i> -anisidin
DE	<i>p</i> -Anisidin, 4-Methoxyanilin
EL	$\pi$ -ανισιδίνη
EN	<i>p</i> -anisidine, 4-methoxyaniline
FR	<i>p</i> -anisidine
IT	<i>p</i> -anisidina, 4-metossianilina
NL	<i>p</i> -anisidine
PT	<i>p</i> -anisidina
FI	<i>p</i> -anisidini, 4-metoksianilini
SV	<i>p</i> -anisidin, 4-metoxianilin

Classification Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering

T + , R 26/27/28	R 33	N; R 50
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Ετικεταδό, Etikettering Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage Etiquetature, Kennmerken, Rotulagem Merkmall Marknung



P 26/27/28 33-50

8 01/2 028 36/37 45 61

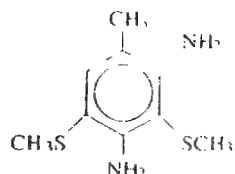
límites de concentración, Konzentrationsgrenze, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite de concentration, Limite di concentrazione, Konzentrationen, Limite de concentrație, Procentuale, Konzentrationsgränze

[illegible]

Cas No 106264-79-3

EEC No 403-240-8

No 612-113-00-8



ES : 6-metil-2,4-bis(metiltio)fenileno-1,3-diamina

DA : 6-methyl-2,4-bis(methylthio)phenylen-1,3-diamin

DE : 6-Methyl-2,4-bis(methylthio)phenylen-1,3-diamin

EL : 6-μεθυλο-2,4-δισ(μεθυλοθειο)φαινυλενο-1,3-διαμίνη

EN : 6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine

FR : 6-méthyl-2,4-bis(méthylthio)phénylène-1,3-diamine

IT : 6-metil-2,4-bis(metiltio)fenilen-1,3-diammina

NL : 6-methyl-2,4-bis(methylthio)fenyleen-1,3-diamine

PT : 6-metil-2,4-bis(metiltio)fenileno-1,3-diamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificaçào*

Xn ; R 22

R 43

N ; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem*

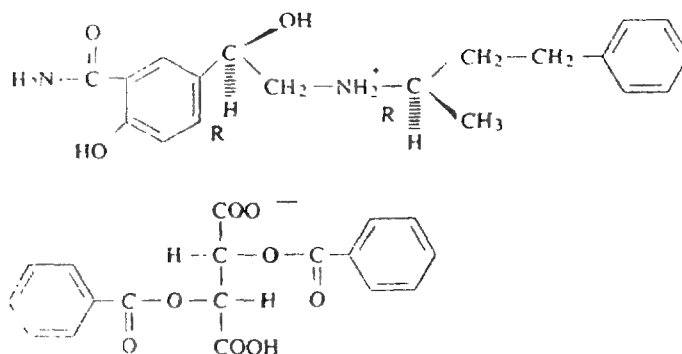
Xn	N	
		R : 22-43 50/53
		S : (2-)24-37-60-61

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limit, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No —

EEC No 404-390-7

No 612-114-00-3



- ES hidrógeno-2,3-bis(benzoiloxi)succinato de R,R-2-hidroxi-5-(1-hidroxi-2-(4-fenilbut-2-ilamino)etil)benzamida  
 DA R,R-2-hydroxy-5-(1-hydroxy-2-(4-phenylbut-2-ylamino)ethyl)benzamidhydrogen-2,3-bis(benzoyloxy)succinat  
 DE R,R-2-Hydroxy-5-(1-hydroxy-2-(4-phenylbut-2-ylamino)ethyl)benzamidhydrogen-2,3-bis(benzoyloxy)succinat  
 EL υδρογονο-2,3-δισ(βενζοϋλοξυ)ηλεκτρικό R,R-2-υδροξυ-5-(1-υδροξυ-2-(4-φαινυλοβουτ-2-υλαμινο)-αιθυλ)βενζαμίδιο  
 EN R,R-2-hydroxy-5-(1-hydroxy-2-(4-phenylbut-2-ylamino)ethyl)benzamide hydrogen 2,3-bis(benzoyloxy)succinate  
 FR hydrogéno-2,3-bis(benzoyloxy)succinate de R,R-2-hydroxy-5-(1-hydroxy-2-(4-phénylbut-2-ylamino)éthyl)benzamide  
 IT idrogeno-2,3-bis(benzoilossi)succinato di R,R-2-idrossi-5-(1-idrossi-2-(4-fenilbut-2-ilammino)etil)benzammide  
 NL R,R-2-hydroxy-5-(1-hydroxy-2-(4-fenylbut-2-ylamino)ethyl)benzamidehydrogeen-2,3-bis(benzoyloxy)succinaat  
 PT hidrógeno-2,3-bis(benzoiloxi)succinato de R,R-2-hidroxi-5-(1-hidroxi-2-(4-fenilbut-2-ilamino)etil)benzamida

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

F; R 11	R 43	R 52-53
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Classificação, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

F	Xn	
		R : 11-43-52/53
		S : (2-)24-37-61

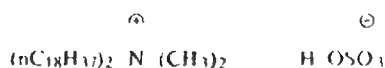
Limite di concentrazione, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration Limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentrações




Cas No 123312-54 9

EEC No 404-050 8

No 612-115-00-9



ES hidrógenosulfato de dimetildioctadecilamonio  
 DA dimethyldioctadecylammoniumhydrogensulfat  
 DE Dimethyldioctadecylammoniumhydrogensulfat  
 EL υδρογονοθεικό διμεθυλοδιδεκαοκτυλαμμώνιο  
 EN dimethyldioctadecylammonium hydrogen sulfate  
 FR hydrogénosulfate de diméthyldioctadécylammonium  
 IT idrogenosolfato di dimetildioctadecilammonio  
 NL dimethyldioctadecylammoniumhydrogensulfaat  
 PT hidrogénosulfato de dimetildioctadecilamónio

Clasificación Klassificering Einstufung Ταξινόμηση Classification Classificazione Classificazione Indeling Classificazio

Xi; R 36	R 53
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Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling Étiquetage Etichettatura, Kenmerken, Rotulagem

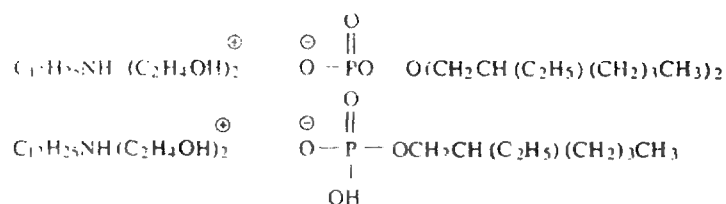
Xi	
	R - 36-53
	S - (2-)26-39-61

Limites de concentration, Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçào


Cas No 68132-17-4

EEC No 404-690-8

No 612-116-00-4



ES. fosfato de C8-18alquilbis(2-idroxietyl)ammonio e bis(2-etylhexilo)

DA: C8-18alkylbis(2-hydroxyethyl)ammoniumbis(2-ethylhexyl)phosphat

DE: C8-18Alkylbis(2-hydroxyethyl)ammoniumbis(2-ethylhexyl)phosphat

EL: φωσφορικό C8-18αλκυλοδισ(2-υδροξυμεθυλο)αμμώνιο δισ(2-αιθυλοεξύλιο)

EN. C8-18alkylbis(2-hydroxyethyl)ammonium bis(2-ethylhexyl)phosphate

FR : phosphate de C8-18alkylbis(2-hydroxyéthyl)ammonium et de bis(2-éthylhexyle)

IT    fosfato di C8-18alchilbis(2-idrossietil)ammonio e bis(2-etilesile)

NL. C8-18alkylbis(2-hydroxyethyl)ammoniumbis(2-ethylhexyl)fosfaat


**PT:** fosfato de C8-18alquilbis(2-hidroietil)ammonio e bis(2-ètilhexilo)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T, R 23	C; R 34	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

**T** **N**

**R** : 23-34-43-50/53

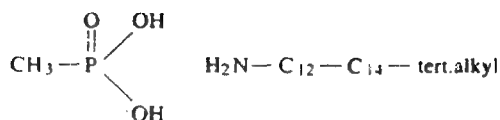
**S** : (1/2-)26-36/37/39-45-60-61

*Limites de concentración. Konzentrationsgrænser. Konzentrationsgrenzwerte. Όρια συγκέντρωσης. Concentration limits, Limites de concentration. Limite di concentrazione. Concentratiegrenzen. Limites de concentraçào*


Cas No 119415-07-5

EEC No 404-750-3

No 612-117-00-X




- ES: C12-14-terc-alquilamina, sal de ácido metilfosfonico  
 DA: C12-14-tert-alkylamin, methylphosphonsyresalt  
 DE: C12-14-tert-Alkylamin, Methylphosphonsäuresalz  
 EL: C12-14-tert-αλκυλαμίνη, άλας του μεθυλοφωσφονικού οξέος  
 EN: C12-14-tert-alkylamine, methylphosphonic acid salt  
 FR: C12-14-tert-alkylamine, sels de l'acide méthylphosphonique  
 IT: C12-14-terz-alcilamina, sali dell'acido metilfosfonico  
 NL: C12-14-tert-alkylamine, methylfosfonzuurzout  
 PT: C12-14-terc-alquilamina, sal de ácido metilfosfonico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22	C; R 34	N; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

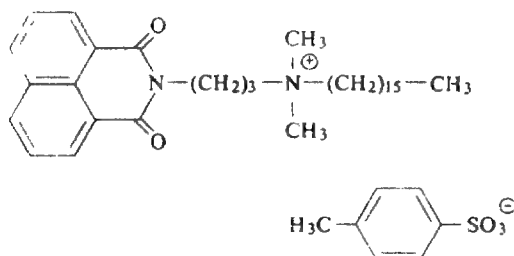
C	N	
		
		R : 22-34-51/53
		S : (1/2-)26-28-36/37/39-45-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo


Cas No —

EEC No 405-080-4

No 612-118-00-5



ES : 4-toluensulfonato de (1,3-dioxo-2H-benzo(de)isoquinolin-2-ilpropil)hexadecildimetilamonio

DA : (1,3-dioxo-2H-benz(de)isoquinolin-2-ylpropyl)hexadecyldimethylammonium-4-toluensulfonat

DE : (1,3-Dioxo-2H-benz(de)isochinolin-2-ylpropyl)hexadecyldimethylammonium-4-toluolsulfonat

EL : 4-τολουενοςουλφονικό (1,3-διοξο-2H-δενζο(δε)ισοκινολιν-2-υλοπροπυλο)δεκαεξυλοδιμεθυλαμμώνιο

EN : (1,3-dioxo-2H-benz(de)isoquinolin-2-ylpropyl)hexadecyldimethylammonium 4-toluenesulfonate

FR : 4-toluènesulfonate de (1,3-dioxo-2H-benzo(de)isoquinoléine-2-ylpropyl)hexadécyldiméthylammonium

IT : 4-toluensolfonato di (1,3-diosso-2H-benzo(de)isochinolin-2-ilpropil)esadecildimetilammonio

NL : (1,3-dioxo-2H-benz(de)isochinoline-2-ylpropyl)hexadecyldimethylammonium-4-tolueensulfonaat

PT : 4-toluenossulfonato de (1,3-dioxo-2H-benzo(de)isoquinolina-2-ilpropil)he. ªdecildimetilamonio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xi ; R 41

N ; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	N	
		R : 41-50/53
		S : (2-)22-26-39-60-61

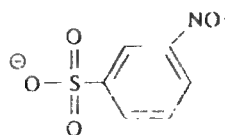
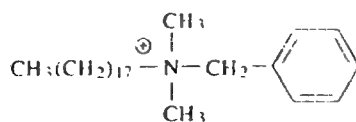
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No

—

EEC No 405-330-2

No 612-119-00-0



- ES: 3-nitrobencensulfonato de benzildimetiloctadecilamonio  
 DA: benzyldimethyloctadecylammonium-3-nitrobenzensulfonat  
 DE: Benzyldimethyloctadecylammonium-3-nitrobenzolsulfonat  
 EL: 3-νιτροδενζολοσουλφονικό δενζυλοδιμεθυλοδεκαοκταμμώνιο  
 EN: benzyldimethyloctadecylammonium 3-nitrobenzenesulfonate  
 FR: 3-nitrobenzènesulfonate de benzyldiméthyloctadécylammonium  
 IT: 3-nitrobenzensolfonato di benzildimetilottadecilammonio  
 NL: benzyldimethyloctadecylammonium-3-nitrobenzeensulfonaat  
 PT: 3-nitrobenzenossulfonato de benzildimetiloctadecilamonio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xi; R 38-41

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

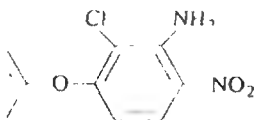
Xi	N	
		
		R : 38-41-50/53
		S : (2-)26-37/39-60-61

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 74070-46-5

EEC No 277-704-1

No 612-120-00-6




- ES. 2-cloro-3-fenoxi-6-nitro-anilina  
 DA: 2-chlor-6-nitro-3-phenoxyanilin  
 DE: 2-Chlor-6-nitro-3-phenoxyanilin  
 EL: 2-χλωρο-6-νιτρο-3-φαινοξυανιλίνη  
 EN: 2-chloro-6-nitro-3-phenoxyaniline  
 FR: 2-chloro-6-nitro-3-phénoxyaniline; aclonifène (ISO)  
 IT: 2-cloro-3-fenossi-6-nitro-anilina  
 NL: 2-chloor-3-fenoxi-6-nitro-aniline  
 PT: 2-cloro-3-fenoxi-6-nitro-anilina  
 FI: 2-kloori-6-nitro-fenoksianiliini; aklonifeeni  
 SV: 2-klor-6-nitro-3-fenoxianilin, aklonifen (ISO)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

	<p>R: 50/53 S: 60-61</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*


Cas No 68131-73-7

EEC No 268-626-9



No 612-121-00-1

ES: aminas, polietilenpoli-; HEPA  
 DA: aminer, polyethylenpoly-; HEPA  
 DE: Amine, Polyethylenpoly-; HEPA  
 EL: αμινες, πολυαιθυλενοπολυ- HEPA  
 EN: Amines, polyethylenepoly-; HEPA  
 FR: amines, polyéthylènepoly-; HEPA  
 IT: amine, polietilenpoli-; HEPA  
 NL: aminen, polyethyleenpoly-; HEPA  
 PT: aminas, polietilenopoli-; HEPA  
 FI: amiinit, polyetyleenipoly-; HEPA  
 SV: aminer, polyetylenpoly-; HEPA

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 21/22	C; R 34	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etichettatura, Kenmerken, Rotulagem, Merkinnit, Märkning*

C	N	
		
		R: 21/22-34-43-50/53
		S: (1/2-)26-36/37/39-45-60-61

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçao, Pitoisuusraajat, Konzentrationsgränser*

C ≥ 25 %	C; R 21/22-34-43
10 % ≤ C < 25 %	C; R 34-43
5 % ≤ C < 10 %	Xi; R 36/38-43
1 % ≤ C < 5 %	Xi; R 43

Cas No 7803-49-8

EEC No 232-259-2

No 612-122-00-7



NH<sub>2</sub>OH

ES hidroxilamina  
 DA hydroxylamin  
 DE Hydroxylamin  
 EL υδροξυλαμίνη  
 EN hydroxylamine  
 FR hydroxylamine  
 IT idrossilamina  
 NL hydroxylamine  
 PT hidroxilamina  
 FI hydroksyylamiini  
 SV hydroxylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 5	Xn, R 22-48/22	Xi, R 37/38-41	R 43	N, R 50
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*Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etichetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

Xn	N	
		R: 5-22-37/38-41 43-48/22-50 S: (2-)22-26-36/37/39-61

*limites de concentration, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*




Cas No	5470-11-1 [1]
	10039-54-0 [2]
	10046-00-1 [3]

EEC No	226-798-2 [1]
	233 118 8 [2]
	233 154 4 [3]

No	612-123-00-2
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[NH<sub>2</sub>OH] HCl [1]  
 [NH<sub>2</sub>OH], H<sub>2</sub>SO<sub>4</sub> [2]  
 [NH<sub>2</sub>OH] H<sub>2</sub>SO<sub>4</sub> [3]

- ES: cloruro de hidroxilamonio [1]; sulfato de bis(hidroxilamonio) [2]; hidrogenosulfato de hidroxilamonio [3]  
 DA: hydroxylammoniumchlorid [1]; bis(hydroxylammonium)sulfat [2]; hydroxylammoniumhydrogen-sulfat [3]  
 DE: Hydroxylammoniumchlorid [1]; Bis(hydroxylammonium)sulfat [2]; Hydroxylammoniumhydrogensulfat [3]  
 EL: χλωρίδιο του υδροξυλαμμωνίου [1]; θειικό δι(υδροξυλαμμώνιο) [2]; υδρογονοθειικό υδροξυλαμμώνιο [3]  
 EN: hydroxylammonium chloride [1]; bis(hydroxylammonium) sulphate [2]; hydroxylammonium hydrogensulphate [3]; hydroxylamine hydrochloride [1]; hydroxylamine sulphate (2:1) [2]; hydroxylamine sulphate (1:1) [3]  
 FR: chlorure d'hydroxylammonium [1]; sulfate de bis(hydroxylammonium) [2]; hydrogénosulfate d'hydroxylammonium [3]  
 IT: cloruro di idrossilammonio [1]; solfato di bis(idrossilammonio) [2]; idrogenosolfato di idrossilammonio [3]  
 NL: hydroxylammoniumchloride [1]; bis(hydroxylammonium)sulfaat [2]; hydroxylammoniumhydrogeensulfaat [3]  
 PT: cloreto de hidroxilamónio [1]; sulfato de bis(hidroxilamónio) [2]; hidrogénossulfato de hidroxilamónio [3]  
 FI: hydroksyylammoniumkloridi [1]; bishydroksyylammoniumsulfaatti [2]; hydroksyylammoniumvetvsulfaatti [3]  
 SV: hydroxylammoniumklorid [1]; hydroxylammoniumsulfat [2]; hydroxylammonium vätesulfat [3]

Cas No 5470-11-1 [1]  
10039-54-0 [2]  
10046-00-1 [3]



EEC No 226-798-2 [1]  
233-118-8 [2]  
233-154-4 [3]

No 612-123-00-2

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 22-48/22    Xi; R 36/38    R 43    N; R 50

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

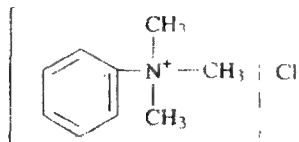
Xn	N	
		R: 22-36/38-43-48/22-50 S: (2-)22-24-37-61

*límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgrænser*


Cas No 138-24-9

EEC No 205-319-0

No 612-124-00-8



- ES: cloruro de N,N,N-trimetilanilinio  
 DA: N,N,N-trimethylaniliniumchlorid  
 DE: N,N,N-Trimethylaniliniumchlorid  
 EL: χλωρίδιο του N,N,N-τριμεθυλανιλινίου  
 EN: N,N,N-trimethylanilinium chloride  
 FR: chlorure de N,N,N-triméthylanilinium  
 IT: cloruro di N,N,N-trimetilanilinio  
 NL: N,N,N-trimethylaniliniumchloride  
 PT: cloreto de N,N,N-trimetilanilinio  
 FI: N,N,N-trimetyylilaniliniumkloridi  
 SV: N,N,N-trimetylfenylammoniumklorid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

T; R 24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

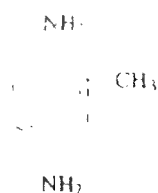
<p>T</p>	<p>R: 24/25</p> <p>S: (1/2)-25-39-45-53</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusrajat, Koncentrationsgränser*


Cas No 95-70-5

EEC No 202-442-1

No 612-125-00-3



- CS 2-metil-*p*-fenilendiamina  
 DA 2-methyl-*p*-phenylenediamine  
 DE 2-Methyl-*p*-phenylenediamin, Toluylen-2,5-diamin  
 EL 2-μεθυλο-*p*-φαινολενοδιαμίνη  
 EN 2-methyl-*p*-phenylenediamine  
 FR 2-methyl-*p*-phenylenediamine, toluène-2,5 diamine  
 IT 2-metil-*p*-fenilendiamina, 2,5 diam notoluene  
 NL 2-methyl-*p*-fenyleendiamine  
 PT 2-metil-*p*-fenilenodiamina  
 FI 2-metyyli-*p*-fenyleendiamini  
 SV 2-metyl-*p*-fenylendiamin, 2-metyl-1,4-benzendiamin

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 classificazione, Classificazione, Indeling, Classificação, Luokitus, Klassificering

T R 25	Xn; R 20/21	R 43	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 etichettage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning



R: 20/21-25-43-50/53

S: (1/2)24-37-45-60-61

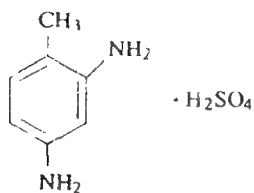
Limits of concentration, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoissuusraajat, Konzentrationsgränser


Cas No 65321-67-7

EEC No 265-697-8

No 612-126-00-9

NOTA E



ES: sulfato de tolueno-2,4-diamonio

DA: toluen-2,4-diammoniumsulfat

DE: Toluol-2,4-diammoniumsulfat; Toluylen-2,4-diaminsulfat

EL: θειικό τολουενο-2,4-διαμώνιο

EN: toluene-2,4-diammonium sulphate; 4-methyl-*m*-phenylenediamine sulfate

FR: sulfate de toluène-2,4-diammonium

IT: solfato di toluen-2,4-diammonio; 4-metil-*m*-fenilendiamina solfato

NL: toluen-2,4-diammoniumsulfat

PT: sulfato de tolueno-2,4-diamónio

FI: tolueni-2,4-diammoniumsulfatti; 4-metyyli-*m*-fenylenidiamiinisulfatti

SV: toluen-2,2-diammoniumsulfat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Carc. Cat. 2; R 45

T; R 25

Xn; R 21

Xi; R 36

R 43

N, R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

T

N



R: 45-21-25-36-43-50/53

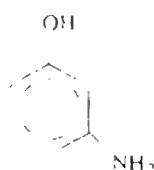
S: 53-45-60-61

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*


Cas No 591-27-5

EEC No 209-711-2

No 612-127-00-4



ES: 3-aminotanol  
 DA: 3-aminophenol  
 DE: 3-Aminophenol  
 EL: 3-αμινοφαινόλη  
 EN: 3-aminophenol  
 FR: 3-aminophénol  
 IT: 3-aminotfenolo  
 NL: 3-aminotfenol  
 PT: 3-aminotfenol  
 FI: 3-aminotfenoli  
 SV: 3-aminotfenol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 20/22	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem, Merkinnat, Märkning*

Xn	N	
		R: 20/22 51/53 S: (2-)28 61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoissuusraajat, Konzentrationsgrenser*


Cas No 123-30-8

EEC No 204-616 2

No 612-128-00-X



ES: 4-aminofenol  
 DA: 4-aminophenol  
 DE: 4-Aminophenol  
 EL: 4-αμινοφαινόλη  
 EN: 4-aminophenol  
 FR: 4-aminophénol  
 IT: 4-aminofenolo  
 NL: 4-aminofenol  
 PT: 4-aminofenol  
 FI: 4-aminofenoli  
 SV: 4-aminofenol



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Muta. Cat. 3; R 40

Xn; R 20/22

N, R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

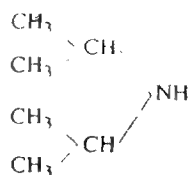
Xn	N	
		R: 20/22-40-50/53 S: (2-)28-36/37-60-61

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*


Cas No 108-18-9

EEC No 203-558-5

No 612-129-00-5





ES: diisopropilamina  
 DA: diisopropylamin  
 DE: Diisopropylamin  
 EL: διισοπροπυλαμίνη  
 EN: diisopropylamine  
 FR: diisopropylamine  
 IT: diisopropilamina  
 NL: diisopropylamine  
 PT: diisopropilamina  
 FI: diisopropyylamiini  
 SV: diisopropylamin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

F; R 11	Xn; R 20/22	C; R 34
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnot, Märkning*

F	C	
		
		R: 11-20/22-34
		S: (1/2-)16-26-36/37/39-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoissuusraajat, Konzentrationsgrænser*

C ≥ 25 %	C, R 20/22-34
10 % ≤ C < 25 %	C, R 34
5 % ≤ C < 10 %	Xi, R 36/37/38



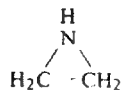
Cas No 151-56-4

EEC No 205-793-9

No 613-001-00-1

NOTA D

NOTA E



ES: etilenimina ; aziridina

DA: ethylenimin ; aziridin

DE: Ethylenimin ; Aziridin

EL: αιθυλενοϊμίνη· αζιριδίνη

EN: ethyleneimine ; aziridine

FR: éthylèneimine ; aziridine

IT: etilenimina ; aziridina




NL: ethylenimine ; aziridine

PT: etilenoimina ; aziridina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

F ; R 11	Carc. Cat. 2 ; R 45	Muta. Cat. 2 ; R 46	T+ ; R 26/27/28	C ; R 34	N ; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

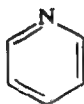
F	T+	N	
			R : 45-46-11-26/27/28-34-51/53
			S : 53-45-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 110-86-1

EEC No 203-809-9

No 613-002-00-7



ES: piridina

DA: pyridin

DE: Pyridin

EL: πυριδίνη

EN: pyridine

FR: pyridine

IT: piridina

NL: pyridine

PT: piridina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

F; R 11

Xn; R 20/21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F	Xn	
		R: 11-20/21/22
		S: (2)-26-28

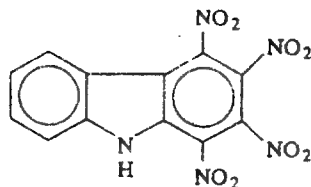
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 5 %	Xn; R 20/21/22

Cas No 6202-15-9

EEC No —

No 613-003-00-2



ES : 1,2,3,4-tetranitrocarbazol

DA : 1,2,3,4-tetranitrocarbazol

DE : 1,2,3,4-Tetranitrocarbazol

EL : 1,2,3,4-τετρανιτροκαρβαζόλιο

EN : 1,2,3,4-tetranitrocarbazole

FR : 1,2,3,4-tétranitrocarbazole

IT : 1,2,3,4-tetranitrocarbazolo

NL : 1,2,3,4-tetranitrocarbazol

PT : 1,2,3,4-tetranitrocarbazol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E	R 1	Xn ; R 20/21/22
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

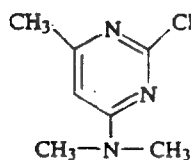
E	Xn	
		R : 1-20/21/22
		S : (2-)35

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 535-89-7

EEC No 208-622-6

No 613-004-00-8



ES: cnmidina (ISO) ; 2-cloro-6-metilpirimidin-4-ildimetilamina  
 DA: cnmidin (ISO) ; 2-chlor-6-methylpyrimidin-4-yl dimethylamin  
 DE: cnmidin (ISO) ; 2-Chlor-6-methylpyrimidin-4-yl dimethylamin  
 EL: cnmidine (ISO) ; 2-χλωρο-6-μεθυλοπυριμιδιν-4-υλοδιμεθυλαμίνη  
 EN: cnmidine (ISO) ; 2-chloro-6-methylpyrimidin-4-yl dimethylamine  
 FR: cnmidine (ISO) ; 2-chloro-6-méthylpyrimidine-4-yl diméthylamine  
 IT: cnmidina (ISO) ; 2-cloro-6-metilpirimidin-4-ildimetilammina  
 NL: cnmidine (ISO) ; 2-chloor-6-methylpyrimidine-4-yl dimethylamine  
 PT: cnmidina (ISO) ; 2-cloro-6-metilpirimidina-4-ildimetilamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

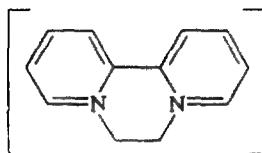
T+	
	R : 28
	S : (1/2-)36/37-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 2764-72-9

EEC No 220-433-0

No 613-005-00-3



ES: dicuat; ion; 1,1'-etilen-2,2'-bipiridilio

DA: diquat; 9,10-dihydro-8a,10a-diazoniaphenantren

DE: Diquat; 1,1'-Ethylen-2,2'-bipyridinium

EL: ντικουάτ· ιόν του 1,1'-αιθυλενο-2,2'-διπυριδιλίου· ιόν του 9,10-διυδρο-8α,10α-διαζωφαινανθρενίου

EN: diquat; 9,10-dihydro-8a,10a-diazoniaphenanthrene ion

FR: diquat; 1,1'-éthylène-2,2'-bipyridilium

IT: diquat; 1,1'-etilen-2,2'-dipiridinio

NL: diquat; 1,1'-ethyleen-2,2'-dipyridinium

PT: diquato; 1,1-etileno-2,2'-dipiridínio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 24/25

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 24/25-36/37/38
	S : (1/2-)22-36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 4685-14-7

EEC No 225-141-7

No 613-006-00-9


ES : paraquat (ISO) ; 1,1'-dimetil-4,4'-bipiridinio  
 DA : paraquat (ISO) ; 1,1'-dimethyl-4,4'-bipyridinium  
 DE : paraquat (ISO) ; 1,1'-Dimethyl-4,4'-bipyridinium  
 EL : paraquat (ISO) ; 1,1'-διμεθυλο-4,4'-διπυριδίνιο  
 EN : paraquat (ISO) ; 1,1'-dimethyl-4,4'-bipyridinium  
 FR : paraquat (ISO) ; 1,1'-diméthyl-4,4'-bipyridinium  
 IT : paraquat (ISO) ; 1,1'-dimetil-4,4'-bipiridinio  
 NL : paraquat (ISO) ; 1,1'-dimethyl-4,4'-bipyridinium  
 PT : paracuat (ISO) ; 1,1'-dimetil-4,4'-bipiridinio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T ; R 24/25

Xi ; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

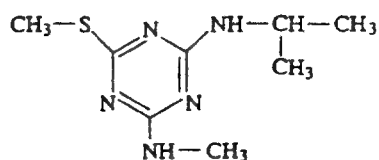
T	
	R : 24/25-36/37/38
	S : (1/2-)22-36/37/39-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1014-69-3

EEC No 213-800-1

No 613-007-00-4



- ES: desmetrina (ISO); 6-isopropilamino-2-metilamino-4-metiltio-1,3,5-triazina  
 DA: desmetryn (ISO); 6-isopropylamino-2-methylamino-4-methylthio-1,3,5-triazin  
 DE: desmetryn (ISO); 6-Isopropylamino-2-methylamino-4-methylthio-1,3,5-triazin  
 EL: desmetryn (ISO); 6-ισοπροπυλαμινο-2-μεθυλαμινο-4-μεθυλοθειο-1,3,5-τριαζίνη  
 EN: desmetryne (ISO); 6-isopropylamino-2-methylamino-4-methylthio-1,3,5-triazine  
 FR: desmétryne (ISO); 6-isopropylamino-2-méthylamino-4-méthylthio-1,3,5-triazine  
 IT: desmetrina (ISO); 6-isopropilammino-2-metilammino-4-metiltio-1,3,5-triazina  
 NL: desmetryn (ISO); 6-isopropylamino-2-methylamino-4-methylthio-1,3,5-triazine  
 PT: desmetrine (ISO); 6-isopropilamino-2-metilamino-4-metiltio-1,3,5-triazina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

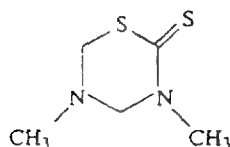
Xn	
	R : 21/22 S : (2-)36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 533-74-4

EEC No 208-576-7

No 613-008-00-X



- ES : dazomet (ISO) ; tetrahidro-3,5-dimetil-1,3,5-tiadiazina-2-tiona  
 DA : dazomet (ISO) ; tetrahydro-3,5-dimethyl-1,3,5-thiadiazin-2-thion  
 DE : dazomet (ISO) ; Tetrahydro-3,5-dimethyl-1,3,5-thiadiazin-2-thion  
 EL : dazomet (ISO) · τετραϋδρο-3,5-διμεθυλο-1,3,5-θειαδιαζινο-2-θειόνη  
 EN : dazomet (ISO) ; tetrahydro-3,5-dimethyl-1,3,5-thiadiazine-2-thione  
 FR : dazomet (ISO) ; tétrahydro-3,5-diméthyl-1,3,5-thiadiazine-2-thione  
 IT : dazomet (ISO) ; tetraidro-3,5-dimetil-1,3,5-tiadiazin-2-tione  
 NL : dazomet (ISO) ; tetrahydro-3,5-dimethyl-1,3,5-thiadiazine-2-thion  
 PT : dazomete (ISO) ; tetrahidro-3,5-dimetil-1,3,5-tiadianina-2-tiona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

Xi ; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22-36
	S : (2-)15-22-24

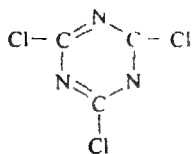
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 108-77-0

EEC No 203-614 9

No 613-009-00-5



- ES 2,4,6-tricloro-1,3,5-triazina cloruro de cianurilo  
 DA 2,4,6-trichlor-1,3,5-triazin  
 DE 2,4,6-Trichlor-1,3,5-triazin Cyanurchlorid  
 EL 2,4,6-τριχλωρο-1,3,5-τριαζίνη  
 EN 2,4,6-trichloro-1,3,5-triazine , cyanuric chloride  
 FR 2,4,6-trichloro-1,3,5-triazine chlorure de cyanuryle  
 IT 2,4,6-tricloro-1,3,5-triazina cloruro di cianurile  
 NL 2,4,6-trichloor-1,3,5-triazine  
 PT 2,4,6-tricloro-1,3,5-triazina cloreto de cianurilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

**X<sub>1</sub> ; R 36/37/38**

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

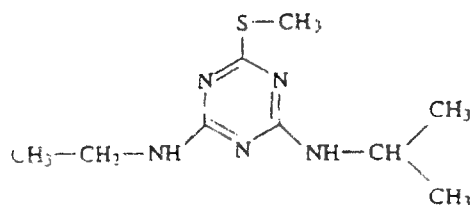
<p>X<sub>1</sub></p> 	<p>R : 36/37/38</p> <p>S : (2-)28</p>
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 834-12-8

EEC No 212-634-7

No 613-010-00-0



- ES : ametrina (ISO) ; 2-etilamino-4-isopropilamino-6-metiltio-1,3,5-triazina  
 DA : ametryn (ISO) ; 2-ethylamino-4-isopropylamino-6-methylthio-1,3,5-triazin  
 DE : ametryn (ISO) ; 2-Ethylamino-4-isopropylamino-6-methylthio-1,3,5-triazin  
 EL : ametryn (ISO) ; 2-αιθυλαμινο-4-ισοπροπυλαμινο-6-μεθυλοθειο-1,3,5-τριαζίνη  
 EN : ametryn (ISO) ; 2-ethylamino-4-isopropylamino-6-methylthio-1,3,5-triazine  
 FR : ametryne (ISO) ; 2-éthylamino-4-isopropylamino-6-méthylthio-1,3,5-triazine  
 IT : ametrina (ISO) ; 2-etilammino-4-isopropilammino-6-metiltio-1,3,5-triazina  
 NL : ametryn (ISO) ; 2-ethylamino-4-isopropylamino-6-methylthio-1,3,5-triazine  
 PT : ametrina (ISO) ; 2-etilamino-4-isopropilamino-6-metiltio-1,3,5-triazina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

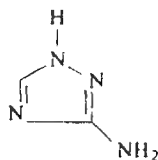
Xn	
	R : 22
	S : (2-)36

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 61-82-5

EEC No 200-521-5

No 613 011 00 6



ES	amitrol (ISO)	1,2,4-triazol-3-ilamina
DA	amitrol (ISO)	1,2,4-triazol-3-ylamin
DE	amitrol (ISO)	1,2,4-Triazol-3-ylamin
EL	amitrole (ISO)	1,2,4-τριαζολ-3-υλαμίνη
EN	amitrole (ISO)	1,2,4-triazol-3-ylamine
FR	amitrole (ISO)	1,2,4-triazole-3-ylamine aminotriazole
IT	amitrolo (ISO)	1,2,4-triazol-3 ilamina
NL	amitrol (ISO)	1,2,4-triazool-3-ylamine
PT	amitrol (ISO)	1,2,4-triazol-3-ilamina

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Carc Cat. 3 , R 40	Xn ; R 48/22	N , R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

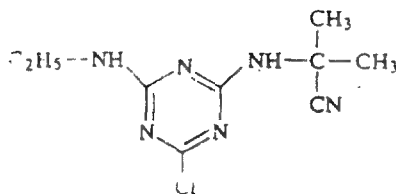
Xn	N	
		R - 40-48/22-51/53
		S : (2-)36-37 61

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limit*  
*Limites de concentration, Limiti di concentrazioni, Concentratiegrenzen, Limites de concentraçao*


Cas No 21725-46-2

EEC No 244-544-9

No 613-013-00-7



- ES : cianazina (ISO) ; 2-(4-cloro-6-etilamino-1,3,5-triazin-2-ilamino)-2-metilpropionitrilo  
 DA : cyanazin (ISO) ; 2-(4-chlor-6-ethylamino-1,3,5-triazin-2-ylamino)-2-methyl propionitrol  
 DE : cyanazin (ISO) ; 2-(4-Chlor-6-ethylamino-1,3,5-triazin-2-ylamino)-2-methylpropionitril  
 EL : cyanazine (ISO) ; 2-(4-χλωρο-6-αιθυλαμινο-1,3,5-τριαζιν-2-υλαμινο)-2-μεθυλοπροπιονιτριλίο  
 EN : cyanazine (ISO) ; 2-(4-chloro-6-ethylamino-1,3,5-triazine-2-ylamino)-2-methylpropionitrile  
 FR : cyanazine (ISO) ; 2-(4-chloro-6-éthylamino-1,3,5-triazine-2-ylamino)-2-méthylpropionitrile  
 IT : cianazina (ISO) ; 2-(4-cloro-6-etilammino-1,3,5-triazin-2-ilammino)-2-metilpropionitrile  
 NL : cyanazine (ISO) ; 2-(4-chloor-6-ethylamino-1,3,5-triazine-2-ylamino)-2-methylpropionitril  
 PT : cianazina (ISO) ; 2-(4-cloro-6-etilamino-1,3,5-triazina-2-ilamino)-2-metilpropionitrilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Roetelagem*

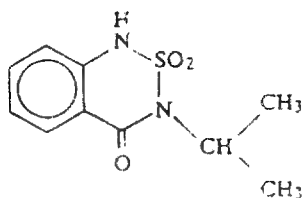
Xn	
	R : 22
	S : (2-)37

*Limites de concentration, Koncentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limieten de concentratie, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 25057-89-0

EEC No 246-585-8

No 613-012-00-1



ES: bentazona (ISO); 2,2-διόξιο de 3-ισοπροπυλ-2,1,3-benzotiadiazina-4-ona

DA: bentazon (ISO); 3-isopropyl-2,1,3-benzothiadiazin-4-on-2,2-dioxid

DE: bentazon (ISO); 3-Isopropyl-2,1,3-benzothiadiazin-4-on-2,2-dioxid

EL: bentazone (ISO); 2,2-διοξειδιο της 3-ισοπροπυλο-2,1,3-δενζοθιαδιαζιν-4-όνης

EN: bentazone (ISO); 3-isopropyl-2,1,3-benzothiadiazine-4-one-2,2-dioxide

FR: bentazone (ISO); 2,2-dioxyde de 3-isopropil-2,1,3-benzothiadiazine-4-one

IT: bentazone (ISO); 2,2-diossido di 3-isopropil-2,1,3-benzotiadiazin-4-one

NL: bentazon (ISO); 3-isopropyl-2,1,3-benzothiadiazine-4-on-2,2-dioxide

PT: bentazona (ISO); 2,2-διόξιο de 3-ισοπροπυλ-2,1,3-benzotiadiazina-4-ona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

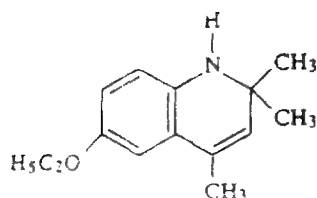
Xn	
	R 22-36
	S 2-26

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 91-53-2

EEC No 202-075-7

No 613-014-00-2



ES : etoxiquina ; 6-etoxi-1,2-dihidro-2,2,4-trimetilquinoleína

DA : ethoxyquin ; 6-ethoxy-1,2-dihydro-2,2,4-trimethylquinolin

DE : Ethoxychin ; 6-Ethoxy-2,2,4-trimethyl-1,2-dihydro-chinolin

EL : αεθοξυκίν · 6-αιθοξυ-2,2,4-τριμεθυλο-1,2-διυδροκινολίνη

EN : ethoxyquin ; 6-ethoxy-1,2-dihydro-2,2,4-trimethylquinoline

FR : ethoxyquine ; 6-éthoxy-2,2,4-triméthyl-1,2-dihydroquinoléine

IT : ethoxyquin ; 6-etossi-2,2,4-trimetil-1,2-diidrochinolina

NL : ethoxychin ; 6-ethoxy-2,2,4-trimethyl-1,2-dihydrochinoline

PT : etoxiquina ; 6-etoxi-2,2,4-trimetil-1,2-diidroquinoleína

Κlassificacón, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn ; R 22

Ετικεταδο, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

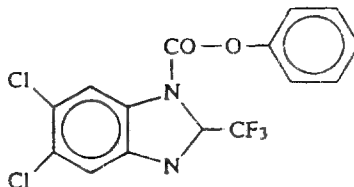
Xn	
	R : 22
	S : (2-)24

Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 14255-88-0

EEC No 238-134-9

No 613-015-00-8



- ES : fenazaflor (ISO) ; 5,6-dicloro-2-trifluorometilbencimidazol-1-carboxilato de fenilo  
 DA : fenazaflor (ISO) ; phenyl-5,6-dichlor-2-trifluormethylbenzimidazol-1-carboxylat  
 DE : fenazaflor (ISO) ; Phenyl-5,6-dichlor-2-trifluormethylbenzimidazol-1-carboxylat  
 EL : fenazaflor (ISO) ; 5,6-διχλωρο-2-τριφθορομεθυλοδενζιμιδαζολο-1-καρβοξυλικό φαινύλιο  
 EN : fenazaflor (ISO) ; phenyl 5,6-dichloro-2-trifluoromethylbenzimidazole-1-carboxylate  
 FR : fénazaflor (ISO) ; 5,6-dichloro-2-trifluorométhylbenzimidazole-1-carboxylate de phényle  
 IT : fenazaflor (ISO) ; 5,6-dicloro-2-trifluorometilbenzimidazol-1-carbossilato di fenile  
 NL : fenazaflor (ISO) ; fenyl-5,6-dichloor-2-trifluormethylbenzimidazool-1-carboxylaat  
 PT : fenazaflor (ISO) ; 5,6-dicloro-2-trifluorometilbenzimidazole-1-carboxilato de fenilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn ; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

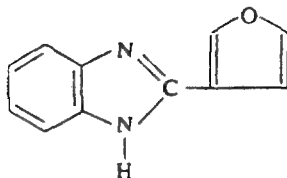
Xn	
	R : 21/22 S : (2-)36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 3878-19-1

EEC No 223-404-0

No 613-016-00-3



ES : fuberidazol ; 2-(2-furil)-bencimidazol  
 DA : fuberidazol ; 2-(2-furyl)-benzimidazol  
 DE : Fuberidazol ; 2-(2-Furyl)-benzimidazol-1,3  
 EL : φουμπεριδαζόλ · 2-(2-φουρυλο)-δενζιμιδαζόλιο  
 EN : fuberidazole ; 2-(2-furyl)benzimidazole  
 FR : fubéridazole ; 2-(2-furyl)benzimidazole  
 IT : fuberidazole ; 2-(2'-furil)-benzimidazolo  
 NL : fuberidazol ; 2-(2-furyl)benzimidazool-1,3  
 PT : fuberidazole ; 2-(2'-furil)benzimidazole

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2-)22

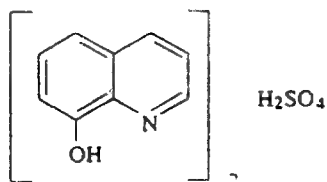
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 134-31-6

EEC No 205-137-1

No 613-017-00-9



ES: sulfato de bis(8-hidroxiquinolinio); sulfato de 8-quinolinol

DA: bis (8-hydroxyquinolinium) sulfat

DE: Bis (8-hydroxychinolinium) sulfat

EL: θειικό δις(8-υδροξυκινολίνιο)

EN: bis (8-hydroxyquinolinium) sulphate

FR: sulfate de bis (8-hydroxyquinolinium)

IT: solfato di bis (8-idrossichinolinio)

NL: bis (8-hydroxychinolinium) sulfaat

PT: sulfato de bis(8-hidroxiquinolinio); sulfato de 8-quinolinol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2-)36

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

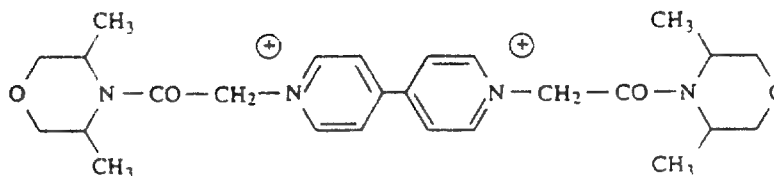

Cas No

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EEC No

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No 613-018-00-4



- ES: morfamquat (ISO); ion- 1,1'-bis(3,5-dimetilmorfolinocarbonilmetil)-4,4'-bipiridilio  
 DA: morfamquat (ISO); 1,1'-bis(3,5-dimethylmorpholinocarbonylmethyl)-4,4'-dipyridyl  
 DE: Morfamquat (ISO); 1,1'-bis(3,5-Dimethylmorpholinocarbonylmethyl)-4,4'-bipyridilium  
 EL: morfamquat (ISO); 1,1'-δισ(3,5-διμεθυλομορφολλινοκαρβονυλομεθυλο)-4,4'-διπυριδίνιο  
 EN: morfamquat (ISO); 1,1'-bis(3,5-dimethylmorpholinocarbonylmethyl)-4,4'-bipyridilium ion  
 FR: morfamquat (ISO); 1,1'-bis(3,5-diméthylmorpholinocarbonylméthyl)-4,4'-bipyridinium  
 IT: morfamquat (ISO); 1,1'-bis(3,5-dimetilmorfolinocarbonilmetil)-4,4'-bipiridilio  
 NL: morfamquat (ISO); 1,1'-bis(3,5-dimethylmorpholinocarbonylmethyl)-4,4'-dipyridilium  
 PT: morfamquato (ISO); 1,1'-bis(3,5-dimetilmorfolinocarbonilmetil)-4,4'-dipiridinio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn; R 22

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

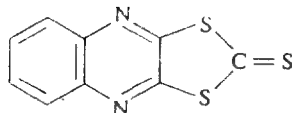
Xn	
	R : 22-36/37/38 S : (2-)22-36

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 93-75-4

EEC No 202-272-8

No 613-019-00-X



ES : tioquinox ; 1,3-ditiolo-4,5,b-quinoxalina-2-tiona  
 DA : thioquinox ; 2-thio-1,3-dithiolo (4,5-b)quinoxalin  
 DE : Thiochinox ; S,S-Chinoxalin-2,3-diyl-trithiocarbonat  
 EL : θειοκινόξ· 2-θειο-1,3-διθειολο(4,5,β)-κινόξαλίνη  
 EN : thioquinox ; 2-thio-1,3-dithiolo(4,5,b)quinoxaline  
 FR : thioquinox ; 1,3-dithiolo[4,5-*b*]quinoxaline-2-thione  
 IT : thioquinox ; 1,3-ditiolo[4,5,b]-chinossalin-2-tione  
 NL : thiochinox ; 2,3-chinoxalinediyl-trithiocarbonaat  
 PT : tioquinox ; 1,3-ditiolo(4,5,b)quinoxaline-2-tiona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

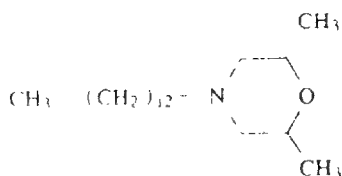
Xn	
	R : 22
	S : (2-)24

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 24602-86-6

EEC No 246-347-3

No 613-020-00-5




- ES tridemort (ISO) ; 2,6-dimetil-4-tridecilmorfolina  
 DA tridemorph (ISO) ; 2,6-dimethyl-4-tridecylmorpholin  
 DE tridemorph (ISO) ; 2,6-Dimethyl-4-tridecylmorpholin  
 EL Tridemorph (ISO) ; 2,6-διμεθυλο-4-τριδεκυλομορφολίνη  
 EN tridemorph (ISO) ; 2,6-dimethyl-4-tridecylmorpholine  
 FR tridemorphe (ISO) ; 2,6-diméthyl-4-tridécylmorpholine  
 IT tridemorfo (ISO) ; 2,6-dimetil-4-tridecilmorfolina  
 NL tridemort (ISO) ; 2,6-dimethyl-4-tridecylmorpholine  
 PT tridemorte (ISO) ; 2,6-dimetil-4-tridecilmorfolina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Xn ; R 21/22

*Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

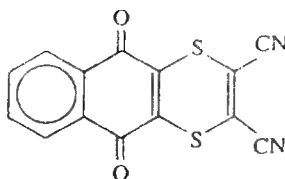
Xn	
	R : 21/22
	S : (2-)25-36/37

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 3347-22-6

EEC No 222-098-6

No 613-021-00-0



- ES : ditionona (ISO) ; 5,10-dihidro-5,10-dioxonafto (2,3-b)(1,4)ditiagina 2,3-dicarbonitrilo  
 DA : dithianon (ISO) ; 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazin-2,3-dicarbonitril  
 DE : dithianon (ISO) ; 5,10-Dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazin-2,3-dicarbonitril  
 EL : dithianon (ISO) ; 5,10-διυδρο-5,10-διοξοναφθο(2,3-b)(1,4)διθειάζινο-2,3-δικαρβονιτρίλιο  
 EN : dithianon (ISO) ; 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile  
 FR : dithianon (ISO) ; 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile  
 IT : ditionon (ISO) ; 5,10-diidro-5,10-diossonafto (2,3-b)(1,4)ditiazin-2,3-dicarbonitrile  
 NL : dithianon (ISO) ; 5,10-dihydro-5,10-dioxonafto(2,3-b)(1,4)dithiazine-2,3-dicarbonitril  
 PT : ditionone (ISO) ; 5,10-dihidro-5,10-dioxonafto (2,3-b)(1,4)ditiagina-2,3-dicarbonitrilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem

Xn	
	R : 22
	S : (2-)24

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 613-022-00-6

- ES · piretrinas incluyendo las cinerinas  
 DA · pyrethriner indeholdende cineriner  
 DE · Pyrethriner einschließlich Cinerine  
 EL · πυρεθρίνες συμπεριλαμβάνονται και οι κινερίνες  
 EN · pyrethrins including cinerins  
 FR · pyréthrines y compris cinerines  
 IT · piretrine, comprese le cinerine  
 NL · pyrethrinen met inbegrip van cinerinen  
 PT · piretrinas, incluindo cinerinas

Classification · Klassificering · Einstufung · Ταξινόμηση · Classification · Classificazione · Indeling · Classificação

Xn ; R 20/21/22

Etiquetado · Etikettering · Kennzeichnung · Επισήμανση · Labelling · Etiquetage · Etichettatura · Kenmerken · Rotulagem

Xn



R : 20/21/22

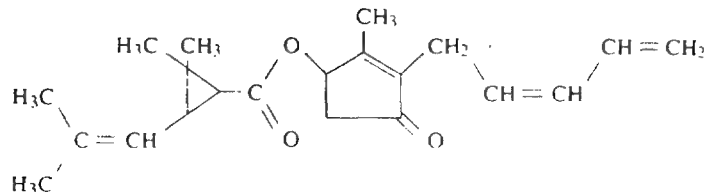
S : (2-)13

Limite de concentration · Konzentrationsgrenzen · Konzentration-grenzuerte · Όρια συγκέντρωσης · Concentration limits ·  
 Limite de concentration · Limite di concentrazione · Concentratiegrenzen · Limites de concentração


Cas No 121-21-1

EEC No 204-455-8

No 613-023-00-1



ES: piretrina I

DA: pyrethrin I

DE: Pyrethrin I; 2,2-Dimethyl-3-(2-methyl-prop-1-enyl)-cyclopropanecarbonsäure-O-(+)-cis-4{3-methyl-2-(penta-2,4-dienyl)-cyclopent-2-en-1-on}-ester

EL: πυρεθρίνη Ι

EN: pyrethrin I

FR: pyrethrine I

IT: piretrina I


NL: pyrethrine I

PT: piretrina I

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

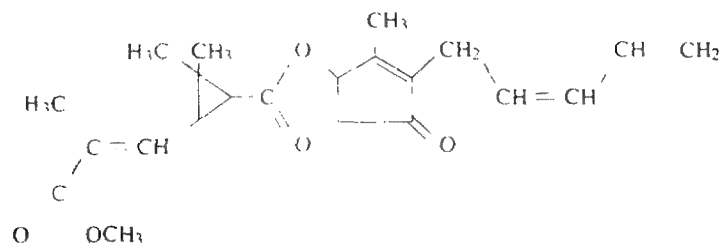
Xn	
	R : 20/21/22
	S : (2-)/13

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 121-29-9

EEC No 204-462-6

No 613-024-00-7



ES piretrina II

DA pyrethrin II

DE: Pyrethrin II, 2,2-Dimethyl-3-(3-methoxy-2-methyl-3-oxo-prop-1-enyl)-cyclopropan-carbonsäure-O-(+)-cis-4-[3-methyl-2-2(penta-2,4-dienyl)-cyclopent-2-en-1-on]-ester

EL: πυρεθρίνη II

EN: pyrethrin II

FR pyrethrine II

IT piretrina II

NL: pyrethrine II

PT piretrina II

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 20/21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20/21/22
	S : (2-)/3

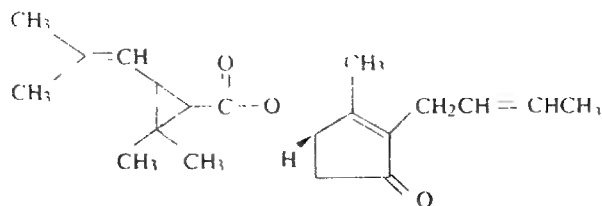
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 25402-06-6

EEC No 246-948-0

No 613-025-00-2



- ES : 2,2-dimetil-3-(2-metilprop-1-enil)ciclopropanocarboxilato de 3-(but-2-enil)-2-metil-4-oxociclopent-2-enilo ; cinerina I
- DA : 3-(but-2-enyl)-2-methyl-4-oxocyclopent-2-enyl-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylat ; cinerin I
- DE : 3-(But-2-enyl)-2-methyl-4-oxocyclopent-2-enyl-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylat ; Cinerin I
- EL : 2,2-διμεθυλο-3-(2-μεθυλοπρoπ-1-ενύλιο)κυκλοπροπανοκαρβοξυλικό-3-(δoυτ-2-ενύλιο)-2-μεθυλο-4-οξoκυκλοπεντ-2-ενύλιο
- EN : 3-(but-2-enyl)-2-methyl-4-oxocyclopent-2-enyl-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate ; cinerin I
- FR : 2,2-diméthyl-3-(2-méthylprop-1-ényl)cyclopropanecarboxylate de 3-(but-2-enyl)-2-méthyl-4-oxocyclopent-2-ényle ; cinérine I
- IT : 2,2-dimetil-3-(2-metilprop-1-enil)ciclopropancarbossilato di 3-(but-2-enil)-2-metil-4-ossociclopent-2-enile ; cinerina I
- NL : 3-(but-2-enyl)-2-methyl-4-oxocyclopent-2-enyl-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylaat ; cinérine I
- PT : 2,2-dimetil-3-(2-metilprop-1-enil)ciclopropanocarboxilato de 3-(but-2-enil)-2-metil-4-oxociclopent-2-enilo ; cinerina I

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Romlagem

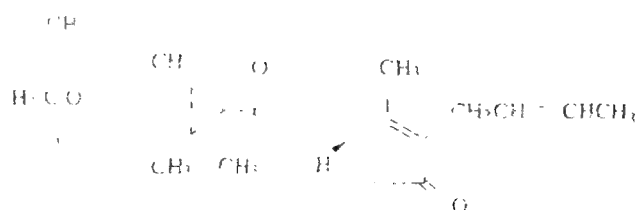
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 121-20-0

EEC No 204-454-2

No 613-026-00-8



- ES 2,2-dimetil-3-(3-metoxi-2-metil-3-oxoprop-1-enil)ciclopropanocarboxilato de 3-(but-2-enil)-2-metil-4-oxociclopent-2-enil; cinerina II
- DA 3-(but-2-enyl)-2-methyl-4-oxocyclopent-2-enyl 2,2-dimethyl-3-(3-methoxy-2-methyl-3-oxoprop-1-enyl)-cyclopropanecarboxylate; cinerin II
- DE 3-(But-2-enyl)-2-methyl-4-oxocyclopent-2-enyl 2,2-dimethyl-3-(3-methoxy-2-methyl-3-oxoprop-1-enyl)-cyclopropanecarboxylat; Cinerin II
- EL 2,2-διμεθυλο-3-(3-μεθοξύ-2-μεθυλ-3-οξοπροπ-1-ενύλο)κυκλοπροπανοκαρβοξυλικό-3-βουτ-2-ενύλο-2-μεθυλο-4-οξοκυκlopεντ-2-ενύλιο
- EN 3-(but-2-enyl)-2-methyl-4-oxocyclopent-2-enyl 2,2-dimethyl-3-(3-methoxy-2-methyl-3-oxoprop-1-enyl)-cyclopropanecarboxylate; cinerin II
- FR 2,2-diméthyl-3-(3-méthoxy-2-méthyl-3-oxoprop-1-ényl)cyclopropanecarboxylate de 3-(but-2-ényl)-2-méthyl-4-oxocyclopent-2-ényle; cinérine II
- IT 2,2-dimetil-3-(3-metossi-2-metil-3-ossoprop-1-enil)ciclopropanecarbossilato di 3-(but-2-enil)-2-metil-4-ossociclopent-2-enile; cinerina II
- NL 3-(but-2-enyl)-2-methyl-4-oxocyclopent-2-enyl 2,2-dimethyl-3-(3-methoxy-2-methyl-3-oxoprop-1-enyl)-cyclopropanecarboxylaat; cinerine II
- PT 2,2-dimetil-3-(3-metoxi-2-metil-3-oxoprop-1-enil)ciclopropanocarboxilato de 3-(but-2-enil)-2-metil-4-oxociclopent-2-enilo; cinerina II

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Xn, R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

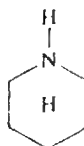
Xn	
	R 22
	S 12

Límites de concentración, Konzentrationserreiser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração


Cas No 110-89-4

EEC No 203-813-0

No 613 027 00 4



ES piperidina hexahidropiridina

DA piperidin

DE Piperidin

EL πιπεριδίνη

EN piperidine

FR piperidine

IT piperidina

NL piperidine

PT piperidina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificatie, Indeling, Classificação

F, R 11

T, R 23/24

C, R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichetare, Kenmerken, Rotulagem

F	T	
		R 11 23/24 34
		S + (1/2) 16 26 27 45

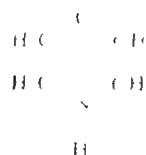
Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορία συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limite de concentração

C ≥ 5 %	T, R 23/24-34
1 % ≤ C < 5 %	Xn, R 20/21-36/38

No 110 91 8

F E C I D O

F E C I D O



IS morfolina (trattato 14 ossidato)

DA morpholin

DE Morpholin

EL μορφολίνη

EN morpholine

FR morpholine

IT morfolina


NL morpholine

PT morfolina

Classification Klassificeren Einordnung Ταξινόμηση Classification Classification Einordnung Klassifizierung

R 10	Xn, R 20/21/22	C, R 34
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Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kennzeichen Rotulagem

C	
	R 10, 20/21/22, 34
	S (1/2) 23, 36, 45

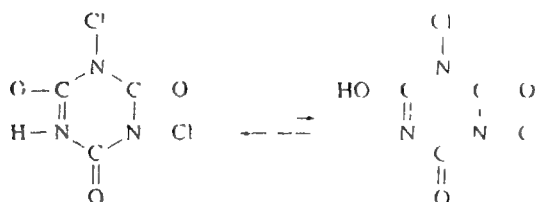
Limite de concentration Konzentrationsgrenze Konzentrationsgrenzwerte Όρια συγκεντρώσεως concentration limit  
 Limites de concentration Limite di concentrazione Concentrationgrenzen Limites de concentraçao

C > 25 %	C, R 20/21/22, 34
10 % < C < 25 %	C, R 34
1 % < C < 10 %	Xn, R 36/38

Cas No 2782-57-2

EC No 220-487-5

Nc 613 029 00-4




- ES ácido dicloroisocianúrico 1,3-dicloro-5H 1,3,5-triazinatriona  
 DA dichlorisocyanursyre  
 DE Dichlorisocyanursäure 1,3-Dichlor-5H (1,3,5)-triazin 2,4,6 trion  
 EL διχλωροισοκυανουρικό οξύ  
 EN dichloroisocyanuric acid dichloro 1,3,5-triazinetrioxone  
 FR 1,3-dichloro 1,3,5-triazine 2,4,6 trione acide dichloroisocyanurique  
 IT acido dicloroisocianurico  
 NL dichloorisocyanuurzuur  
 PT acido dicloroisocianúrico

Clasificación Klassificering Einstufung Ταξινόηση Classification Classificazione Classificazione Intélny Classificazioe

O, R 8	Xn, R 22	R 31	Xn, R 36/37
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Etiquetado Etikettering Kennzeichnung Επισημάνση Labelling Etiquetage Etichettatura Kennzeichen Rotulagem

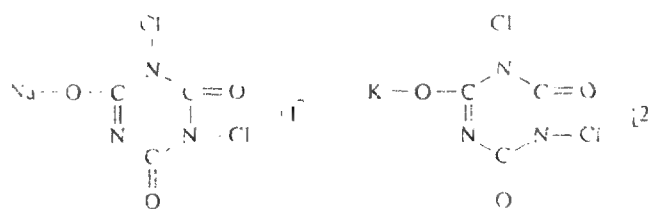
O	Xn	
		R 8 22 31 36/37 S (2) 8 26 41

Límites de concentración Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκεντρώσεως Concentration limits  
 Limites de concentration Limiti di concentrazione, Concentratiegrenzen Limites de concentraçõe


Cas No 2893-78-9 [1]  
2244-21-5 [2]

EEC No 220-767-7 [1]  
218-828-8 [2]

No 613-030-00-X





- ES sal de sodio del ácido dicloroisocianurico [1], sal de potasio del ácido dicloroisocianúrico [2]  
 DA natriumsalt af dichlorisocyanursyre [1], kaliumsalt af dichlorisocyanursyre [2]  
 DE Dichlorisocyanursäure, Natriumsalz [1], 1,3-Dichlor-5H-(1,3,5)-triazin-2,4,6-trion, Natriumsalz [1], Dichlorisocyanursäure, Kaliumsalz [2], 1,3-Dichlor-5H-(1,3,5)-triazin-2,4,6-trion, Kaliumsalz [2]  
 EL το μετα νατρίου αλάς του διχλωροϊσοκυανουρικού οξέος [1] το μετά καλίου άλας του διχλωροϊσοκυανουρικού οξέος [2]  
 EN sodium salt of dichloroisocyanuric acid [1], dichloro-1,3,5-triazinetriene, sodium salt [1], potassium salt of dichloroisocyanuric acid [2], dichloro-1,3,5-triazinetriene, potassium salt [2]  
 FR sel de sodium de l'acide dichloroisocyanurique [1], sel de potassium de l'acide dichloroisocyanurique [2]  
 IT sale di sodio dell'acido dicloroisocianurico [1], sale di potassio dell'acido dicloroisocianurico [2]  
 NL natriumzout van dichloorisocyanuurzuur [1], kaliumzout van dichloorisocyanuurzuur [2]  
 PT sal de sódio do ácido dicloroisocianurico [1], sal de potássio do ácido dicloroisocianúrico [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

O; R 8    Xn; R 22    R 31    Xi; R 36/37

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

O	Xn	
		R : 8-22-31-36/37 S : (2)-8-26-41

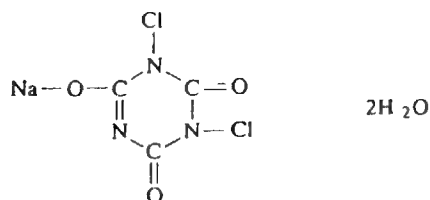
*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn; R 22-31-36/37

Cas No 51580-86-0

EEC No —

No 613 030-01 7



- ES sal de sodio del ácido dicloroisocianúrico dihidratada  
 DA dichlorisocyanursyre, natriumsalt dihydrat  
 DE Natriumdichlorisocyanatdihydrat  
 EL διένυδρο άλας νατρίου του διχλωροϊσοκυανουρικού οξέος  
 EN sodium dichloroisocyanurate, dihydrate  
 FR sel de sodium de l'acide dichloroisocyanurique dihydraté  
 IT dicloroisocianurato sodico biidrato  
 NL natriumdichloorisocyanuraatdihydraat  
 PT dicloroisocianurato sodico dihidratado

*Classificacão, Klassificering, Einstufung, Ταξινόμηση Classification, Classification Classificazione Indeling Classificazioe*

Xn, R 22	R 31	Xn, R 36/37
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura Kenmerken Rotulagem*

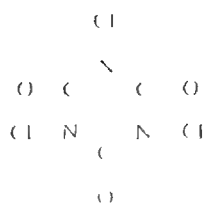
Xn	
	R 22-31-36/37 S (2-)8-26-41

*Límites de concentración Konzentrationsgrenzen, Konzentrationsgrenzwerte Όρια συγκεντρώσεως Concentration limits  
 Limites de concentration Limite di concentrazione Concentratiegrenzen Limite de concentratie*


Cas No 87 90 1

EEC No 201 782 8

N. C.I.C. 201



- ES triclora 1,3,5 triazin-4(6H)-one - ácido tricloro-1,3,5 triazinico  
 DA trichlorisocyanuric  
 DE Trichlorisocyanurinsäure - 1,3,5-Trichlor-1,3,5-triazin-2,4,6-trione  
 EL τριχλωροκυανουρικό οξύ  
 EN trichloroisocyanuric acid - trichloro-1,3,5 triazin-4(6H)-one  
 FR trichloro-1,3,5 triazine-2,4,6 trione - acide trichloroisocyanurique  
 IT triclora-5 triazina-2,4,6 trione - ácido tricloro-1,3,5 triazinico  
 NL trichlorisocyanurzuur  
 PT triclora-5 triazina-2,4,6 trione - ácido tricloro-1,3,5 triazinico

Classification: EEC - Directive 67/548/EEC - European Classification - Classification: CEE - Directive 67/548/EEC - European Classification

O - R 8	Xn - R 22	R 31	Xn - R 36/37
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European Labeling - European Union - European Labeling - European Labeling - European Labeling - European Labeling - European Labeling

O	Xn	
		R - 8, 22, 31, 36/37
		S - (2)S 2, 3, 4

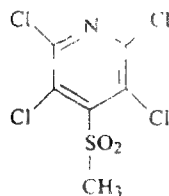
Limit de concentration - Konzentrationen - Konzentrationen - Konzentrationen - Konzentrationen - Konzentrationen - Konzentrationen




Cas No 13108-52-6

EEC No 236-035-5

No 613-032-00-0



ES : 2,3,5,6-tetracloro-4-(metilsulfonil)piridina

DA : 2,3,5,6-tetrachloro-4-(methylsulfonyl)pyridin

DE : 2,3,5,6-Tetrachloropyridyl-4-methylsulfon ; 2,3,5,6-Tetrachloro-4-(methylsulphonyl)pyridin

EL : 2,3,5,6-τετραχλωρο-4-(μεθυλοσουλφονυλο)-πυριδίνη

EN : methyl-2,3,5,6-tetrachloro-4-pyridylsulphone ; 2,3,5,6-tetrachloro-4-(methylsulphonyl)pyridine

FR : 2,3,5,6-tétrachloro-4-(méthylsulfonyl)pyridine

IT : 2,3,5,6-tetracloro-4-(metilsulfonil)piridina

NL : 2,3,5,6-tetrachloor-4-methylsulfonylpyridine

PT : 2,3,5,6-tetracloro-4-metilssulfonilpiridina

Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Inaeling, Classificação

Xn ; R 21/22

Xi ; R 36

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagen

Xn



R : 21/22-36-43

S : (2-)26-28

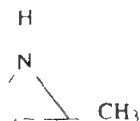
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 75-55-8

EEC No 200-878-7

No 613-033-00-6

NOTA E





ES 2-metilaziridina , propilenimina  
 DA 2-methylaziridin , propylenimin  
 DE 2-Methylaziridin , Propylenimin  
 EL 2-μεθυλαζιρίδίνη  
 EN 2-methylaziridine , propyleneimine  
 FR 2-méthylaziridine , propylèneimine  
 IT 2-metilaziridina , propilenimina  
 NL 2-methylaziridine , propyleenimine  
 PT 2-metilaziridina , propilenimina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

F R 11	Carc. Cat. 2 ; R 45	T+ ; R 26/27/28	Xi ; R 41
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

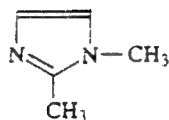
		R : 45-11-26/27/28-41 S : 53-45
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 1739-84-0

EEC No 217-101-2

No 613-034-00-1



ES : 1,2-dimetilimidazol  
 DA : 1,2-dimethylimidazol  
 DE : 1,2-Dimethylimidazol  
 EL : 1,2-διμεθυλιμιδαζόλιο  
 EN : 1,2-dimethylimidazole  
 FR : 1,2-diméthylimidazole  
 IT : 1,2-dimetilimidazolo  
 NL : 1,2-dimethylimidazool  
 PT : 1,2-dimetilimidazole

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Xn ; R 22

Xi ; R 38-41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

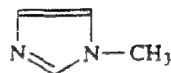
Xn	
	R : 22-38-41
	S : (2-)24-26

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 616-47-7

EEC No 210-484-7

No 613-035-00-7



ES : 1-metilimidazol

DA : 1-methylimidazol

DE : 1-Methylimidazol

EL : 1-μεθυλιμιδαζόλιο

EN : 1-methylimidazole

FR : 1-méthylimidazole

IT : 1-metilimidazolo

NL : 1-methylimidazool

PT : 1-metilimidazolo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xn ; R 21/22

C ; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

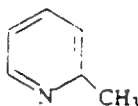
	R : 21/22-34
	S : (1/2-)26-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 109-06-8

EEC No 203-643-7

No 613-036-00-2



ES: 2 metilpiridina; 2-picolina

DA: 2-methylpyridin; 2-picolin

DE: 2 Methylpyridin; 2-Picolin

EL: 2-μεθυλοπυριδίν· 2-πικολίνη

EN: 2 methylpyridine; 2-picoline

FR: 2-méthylpyridine; 2-picoline

IT: 2-metilpiridina; 2-picolina

NL: 2 methylpyridine; 2-picoline

PT: 2-metilpiridina; 2-picolina

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

R 10	Xn; R 20/21/22	Xi; R 36/37
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

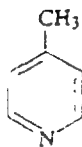
Xn	
	R : 10-20/21/22-36/37
	S : (2-)26-36

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 108-89-4

EEC No 203-626-4

No 613-037-00-8



ES: 4-metilpiridina; 4-picolina

DA: 4-methylpyridin; 4-picolin

DE: 4-Methylpyridin; 4-Picolin

EL: 4-μεθυλοπυριδίνη

EN: 4-methylpyridine; 4-picoline

FR: 4-methylpyridine; 4-picoline

IT: 4-metilpiridina; 4-picolina

NL: 4-methylpyridine; 4-picoline

PT: 4-metilpiridina; 4-picolina

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

R 10	T: R 24	Xn; R 20/22	Xi; R 36/37/38
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

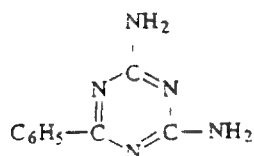
	R: 10-20/22-24-36/37/38
	S: (1/2)-26-36-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 91-76-9

EEC No 202-095-6

No 613-038-00-3




- ES: 6-fenil-1,3,5-triazina-2,4-diamina; benzoguanamina  
 DA: 6-phenyl-1,3,5-triazin-2,4-diamin; benzoguanamin  
 DE: 6-Phenyl-1,3,5-triazin-2,4-diamin; Benzoguanamin  
 EL: 6-φαινυλο-1,3,5-τριαζινο-2,4-διαμίνη · δενζογουαναμίνη  
 EN: 6-phenyl-1,3,5-triazine-2,4-diamine; benzoguanamine  
 FR: 6-phényl-1,3,5-triazine-2,4-diamine; benzoguanamine  
 IT: 6-fenil-1,3,5-triazin-2,4-diamina; benzoguanamina  
 NL: 6-fenyl-1,3,5-triazine-2,4-diamine; benzoguanamine  
 PT: 6-fenil-1,3,5-triazina-2,4-diamina; benzoguanamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 96-45-7

EEC No 202-506-9

No 613-039-00-9

NOTA E



ES: etilentiourea; imidazolidina-2-tiona

DA: ethylenthioninstof; imidazolidin-2-thion

DE: Ethylenthioharnstoff; Imidazolidin-2-thion

EL: αιθυλενοθειουρία · ιμιδαζολιδινο-2-θειόνη

EN: ethylene thiourea; imidazolidine-2-thione; 2-imidazoline-2-thiol

FR: éthylènthiouree; imidazolidine-2-thione; 2-imidazoline-2-thiol

IT: etilentiourea; imidazolidin-2-tione

NL: ethyleenthiozurem; imidazolidine-2-thion

PT: eulenotiourea; imidazolidina-2-tiona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 2; R 61

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 61-22
	S : 53-45

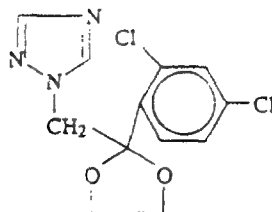
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 60207-31-0

EEC No 262-102-3

No 613-040-00-4



- ES : azaconazol (ISO) ; 1-[[2-(2,4-diclorofenil)-1,3-dioxolan-2-il]metil]-1H-1,2,4-triazol  
 DA : azaconazol (ISO) ; 1-[[2-(2,4-dichlorphenyl)-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazol  
 DE : azaconazol (ISO) ; 1-[[2-(2,4-Dichlorophenyl)-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazol  
 EL : azaconazole (ISO) ; 1-[[2-(2,4-διχλωροφαινυλο)-1,3-διοξολαν-2-υλ]μεθυλο]-1H-1,2,4-τριαζόλη  
 EN : azaconazole (ISO) ; 1-[[2-(2,4-dichlorophenyl)-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole  
 FR : azaconazole (ISO) ; 1-[[2-(2,4-dichlorophényl)-1,3-dioxolann-2-yl]méthyl]-1H-1,2,4-triazole  
 IT : azaconazolo (ISO) ; 1-[[2-(2,4-diclorofenil)-1,3-diossolan-2-il]metil]-1H-1,2,4-triazolo  
 NL : azaconazol (ISO) ; 1-[[2-(2,4-dichloorphenyl)-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazol  
 PT : azaconazol (ISO) ; 1-[[2-(2,4-diclorofenil)-1,3-dioxolan-2-il]metil]-1H-1,2,4-triazol

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 44

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22-44
	S : (2-)24

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 15159-40-7

EEC No 239-213-0

No 613-041-00-X



ES cloruro de morfolina-4-carbonilo

DA morpholin-4-carbonylchlorid

DE Morpholin-4-carbonylchlorid

EL χλωρίδιο του μορφολινο-4-καρβονυλίου

EN morpholine-4-carbonyl chloride

FR chlorure de morpholine-4-carbonyle

IT cloruro di morfolin-4-carbonile

NL morfoline-4-carbonylchloride

PT cloreto de morfolina-4-carbonilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, inddeling, Classificação

R 14 | Carc. Cat. 3 ; R 40 | Xi ; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

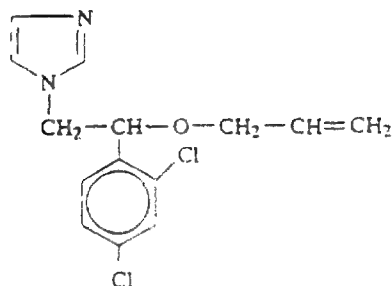
Xn	
	R : 14-36/38-40
	S : (2-)26-30-36-38

Limite de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 35554-44-0

EEC No 252-615-0

No 613-042-00-5



- ES : 1-[2-(aliloxi)-2-(2,4-diclorofenil)etil]-1 *H*-imidazol  
 DA : 1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1 *H*-imidazol  
 DE : 1-[2-(Allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1 *H*-imidazol  
 EL : 1-[2-(αλλυλοξυ)-2-(2,4-δυχλωροφαινυλ)αιθυλο]-1 *H*-ιμιδαζόλιο  
 EN : 1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1 *H*-imidazole ; imazalil (ISO)  
 FR : 1-[2-(allyloxy)-2-(2,4-dichlorophényl)éthyl]-1 *H*-imidazole ; imazalil (ISO)  
 IT : 1-[2-(allilossi)-2-(2,4-diclorofenil)etil]-1 *H*-imidazolo  
 NL : 1-[2-(allyloxy)-2-(2,4-dichloorfenyl)ethyl]-1 *H*-imidazool  
 PT : 1-[2-(aliloxi)-2-(2,4-diclorofenil)etil]-1 *H*-imidazole

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

Xi ; R 36

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

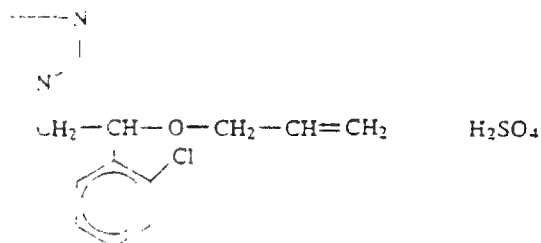
Xn	
	R : 22-36 S : (2)

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 58594-72-2

EEC No 261-351-5

No 613-043-00-0



- ES : hidrogenosulfato de 1-[2-(aliloxi)etil-2-(2,4-diclorofenil)]-1 *H*-imidazolio  
 DA : 1-[2-(allyloxy)ethyl-2-(2,4-dichlorophenyl)]-1 *H*-imidazoliumhydrogensulfat  
 DE : 1-[2-(Allyloxy)ethyl-2-(2,4-dichlorophenyl)]-1 *H*-imidazoliumhydrogensulfat  
 EL : θειικό 1-[2-(αλλυλοξυ)αιθυλο-2-(2,4-διχλωροφαινυλο)]-1 *H*-ιμιδαζόλιο  
 EN : 1-[2-(allyloxy)ethyl-2-(2,4-dichlorophenyl)]-1 *H*-imidazolium hydrogen sulphate ; imazalil sulphate (ISO)  
 FR : hydrogénosulfate de 1-[2-(allyloxy)-2-(2,4-dichlorophényl)éthyl]-1 *H*-imidazolium ; hydrogénosulfate d'imazalil  
 IT : drogenosolfato di 1-[2-(alilossi)etil-2-(2,4-diclorofenil)]-1 *H*-imidazolio  
 NL : 1-[2-(allyloxy)ethyl-2-(2,4-dichloorfenyl)]-1 *H*-imidazoliumhydrogeensulfaat  
 PT : hidrogenossulfato de 1-[2-(aliloxi)etil-2-(2,4-diclorofenil)]-1 *H*-imidazólio

Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Xi ; R 41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

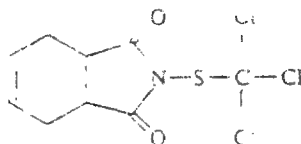
<div style="display: flex; align-items: center; justify-content: space-between;"> <div style="text-align: center;"> <p>Xn</p>  </div> <div> <p>R : 22-41</p> <p>S : (2-)26</p> </div> </div>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 133-06-2

EEC No 205-087-0

No 613-044-00-6



ES: captan (ISO)

DA: captan (ISO)

DE: captan (ISO)

EL: captan (ISO)

EN: captan (ISO); 1,2,3,6-tetrahydro-N(trichloromethylthio)phthalimide

FR: captane (ISO); N-(trichlorométhylthio)cyclohex-4-ène-1,2-dicarboximide

IT: captan (ISO)

NL: captan (ISO)

PT: captano (ISO)

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Xi; R 36

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R: 36-40-43

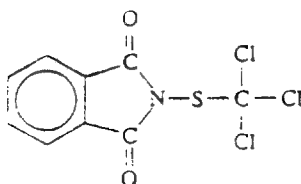
S: (2-)36/37

Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 133-07-3

EEC No 205-088-6

No 613-045-00-1



ES: N-(triclorometiltilio)ftalimida; folpet  
 DA: N-(trichlormethylthio)phthalimid; folpet  
 DE: N-(Trichlormethylthio)phthalimid; Folpet  
 EL: N-(τριχλωρομεθυλοθειο)φθαλιμιδιο; folpet  
 EN: N-(trichloromethylthio)phthalimide; folpet  
 FR: N-(trichlorométhylthio)phthalimide; folpet; folpei  
 IT: N-(triclorometiltilio)ftalimmide; folpet  
 NL: N-(trichloormethylthio)ftaalimide; folpet  
 PT: N-(triclorometiltilio)ftalimida; folpete

Classificacion, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40	Xi; R 36	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

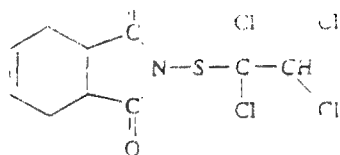
Xn	
	R: 36-40-43
	S: (2-)36/37

...mites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2425-06-1

EEC No 219-363-3

No 613-046-00-7



- ES: captafol (ISO); 1,2,3,6-tetrahidro-N-(1,1,2,2-tetracloroetiltio)ftalimida  
 DA: captafol (ISO); 1,2,3,6-tetrahydro-N-(1,1,2,2-tetrachlorethylthio)phthalimid  
 DE: captafol (ISO); 1,2,3,6-Tetrahydro-N-(1,1,2,2-tetrachlorethylthio)phthalimid  
 EL: captafol (ISO); 1,2,3,6-τετραϋδρο-N-(1,1,2,2-τετραχλωροαιθυλοθειο)φθαλιμίδιο  
 EN: captafol (ISO); 1,2,3,6-tetrahydro-N-(1,1,2,2-tetrachloroethylthio)phthalimide  
 FR: captafol (ISO); 1,2,3,6-tétrahydro-N-(1,1,2,2-tétrachloroéthylthio)phthalimide  
 IT: captafolo (ISO); 1,2,3,6-tetraidro-N-(1,1,2,2-tetracloroetiltio)ftalimmide  
 NL: captafol (ISO); 1,2,3,6-tetrahydro-N-(1,1,2,2-tetrachloorethylthio)ftaalimide  
 PT: captafol (ISO); 1,2,3,6-tetrahidro-N-(1,1,2,2-tetracloroetiluo)ftalimida

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

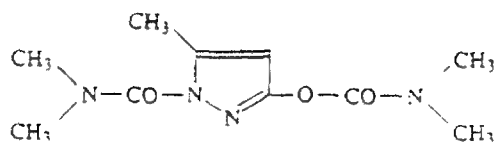
<p>T</p>	R 45-43
	S 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas. No 644-644

EEC No 211-420-0

No 613-047-00-2



ES: dimetilán (ISO); dimetilcarbarnato de 1-dimetilcarbamoil-5-metilpirazol-3-ilo

DA: 1-dimethylcarbamoil-5-methylpyrazol-3-yl dimethylcarbamate

DE: 1-Dimethylcarbamoil-5-methylpyrazol-3-yl dimethylcarbamate

EL: διμεθυλοκαρβαμιδικός 1-διμεθυλοκαρβαμούλο-5-μεθυλοπυραζολ-3-υλεστέρας · dimetilán (ISO)

EN: 1-dimethylcarbamoil-5-methylpyrazol-3-yl dimethylcarbamate; dimetilán (ISO)

FR: dimethylcarbamate de 1-diméthylcarbamoil-5-méthylpyrazol-3-yle; dimétilán (ISO)

IT: dimetilcarbarnato di 1-dimetilcarbamoil-5-metilpirazol-3-ile

NL: 1-dimethylcarbamoil-5-methylpyrazol-3-yl dimethylcarbamate

PT: dimetilane (ISO); dimetilcarbarnato de 1-dimetilcarbamoil-5-metilpirazole-3-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 25

Xn; R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 21-25
	S : (1/2-)36/37-45

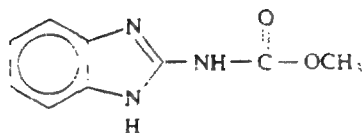
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã




Cas No 10605-21-7

EEC No 234-232-0

No 613-048-00-8



- ES: carbendazina (ISO); bencimidazol-2-ilcarbamato de metilo  
 DA: carbendazim (ISO); methylbenzimidazol-2-ylcarbamate  
 DE: carbendazim (ISO); Methylbenzimidazol-2-ylcarbamate  
 EL: carbendazim (ISO); δενζιμιδαζολ-2-υλοκαρβαμιδικός μεθυλεστέρας  
 EN: carbendazim (ISO); methyl benzimidazol-2-ylcarbamate  
 FR: carbendazine (ISO); benzimidazole-2-ylcarbamate de méthyle  
 IT: carbendazina (ISO); benzimidazol-2-ilcarbammato di metile  
 NL: carbendazim (ISO); methylbenzimidazool-2-ylcarbamaat  
 PT: carbendazina (ISO); benzimidazole-2-ilcarbamato de metilo

*Clasificación. Klassificering. Einstufung. Ταξινόμηση. Classification. Classificazione. Indeling. Classificação*

Muta. Cat. 3; R 40

*Etiquetado. Etikettering. Kennzeichnung. Επισήμανση. Labelling. Étiquetage. Etichettatura. Kenmerk(en). Rotulagem*

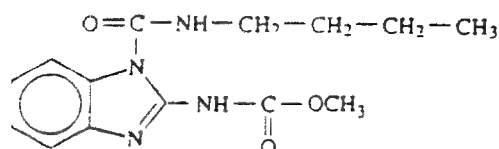
Xn	
	R : 40
	S : (2-)36/37

*Límites de concentración. Konzentrationsgrenzen. Konzentrationsgrenzwerte. Όρια συγκεντρώσεως. Concentration limits. Limites de concentration. Limite di concentrazione. Concentratiegrenzen. Limites de concentraçáo*


Cas No 17804-35-2

EEC No 241-775-7

No 613-049-00-3




- ES: benomio (ISO); 1-(butilcarbamoil)bencimidazol-2-ilcarbamato de metilo  
 DA: benomyl (ISO); methyl-1-(butylcarbamoil)benzimidazol-2-ylcarbamat  
 DE: benomyl (ISO); Methyl-1-(butylcarbamoil)benzimidazol-2-ylcarbamat  
 EL: benomyl (ISO); 1-(δουτυλοκαρβαμουλο)δενζιμιδαζολ-2-υλοκαρβαμιδικός μεθυλεστέρας  
 EN: benomyl (ISO); methyl 1-(butylcarbamoil)benzimidazol-2-ylcarbamate  
 FR: benomyl (ISO); 1-(butylcarbamoil)benzimidazole-2-ylcarbamate de méthyle  
 IT: benomil (ISO); 1-(butilcarbammoil)benzimidazol-2-ilcarbammato di metile  
 NL: benomyl (ISO); methyl-1-(butylcarbamoil)benzimidazool-2-ylcarbamaat  
 PT: benomilo (ISO); 1-(butilcarbamoil)benzimidazole-2-ilcarbamato de metilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificação, Indeling, Classificação

Muta. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 40
	S : (2-)36/37

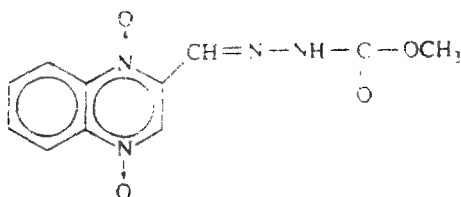
Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 6804-07-5

EEC No 229-879-0

No 613-050-00-9

NOTA E



- ES: carbadox (DCI); 1,4-dióxido de 3-(quinoxalina-2-ilmetilén)carbazato de metil; 1,4-dióxido de 2-((metoxicarbonilhidrazonometil)quinoxalina
- DA: carbadox (INN); methyl-3-(quinoxalin-2-ylmethylene)carbazat-1,4-dioxid; 2-(methoxycarbonylhydrazonomethyl)-quinoxalin-1,4-dioxid
- DE: Carbadox (INN); Methyl-3-(chinoxalin-2-ylmethylene)carbazat-1,4-dioxid; 2-(Methoxycarbonylhydrazonomethyl)-chinoxalin-1,4-dioxid
- EL: Carbadox (INN); 1,4-διοξειδίο της 2-(μεθοξυκαρβονυλδραζωνομεθυλο)κιννοξαλίνης
- EN: carbadox (INN); methyl 3-(quinoxalin-2-ylmethylene)carbazate 1,4-dioxide; 2-(methoxycarbonylhydrazonomethyl)-quinoxaline 1,4-dioxide
- FR: carbadox (DCI); 1,4-dioxyde du 3-(quinoxaline-2-ylméthylène)carbazate de méthyle; 2-((methoxycarbonylhydrazonométhyl)quinoxaline-1,4-dioxyde
- IT: carbadox (DCI); 1,4-diossido di 3-(chinossalin-2-ilmetilén)carbazato di metilo; 1,4-diossido di 2-((metossicarbonilidrazonometil)chinossalina
- NL: carbadox (INN); 2-(methoxycarbonylhydrazonomethyl)chinoxaline-1,4-dioxide; methyl-3-(chinoxaline-2-ylmethyleen)carbazaat-1,4-dioxide
- PT: carbadox (DCI); 1,4-dióxido de 3-(quinoxalina-2-ilmetilén)carbazato de metil; 1,4-dióxido de 2-((metoxicarbonilhidrazonometil)quinoxalina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F; R 11	Carc. Cat. 2; R 45	Xn; R 22
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

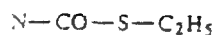
F	T	
		R : 45-11-22
		S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2212-67-1

EEC No 218-661-0

No 613-051-00-4



ES: molinato (ISO); 1-perhidroazepinacarbotoato de S-etilo  
 DA: molinat (ISO); S-ethyl-1-perhydroazepinithioat  
 DE: Molinat (ISO); S-Ethyl-1-perhydroazepinithioat  
 EL: molinate (ISO) θειοϋπερυδροαζεπιν-1-ικός S-αιθυλεστέρας  
 EN: molinate (ISO); S-ethyl 1-perhydroazepinecarbothioate  
 FR: molinate (ISO); 1-perhydroazépinethioate de S-éthyle  
 IT: molinato (ISO); 1-peridroazepintioato di S-etile  
 NL: molinaat (ISO); S-ethyl-1-perhydroazepinithioaat  
 PT: molinato (ISO); 1-perhidroazepinacarbotoato de S-etilo

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação.

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etikettatura, Kenmerken, Rotulagem

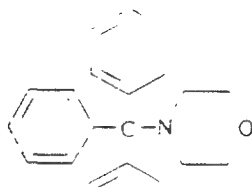
Xn	
	R : 22
	S : (2-)24

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração


Cas No 1420-06-0

EEC No 215-812-2

No 613-052-00-X



ES: trifenmorf (ISO); 4-tritilmorfolina

DA: trifenmorph (ISO); 4-tritylmorpholin

DE: Trifenmorph (ISO); 4-Tritylmorpholin

EL: trifenmorph (ISO) · τριφαινυλο-μορφολιν-4-υλο-μεθάνιο

EN: trifenmorph (ISO); 4-tritylmorpholine

FR: trifenmorphe (ISO); triphenmorphe; 4-tritylmorpholine

IT: trifenmorto (ISO); 4-tritilmorfolina

NL: trifenmorf (ISO); 4-tritylmorfoline

PT: trifenemorfe (ISO); 4-tritilmorfolina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn: R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

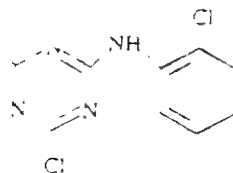
Xn	
	R: 22
	S: (2-)22-24

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 101-05-3

EEC No 202-910-5

No 613-053-00-5



- ES: aniazina (ISO); 2-cloro-N-(4,6-dicloro-1,3,5-triazin-2-il)anilina  
 DA: aniazin (ISO); 2-chlor-N-(4,6-dichlor-1,3,5-triazin-2-yl)anilin  
 DE: Aniazin (ISO); 2-Chlor-N-(4,6-dichlor-1,3,5-triazin-2-yl)anilin  
 EL: aniazina (ISO); 2-χλωρο-N-(4,6-δichλωρο-1,3,5-τριάζιν-2-υλ)ανιλίνη  
 EN: aniazine (ISO); 2-chloro-N-(4,6-dichloro-1,3,5-triazin-2-yl)aniline  
 FR: aniazine (ISO); 2-chloro-N-(4,6-dichloro-1,3,5-triazine-2-yl)aniline  
 IT: aniazina (ISO); 2-cloro-N-(4,6-dicloro-1,3,5-triazin-2-il)anilina  
 NL: aniazine (ISO); 2-chloor-N-(4,6-dichloor-1,3,5-triazine-2-yl)aniline  
 PT: aniazina (ISO); 2-cloro-N-(4,6-dicloro-1,3,5-triazina-2-il)anilina

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi; R 36/38

Επισήμανση, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

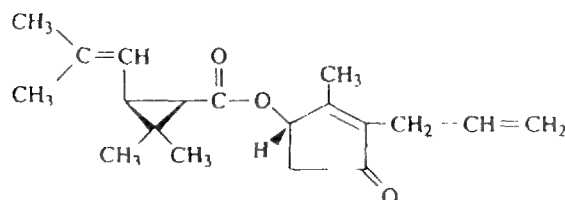
Xi	
	R : 36/38
	S : (2-)22

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 28434-00-6

EEC No 249-013-5

No 613-055-00-6



- ES: [1*R*-[1α(*S*'),3β]]-2,2-dimetil-3-(2-metilprop-1-enil)ciclopropanocarboxilato de 3-alil-2-metil-4-oxociclopent-2-en-1-ilo; S-bioaletrina
- DA: 3-allyl-2-methyl-4-oxocyclopent-2-en-1-yl-[1*R*-[1α(*S*'),3β]]-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropan-carboxylat; S-bioallethrin
- DE: 3-Allyl-2-methyl-4-oxocyclopent-2-en-1-yl-[1*R*-[1α(*S*'),3β]]-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropan-carboxylat; S-Bioallethrin
- EL: [1*R*-[1α(*S*'),3β]]-2,2-διμεθυλο-3-(2-μεθυλοπροπ-1-ενυλο)κυκλοπροπανοκαρβοξυλικό 3-αλλυλο-2-μεθυλ-4-οξοκυκλο-πεντ-2-εν-1-ύλιο S-bioallethrin
- EN: 3-allyl-2-methyl-4-oxocyclopent-2-en-1-yl-[1*R*-[1α(*S*'),3β]]-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropano-carboxylate; S-bioallethrin
- FR: [1*R*-[1α(*S*'),3β]]-2,2-diméthyl-3-(2-méthylprop-1-enyl)cyclopropanecarboxylate de 3-allyl-2-méthyl-4-oxocyclopent-2-ène-1-yle; esdépallétrine
- IT: [1*R*-[1α(*S*'),3β]]-2,2-dimetil-3-(2-metilprop-1-enil)ciclopropanocarbossilato di 3-alil-2-metil-4-ossociclopent-2-en-1-ile; S-bioalletrina
- NL: 3-allyl-2-methyl-4-oxocyclopent-2-een-1-yl-[1*R*-[1α(*S*'),3β]]-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropan-carboxylaat; S-bioalletrine
- PT: [1*R*-[1α(*S*'),3β]]-2,2-dimetil-3-(2-metilprop-1-enil)ciclopropanocarboxilato de 3-alil-2-metil-4-oxociclopent-2-eno-1-ilo; S-bioaletrina
- FI: 3-allyyli-2-metyyli-4-oksycyclopent-2-en-1-yyli-[1*R*-[1α(*S*'),3β]]-2,2-dimetyyli-3-(2-metyyliprop-1-enyyli)syklopro-paanikarboksylaatti; S-bioalletriini
- SV: 3-allyl-2-metyl-4-oxocyclopent-2-en-1-yl[1*R*-[1α(*S*'),3β]]-2,2-dimetyl-3-(2-metylprop-1-enyl)cyklopropankarboxylat; S-bioalletrin

Cas No 28434-00-6

EEC No 249-013-5



No 613-055-00-6

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn; R 21/22

N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

Xn	N	
		R: 21/22-50/53 S: (2-)60-61

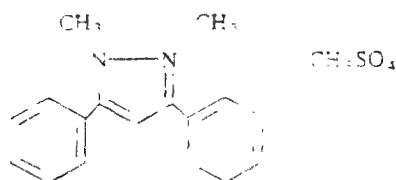
*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Koncentrationsgrænser*




Cas No 43222-48-6

EEC No 256-152-5

No 613-056-00-1



ES: metilsulfato de 1,2-dimetil-3,5-difenilpirazolio

DA: 1,2-dimethyl-3,5-diphenylpyrazoliummethysulfat

DE: 1,2-Dimethyl-3,5-diphenylpyrazoliummethysulfat

EL: μεθυλοθειικό 1,2-διμεθυλο-3,5-διφαινυλοπυραζόλιο

EN: 1,2 dimethyl-3,5-diphenylpyrazolium methylsulphate; difenzoquat-methylsulphate

FR: méthylsulfate de 1,2-diméthyl-3,5-diphénylpyrazolium; difenzoquat-méthylsulfate

IT: metilsolfato di 1,2-dimetil-3,5-difenilpirazolio

NL: 1,2 dimethyl-3,5-diphenylpyrazoliummethysulfaat

PT: metilsulfato de 1,2-dimetil-3,5-difenilpirazólio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificação, Classificação, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiqueta, Etichetare, Kennmerken, Rotulagem

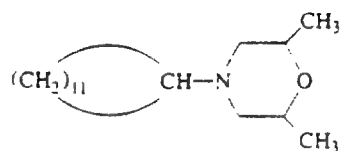
Xn	

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçõe


Cas No 1593-77-7

EEC No 216-474-9

No 613-057-00-7



- ES : dodemorf (ISO) ; 4-ciclododecil-2,6-dimetilmorfolina  
 DA : dodemorph (ISO) ; 4-cyclododecyl-2,6-dimethylmorpholin  
 DE : Dodemorph (ISO) ; 4-Cyclododecyl-2,6-dimethylmorpholin  
 EL : dodemorph (ISO) ; 4-κυκλοδωδεκυλο-2,6-διμεθυλομορφολίνη  
 EN : dodemorph (ISO) ; 4-cyclododecyl-2,6-dimethylmorpholine  
 FR : dodémorphe (ISO) ; 4-cyclododécyl-2,6-diméthylmorpholine  
 IT : dodemorfo (ISO) ; 4-ciclododecil-2,6-dimetilmorfolina  
 NL : dodemorf (ISO) ; 4-cyclododecyl-2,6-dimethylmorpholine  
 PT : dodemorfe (ISO) ; 4-ciclododecil-2,6-dimetilmorfolina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi ; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

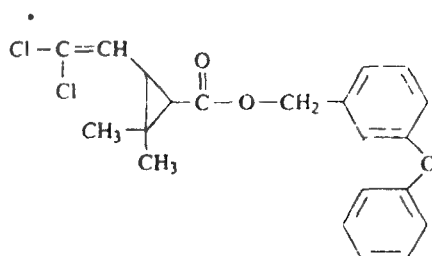
Xi	
	R : 36/37/38
	S : (2)26

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 52645-53-1

EEC No 258-067-9

No 613 058-00-2



- ES 3-(2,2-diclorovinil)-2,2-dimetilciclopropanocarboxilato de *m*-fenoxibencilo , permetrina  
 DA *m*-phenoxybenzyl-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylat permethrin  
 DE *m*-Phenoxybenzyl-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylat Permethrin  
 EL 3-(2,2-διχλωροβινυλ)-2,2-διμεθυλκυκλοπροπανιοκαρβοξυλικό *m*-φαινοξυδενζύλιο  
 EN *m* phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate permethrin  
 FR 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate de *m*-phénoxybenzyle permethrine  
 IT 3-(2,2-diclorovinil)-2,2-dimetilciclopropanecarbossilato di *m*-fenossibenzile , permetrina  
 NL *m*-fenoxybenzyl-3-(2,2-dichloorvinyl)-2,2-dimethylcyclopropaancarboxylaar , permethrin  
 PT 3-(2,2-diclorovinil)-2,2-dimetilciclopropanocarboxilato de *m*-fenoxibenzilo , permetrina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

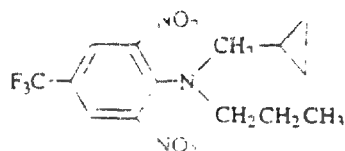
Xn	
	R : 22
	S : (2)

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 26399-36-0

EEC No 247-656-6

No 613-059-00-8



- ES : profluralin (ISO) ; N-(ciclopropilmetil) -alfa,alfa,alfa-trifluoro-2,6-dinitro-N-propil-p-toluidina  
 DA : profluralin (ISO) ; N-(cyclopropylmethyl) -alfa,alfa,alfa-trifluor-2,6-dinitro-N-propyl-p-toluidin  
 DE : Profluralin (ISO) ; N-(Cyclopropylmethyl) -alpha,alpha,alpha-trifluor-2,6-dinitro-N-propyl-p-toluidin  
 EL : profluralin (ISO) ; N-(κυκλοπροπυλομεθυλ) -αλφα,αλφα,αλφα-τριφθορο-2,6-δινιτρο-N-προπυλο-π-τολουιδίνη  
 EN : profluralin (ISO) ; N-(cyclopropylmethyl) -alpha,alpha,alpha-trifluoro-2,6-dinitro-N-propyl-p-toluidine  
 FR : profluraline (ISO) ; N-(cyclopropylméthyl) -alpha,alpha,alpha-trifluoro-2,6-dinitro-N-propyl-p-toluidine  
 IT : profluralin (ISO) ; N-(ciclopropilmetil) -alfa,alfa,alfa-trifluoro-2,6-dinitro-N-propil-p-toluidina  
 NL : profluralin (ISO) ; N-(cyclopropylmethyl) -alfa,alfa,alfa-trifluor-2,6-dinitro-N-propyl-p-toluidine  
 PT : profluraline (ISO) ; N-(ciclopropilmetil) -alfa,alfa,alfa-trifluoro-2,6-dinitro-N-propil-p-toluidina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi ; R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

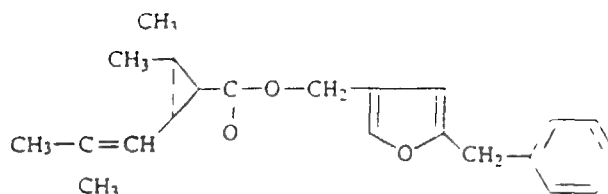
Xi	
	R : 36
	S : (2)

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 10453-86-8

EEC No 233-940-7

No 613-060-00-3



- ES resmetrina (ISO), (+-)-cis-trans-crisantemato de 5-bencil-3-furilmetilo  
 DA resmethrin (ISO), 5-benzyl-3-furylmethyl-(+)-cis-trans-chrysanthemat  
 DE Resmethrin (ISO) 5-Benzyl-3-furylmethyl-(+)-cis-trans-chrysanthemat  
 EL resmethrin (ISO) (+-)-cis-trans-χρυσανθεμικός 5-δενζύλο-3-φουρυλομεθυλεστέρα  
 EN resmethrin (ISO), 5-benzyl-3-furylmethyl (+)-cis-trans-chrysanthemate  
 FR resmethrine (ISO), (+-)-cis-trans-chrysanthémate de 5-benzyl-3-furylméthyle  
 IT resmetrina (ISO), (+-)-cis-trans-crisantemato di 5-benzil-3-furilmetile  
 NL resmethrine (ISO), 5-benzyl-3-furylmethyl-(+)-cis-trans-chrysanthemaat  
 PT resmetrina (ISO) (+-)-cis-trans-crisantemato de 5-benzil-3-furilmetilo

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Classificado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22 S : (2)

Limites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 15662-33-6

EEC No 239-732-2

No 613-061-00-9

- ES pirrol-2-carboxilato de 6-(1-alfa,5a-beta,8a-beta,9-pentahidroxi-7-beta-isopropil-2-beta,5-beta,8-beta-trimetilperhidro-8b-alfa,9-epoxi-5,8-etanociclopenta(1,2-b)-indenilo) ; riania
- DA 6-(1-alfa,5a-beta,8a-beta,9-pentahydroxy-7-beta-isopropyl-2-beta,5-beta,8-beta-trimethylperhydro-8b-alfa,9-epoxy-5,8-ethanocyclopenta(1,2-b)indenyl)pyrrol-2-carboxylat ; riania
- DE 6-(1-alfa,5a-beta,8a-beta,9-Pentahydroxy-7-beta-isopropyl-2-beta,5-beta,8-beta-trimethylperhydro-8b-alfa,9-epoxy-5,8-ethanocyclopenta(1,2-b)indenyl)pyrrol-2-carboxylat ; Riania
- EL πυρρολο-2-καρβοξυλικό 6-(1-αλφα,5α-δητα,8α-δητα,9-πενταϋδροξυ-7-δητα-ισοπροπυλο-2-δητα,5-δητα,8-δητα-τριμεθυλπερυδρο-8β-αλφα,9-εποξυ-5,8-αιθανοκυκλοπεντα(1,2-b)-ινδενύλιο)
- EN 6-(1-alfa,5a-beta,8a-beta,9-pentahydroxy-7-beta-isopropyl-2-beta,5-beta,8-beta-trimethylperhydro-8b-alfa,9-epoxy-5,8-ethanocyclopenta(1,2-b)indenyl)pyrrole-2-carboxylate ; riania
- FR pyrrole-2-carboxylate de 6-(1-alfa,5a-beta,8a-beta,9-pentahydroxy-7-beta-isopropyl-2-beta,5-beta,8-beta-triméthylperhydro-8b-alfa,9-époxy-5,8-éthanocyclopenta(1,2-b)-indenvyle) ; riania
- IT pirroli-2-carbossilato di 6-(1-alfa,5a-beta,8a-beta,9-pentaidrossi-7-beta-isopropil-2-beta,5-beta,8-beta-trimetilperidro-8b-alfa,9-epossi-5,8-etanociclopenta(1,2-b)-indenile) ; riania
- NL 6-(1-alfa,5a-beta,8a-beta,9-pentahydroxy-7-beta-isopropyl-2-beta,5-beta,8-beta-trimethylperhydro-8b-alfa,9-epoxy-5,8-ethanocyclopenta(1,2-b)indenyl)pyrrool-2-carboxylaat ; riania
- PT pirrole-2-carboxilato de 6-(1-alfa,5a-beta,8a-beta,9-pentahidroxi-7-beta-isopropil-2-beta,5-beta,8-beta-trimetilperhidro-8b-alfa,9-epoxi-5,8-etanociclopenta(1,2-b)-indenilo) ; riania

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 21/22

Επισημάνση, Etiketierung, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 21/22
	S : (2-)36/37

Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 8051-02-3

EEC No —

No 613-062-00-4

ES: sabadilla (ISO); veratrina  
 DA: sabadilla (ISO); veratrin  
 DE: Sabadilla (ISO); Veratrin  
 EL: sabadilla (ISO); βερατρίνη  
 EN: sabadilla (ISO); veratrine  
 FR: sabadille (ISO); vératrine  
 IT: sabadilla (ISO); veratrina  
 NL: sabadilla (ISO); veratrine  
 PT: sabadilla (ISO); veratrina

*Classincation, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

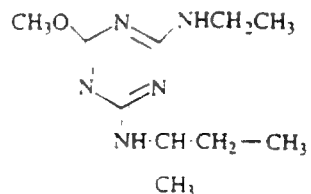
Xi	
	R : 36/37/38 S : (2-)36/37/39

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo*


Cas No 26259-45-0

EEC No 247-554-1

No 613-063-00-X



- ES: secbumeton (ISO); 2-sec-butylamino-4-ethylamino-6-methoxy-1,3,5-triazina  
 DA: secbumeton (ISO); 2-sec-butylamino-4-ethylamino-6-methoxy-1,3,5-triazin  
 DE: Secbumeton (ISO); 2-sec-Butylamino-4-ethylamino-6-methoxy-1,3,5-triazin  
 EL: secbumeton (ISO); 2-δευτ-δουτυλαμιν-4-αιθυλαμιν-6-μεθοξυ-1,3,5-τριαζίνη  
 EN: secbumeton (ISO); 2-sec-butylamino-4-ethylamino-6-methoxy-1,3,5-triazine  
 FR: secbumeton (ISO); *N*<sup>2</sup>-sec-butyl-*N*<sup>4</sup>-éthyl-6-methoxy-1,3,5-triazine-2,6-diamine  
 IT: secbumeton (ISO); 2-sec-butylammino-4-etilammino-6-metossi-1,3,5-triazina  
 NL: secbumeton (ISO); 2-sec-butylamino-4-ethylamino-6-methoxy-1,3,5-triazine  
 PT: secbumeton (ISO); 2-sec-butylamino-4-etilamino-6-metoxi-1,3,5-triazina

Clasificación. Klassificering. Einstufung. Ταξινόμηση. Classification. Classification. Classificazione. Indeling. Classificação

Xn; R 22

Xi; R 36

Etiquetado. Etikettering. Kennzeichnung. Επισήμανση. Labelling. Étiquetage. Etichettatura. Kenmerken. Rotulagem

Xn	
	R : 22-36
	S : (2)

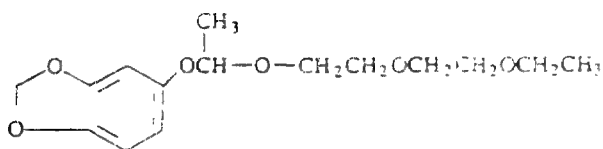
Límites de concentración. Koncentrationsgrænser. Konzentrationsgrenzwerte. Όρια συγκέντρωσης. Concentration limits  
 Limites de concentration. Limite di concentrazione. Concentratiegrenzen. Limites de concentração




Cas No 51-14-9

EEC No \_\_\_\_\_

No 613-064-00-5



ES: 5-(3,6,9-trioxa-2-undeciloxi)benzo(d)-1,3-dioxolano  
DA: 5-(3,6,9-trioxa-2-undecyloxy)benzo(d)-1,3-dioxolan  
DE: 5-(3,6,9-Trioxa-2-undecyloxy)benzo(d)-1,3-dioxolan  
EL: 5-(3,6,9-τριοξα-2-ενδεκυλοξυ)δενζο(δ)-1,3-διοξολάνιο  
EN: 5-(3,6,9-trioxa-2-undecyloxy)benzo(d)-1,3-dioxolane ; sesamex  
FR: 5-(1-(2(2-éthoxyéthoxy)éthoxy)éthoxy)-1,3-benzodioxole  
IT: 5-(3,6,9-trioxa-2-undecilossi)benzo(d)-1,3-diossolano  
NL: 5-(3,6,9-trioxa-2-undecyloxy)benzo(d)-1,3-dioxolaan  
PT: 5-(3,6,9-trioxa-2-undeceloxi)benzo(d)-1,3-dioxolano

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

 $X_n; \mathbb{R}^{22}$ 

*Etiquetado, Etikettering, Kennzeichnung, Etiketovani, Labelling, Étiquetage, Etichettatura, Kenmerken, Rosulagem*

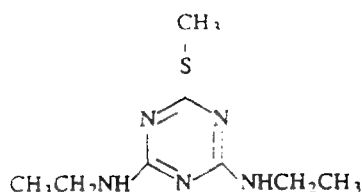
$X_n$ 	$R : 22$ $S : (2)$
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...limes de concentração, Konzentrationsgränser, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits.  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1014-70-6

EEC No 213-801-7

No 613-065-00-0



- ES: simetrina (ISO) ; 2,4-bis(etilamino)-6-metiltio-1,3,5-triazina  
 DA: simetryn (ISO) ; 2,4-bis(ethylamino)-6-methylthio-1,3,5-triazin  
 DE: Simetryn (ISO) ; 2,4-Bis(ethylamino)-6-methylthio-1,3,5-triazin  
 EL: simetryn (ISO) ; 2,4-δισ(αιθυλαμινο)-6-μεθυλοθειο-1,3,5-τριαζίνη  
 EN: simetryn (ISO) ; 2,4-bis(ethylamino)-6-methylthio-1,3,5-triazine  
 FR: simetryne (ISO) ; N<sup>2</sup>,N<sup>4</sup>-diethyl-6-méthylthio-1,3,5-triazine-1,4-diamine  
 IT: simetrina (ISO) ; 2,4-bis(etilammino)-6-metiltio-1,3,5-triazina  
 NL: simetryne (ISO) ; 2,4-bis(ethylamino)-6-methylthio-1,3,5-triazine  
 PT: simetrino (ISO) ; 2,4-bis(etilamino)-6-metiltio-1,3,5-triazina

Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

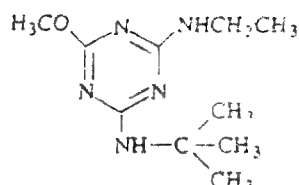
Xn	
	R : 22
	S : (2)

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 33693-04-8

EEC No 251-637-8

No 613-066-00-6



ES: terbumeton (ISO); 2-terc-butilamino-4-etilamino-6-metoxi-1,3,5-triazina

DA: terbumeton (ISO); 2-tert-butylamino-4-ethylamino-6-methoxy-1,3,5-triazin

DE: Terbumeton (ISO); 2-tert-Butylamino-4-ethylamino-6-methoxy-1,3,5-triazin

EL: terbumeton (ISO); 2-τερτ-βουτυλαμινο-4-αιθυλαμινο-6-μεθοξύ-1,3,5-τριαζίνη

EN: terbumeton (ISO); 2-tert-butylamino-4-ethylamino-6-methoxy-1,3,5-triazine

FR: terbuméton (ISO); *N*<sup>2</sup>-tert-butyl-*N*<sup>4</sup>-éthyl-6-méthoxy-1,3,5-triazine-2,4-diamine

IT: terbumeton (ISO); 2-terz-butilammino-4-etilammino-6-metossi-1,3,5-triazina

NL: terbumeton (ISO); 2-tert-butylamino-4-ethylamino-6-methoxy-1,3,5-triazine

PT: terbumeton (ISO); 2-terc-butilamino-4-etilamino-6-metoxi-1,3,5-triazina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

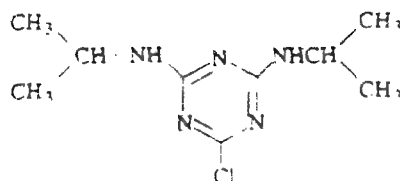
Xn	
	R : 22
	S : (2)

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 139-40-2

EEC No 205-359-9

No 613-067-00-1



ES: propazina

DA: propazin

DE: Propazin

EL: προπαζίνη · 2-χλωρο-4,6-δισ(ισοπροπυλαμινο)-1,3,5-τριαζίνη

EN: propazine; 2-chloro-4,6-bis(isopropylamino)-1,3,5-triazine

FR: propazine; 6-chloro-*N*<sup>2</sup>,*N*<sup>4</sup>-di-isopropyl-1,3,5-triazine-2,4-diamine

IT: propazina

NL: propazine

PT: propazina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

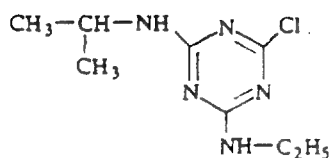
Xn	
	R : 40
	S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 1912-24-9

EEC No 217-617-8

No 613-068-00-7



ES: atrazina

DA: atrazin

DE: Atrazin

EL: atrazine · 2-χλωρο-4-αιθυλαμινο-6-ισοπροπυλαμίνη-1,3,5-τριαζίνη

EN: atrazine; 2-chloro-4-ethylamine-6-isopropylamine-1,3,5-triazine

FR: atrazine; 6-chloro-N<sup>2</sup>-éthyl-N<sup>4</sup>-isopropyl-1,3,5-triazine-2,4-diamine

IT: atrazina

NL: atrazine

PT: atrazina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40	Muta. Cat. 3; R 40	Xn; R 20/22	Xi; R 36	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

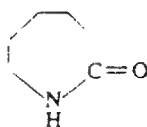
Xn	
	R : 20/22-36-40-43 S : (2-)36/37-46

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 105-60-2

EEC No 203-313-2

No 613-069-00-2



ES : ε-caprolactama

DA : ε-caprolactam

DE : ε-Caprolactam

EL : ε-καπρολακταμη

EN : ε-caprolactam

FR : ε-caprolactame ; hexahydro-2H-azepin-2-one

IT : ε-caprolattame

NL : ε-caprolactam

PT : ε-caprolactama

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 20/22

Xi ; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem

Xn



R : 20/22-36/37/38

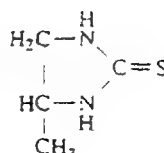
S : (2)

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2122-19-2

EEC No —

No 613-070-00-8



ES: propilentiourea  
 DA: propylenthourinstof  
 DE: Propylenthioharnstoff  
 EL: προπιλενοθειουρία  
 EN: propylenethiourea  
 FR: propylenetiouree  
 IT: propilenetiurea  
 NL: propyleenthiourea  
 PT: propilenetiourea

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

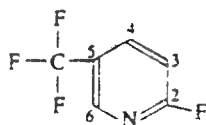
Xn	
	R : 40 S : (2-)36/37

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 69045-82-5

EEC No 400-290-2

No 613-071-00-3



ES: 2 fluoro-5-trifluorometilpiridina

DA: 2 fluor-5-trifluormethylpyridin

DE: 2-Fluor-5-trifluormethylpyridin

EL: 2 φθορο-5-τριφθορομεθυλοπυριδίνη

EN: 2-fluoro-5-trifluoromethylpyridine

FR: 2 fluoro-5-trifluorométhylpyridine

IT: 2 fluoro-5-trifluorometilpiridina

NL: 2 fluor-5-trifluormethylpyridine

PT: 2 fluoro-5-trifluorometilpiridina

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

R 10

R 43

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 10-43-52/53

S : (2-)24-37-61

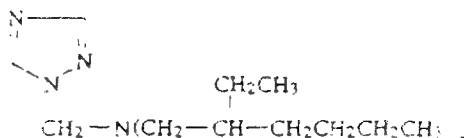
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 91273-04-0

EEC No 401-280-0

No 613-072-00-9



- ES: N,N-bis(2-etilhexil)-((1,2,4-triazol-1-il)metil)amina  
 DA: N,N-bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amin  
 DE: N,N-bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amin  
 EL: N,N-δίζ(2-αιθυλεξυλό)-((1,2,4-τριαζολ-1-υλό)μεθυλ)αμιν  
 EN: N,N-bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine  
 FR: N,N-bis(2-éthylhexyl)-((1,2,4-triazole-1-yl)méthyl)amine  
 IT: N,N-bis(2-etilhexil)-((1,2,4-triazol-1-il)metil)ammina  
 NL: N,N-bis(2-ethylhexyl)-((1,2,4-triazool-1-yl)methyl)amine  
 PT: N,N-bis(2-etilhexil)-((1,2,4-triazole-1-il)metil)amina

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificazione, Indeling, Classificação

C; R 34	R 43	N; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

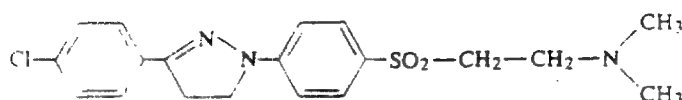
C	N	
		R : 34-43-51/53 S : (1/2-)26-28-36/37/39-45-61

Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçao


Cas No 10357-99-0

EEC No 401-410-6

No 613-073-00-4



ES : N,N-dimetil-2-(3-(4-clorofenil)-4,5-dihidropirazol-1-il)fenilsulfonil)etilamina

DA : N,N-dimethyl-2-(3-(4-chlorphenyl)-4,5-dihydropyrazol-1-yl)phenylsulfonyl)ethylamin

DE : N,N-Dimethyl-2-(3-(4-chlorphenyl)-4,5-dihydropyrazol-1-yl)phenylsulfonyl)ethylamin

EL : N,N-διμεθυλο-2-(4,5-διυδρο-3-(4-χλωροφαινυλο)πυραζολ-1-υλοφαινυλοσουλφονυλ)αιθυλαμίνη

EN : N,N-dimethyl-2-(3-(4-chlorophenyl)-4,5-dihydropyrazol-1-yl)phenylsulphonyl)ethylamine

FR : N,N-diméthyl-2-(3-(4-chlorophényl)-4,5-dihydropyrazole-1-yl)phénylsulfonyl)éthylamine

IT : N,N-dimetil-2-(3-(4-clorofenil)-4,5-diidropirazol-1-il)fenilsolfonil)etilamina

NL : N,N-dimethyl-2-(3-(4-chloorfenyl)-4,5-dihydropyrazool-1-yl)fenylsulfonyl)ethylamine

PT : N,N-dimetil-2-(3-(4-clorotenil)-4,5-dihidropirazole-1-il)fenilsulfonil)etilamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 48/22    R 43    N ; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

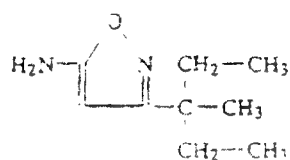
Xn	N	
		R : 43-48/22-51/53
		S : (2-)24-37-61

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limite di concentrazione, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 82560-06-3

EEC No 401-460-9

No 613-074-00-X



ES: 3-(3-methylpent-3-yl)isoxazol-5-ylamina  
 DA: 3-(3-methylpent-3-yl)isoxazol-5-ylamin  
 DE: 3-(3-Methylpent-3-yl)isoxazol-5-ylamin  
 EL: 3-(3-μεθυλοπεντ-3-υλ)ισοξαζολ-5-υλαμίνη  
 EN: 3-(3-methylpent-3-yl)isoxazol-5-ylamine  
 FR: 3-(3-methylpent-3-yl)isoxazole-5-ylamine  
 IT: 3-(3-metilpent-3-il)isossazol-5-ilammīna  
 NL: 3-(3-methylpent-3-yl)isoxazool-5-ylamine  
 PT: 3-(3-metilpent-3-il)isoxazole-5-ilamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/25	Xi; R 41	R 52-53
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Εtiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

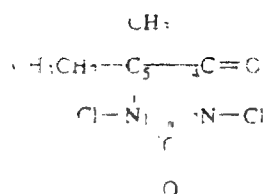
T	
	P: 23/25-41-52/53 S: (1/2)-22-26-36/37/39-45-61

Limites de concentração, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 89415-87-2

EEC No 401-570-7

No 613-075-00-5



ES 1,3-dicloro-5-etil-5-metilimidazolidina-2,4-dione

GR 1,3-dichlor-5-ethyl-5-methylimidazolidin-2,4-dione

DE 1,3-Dichlor-5-ethyl-5-methylimidazolidin-2,4-dion

EL 1,3-διχλωρο-5-εθυλο-5-μεθυλιμιδαζολιδινο-2,4-δione

1,3-dichloro-5-ethyl-5-methylimidazolidine-2,4-dione

FR 1,3-dichloro-5-ethyl-5-méthylimidazolidine-2,4-dione

IT 1,3-dicloro-5-etil-5-metilimidazolidina-2,4-dione




NL 1,3-dichloor-5-ethyl-5-methylimidazolidine-2,4-dion

PT 1,3-dicloro-5-etil-5-metilimidazolidina-2,4-dione

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

R 8	T+ R 26	C R 34	Xn; R 22	R 43	N: R 50
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

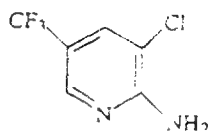
			R : 8-22-26-34-43-50 S : (1/2)-8-26-36/39-45-61
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 79456-26-1

EEC No 401-670-0

No 613-076-00-0



ES : 3-cloro-5-trifluorometil-2-piridilamina

DA : 3-chlor-5-trifluormethyl-2-pyridylamin

DE : 3-Chlor-5-trifluormethyl-2-pyridylamin

EL : 5-τριφθορομεθυλο-3-χλωρο-2-πυριδυλαμίνη

EN : 3-chloro-5-trifluoromethyl-2-pyridylamine

FR : 3-chloro-5-trifluorométhyl-2-pyridylamine

IT : 3-cloro-5-trifluorometil-2-piridilammina

NL : 3-chloor-5-trifluormethyl-2-pyridylamine

PT : 3-cloro-5-trifluorometil-2-piridilamina

Classificacón, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificacón, Classificacón, Indeling, Classificacón

Xn : R 22

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-52/53

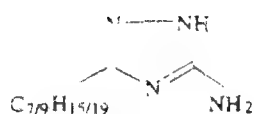
S : (2-)61

Límites de concentracón, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo


Cas No —

EEC No 401-940-8

No 613-077-00-6



*Miscela de. Blanding af. Gemisch aus. Μείγμα των. Mixture of. Mélange de. Miscela di. Mengsel van. Mistura de.*

ES: 5-heptyl-1,2,4-triazol-3-ilamina  
 DA: 5-heptyl-1,2,4-triazol-3-ylamin  
 DE: 5-Heptyl-1,2,4-triazol-3-ylamin  
 EL: 5-επτυλο-1,2,4-τριαζολ-3-υλαμίνη  
 EN: 5-heptyl-1,2,4-triazol-3-ylamine  
 FR: 5-heptyl-1,2,4-triazole-3-ylamine  
 IT: 5-eptil-1,2,4-triazol-3-ilammina  
 NL: 5-heptyl-1,2,4-triazool-3-ylamine  
 PT: 5-heptyl-1,2,4-triazole-3-ilamina

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ES: 5-nonil-1,2,4-triazol-3-ilamina  
 DA: 5-nonyl-1,2,4-triazol-3-ylamin  
 DE: 5-Nonyl-1,2,4-triazol-3-ylamin  
 EL: 5-εννεύλο-1,2,4-τριαζολ-3-υλαμίνη  
 EN: 5-nonyl-1,2,4-triazol-3-ylamine  
 FR: 5-nonyl-1,2,4-triazole-3-ylamine  
 IT: 5-nonil-1,2,4-triazol-3-ilammina  
 NL: 5-nonyl-1,2,4-triazool-3-ylamine  
 PT: 5-nonil-1,2,4-triazole-3-ilamina

Cas No

—

EEC No 401-940-8

No 613-077-00-6

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

Xi ; R 36

N ; R 51-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

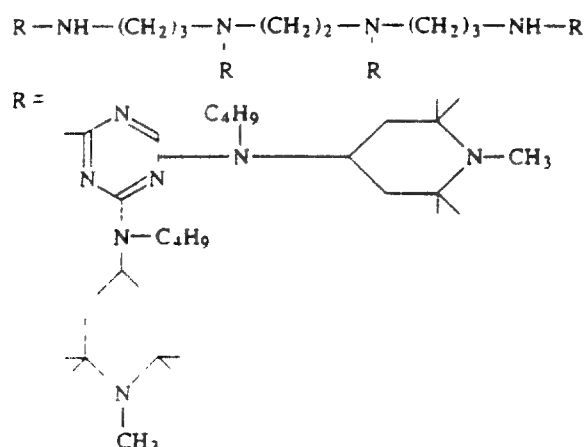
Xn	N	
		R : 22-36-51/53 S : (2-)22-26-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 106990-43-6

EEC No 401-990-0

No 613-078-00-1



- ES: N,N',N'',N'''-tetrakis(4,6-bis(butil-(N-metil-2,2,6,6-tetrametilpiperidin-4-il)amino)triazin-2-il)-4,7-diazadecan-1,10-diamina
- DA: N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecan-1,10-diamin
- DE: N,N',N'',N'''-Tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecan-1,10-diamin
- EL: N,N',N'',N'''-τετρακίς(4,6-δισ(δουτυλο-(N-μεθυλο-2,2,6,6-τετραμεθυλοπριπεριδιν-4-υλο)αμινο)τριάζιν-2-υλο)-4,7-διαζαδεκανο-1,10-διαμίνη
- EN: N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine
- FR: N,N',N'',N'''-tétrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetraméthylpipéridine-4-yl)amino)triazine-2-yl)-4,7-diazadécane-1,10-diamine
- IT: N,N',N'',N'''-tetrachis(4,6-bis(butil-(N-metil-2,2,6,6-tetrametilpiperidin-4-il)ammino)triazin-2-il)-4,7-diazadecan-1,10-diammina
- NL: N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidine-4-yl)amino)triazine-2-yl)-4,7-diazadecan-1,10-diamine
- PT: N,N',N'',N'''-tetraquis(4,6-bis(butil-(N-metil-2,2,6,6-tetrametilpiperidin-4-il)amino)triazin-2-il)4,7-diazadecano-1,10-diamina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

R 43	N ; R 51-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	N	
		R : 43-51/53
		S : (2-)22-24-37-61

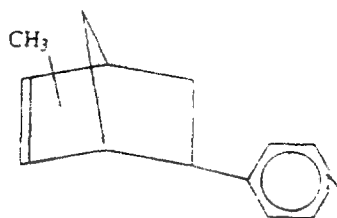
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No —

EEC No 402-520-7

No 613-079-00-7



- ES: 4-(1(o 4 o 5 o 6)-metil-8,9,10-trinorborn-5-en-2-il)piridina, mezcla de isómeros  
 DA: 4-(1(eller 4 eller 5 eller 6)-methyl-8,9,10-trinorborn-5-en-2-yl)pyridin, blanding af isomerer  
 DE: 4-(1(oder 4 oder 5 oder 6)-Methyl-8,9,10-trinorborn-5-en-2-yl)pyridin, Isomerengemisch  
 EL: 4-(1(ή 4 ή 5 ή 6)-μεθυλο-8,9,10-τρινορβορν-5-ενο-2-υλο)πυριδίνη, μείγμα ισομερών  
 EN: 4-(1(or 4 or 5 or 6)-methyl-8,9,10-trinorborn-5-en-2-yl)pyridine, mixture of isomers  
 FR: 4-(1(ou 4 ou 5 ou 6)-methyl-8,9,10-trinorborn-5-ène-2-yl)pyridine, mélange d'isomères  
 IT: 4-(1(o 4 o 5 o 6)-metil-8,9,10-trinorborn-5-en-2-il)piridina, miscela di isomeri  
 NL: 4-(1(of 4 of 5 of 6)-methyl-8,9,10-trinorborn-5-een-2-yl)pyridine, mengsel van isomeren  
 PT: 4-(1(ou 4 ou 5 ou 6)-metil-8,9,10-trinorborn-5-eno-2-il)piridina, mistura de isómeros

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

Xn; R 21/22	Xi; R 38	R 43	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

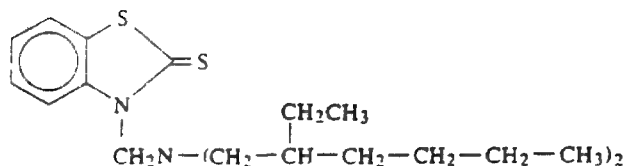
Xn	N	
		R : 21/22-38-43-50/53
		S : (2-)36/37-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 105254-85-1

EEC No 402-540-6

No 613-080-00-2



- ES : 3-(bis(2-etilhexil)aminometil)benzotiazol-2(3H)-tione  
 DA : 3-(bis(2-ethylhexyl)aminomethyl)benzothiazol-2(3H)-thion  
 DE : 3-(bis(2-ethylhexyl)aminomethyl)benzothiazol-2(3H)-thion  
 EL : 3-(δισ(2-αιθυλξεξυλ)αμινομεθυλο)δενζοθειαζολο-2(3Η)-θειόνη  
 EN : 3-(bis(2-ethylhexyl)aminomethyl)benzothiazole-2(3H)-thione  
 FR : 3-(bis(2-éthylhexyl)aminométhyl)benzothiazole-2(3H)-thione  
 IT : 3-(bis(2-etilesil)amminometil)benzotiazol-2(3H)-tione  
 NL : 3-(bis(2-ethylhexyl)aminomethyl)benzothiazool-2(3H)-thion  
 PT : 3-(bis(2-etilhexil)aminometil)benzotiazole-2(3H)-tione

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

C; R 34	R 43	N; R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

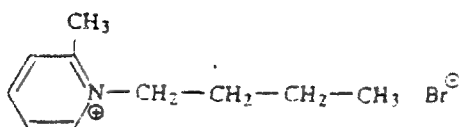
C	N	
		R : 34-43-50/53
		S : (1/2-)26-28-36/37/39-45-60-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 26576-84-1

EEC No 402-680-8

No 613-081-00-8



ES: bromuro de 1-butil-2-metilpiridinio

DA: 1-butyl-2-methylpyridiniumbromid

DE: 1-Butyl-2-methylpyridiniumbromid

EL: βρωμίδιο του 1-βουτυλο-2-μεθυλοπυριδινίου

EN: 1-butyl-2-methylpyridinium bromide

FR: bromure de 1-butyl-2-méthylpyridinium

IT: bromuro di 1-butil-2-metilpiridinio

NL: 1-butyl-2-methylpyridiniumbromide

PT: brometo de 1-butil-2-metilpiridínio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 22

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-52/53

S : (2-)61

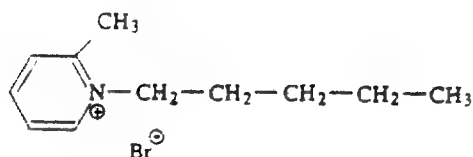
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No

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EEC No 402-690-2

No 613-082-00-3



ES: bromuro de 2-metil-1-pentilpiridinio

DA: 2-methyl-1-pentylpyridiniumbromid

DE: 2-Methyl-1-pentylpyridiniumbromid

EL: βρωμίδιο του 2-μεθυλο-1-πεντυλοπυριδινίου

EN: 1-methyl-1-pentylpyridinium bromide

FR: bromure de 2-méthyl-1-pentylpyridinium

IT: bromuro di 2-metil-1-pentilpiridinio

NL: 2-methyl-1-pentylpyridiniumbromide

PT: brometo de 2-metil-1-pentilpiridínio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 21/22

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

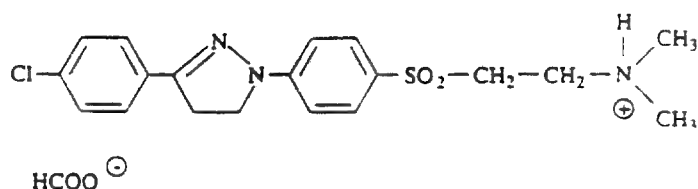
Xn	
	R : 21/22-52/53
	S : (2-)36/37-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No —

EEC No 402-120-2

No 613-083-00-9



ES: formiato de 2-(4-(3-(4-clorofenil)-2-pirazolin-1-il)fenilsulfonyl)etildimetilamonio

DA: 2-(4-(3-(4-chlorophenyl)-2-pyrazolin-1-yl)phenylsulfonyl)ethyltrimethylammoniumformiat

DE: 2-(4-(3-(4-Chlorphenyl)-2-pyrazolin-1-yl)phenylsulfonyl)ethyltrimethylammoniumformiat

EL: υπερμηκικό 2-(4-(3-(4-χλωροφαινυλο)-2-πυραζολιν-1-υλο)φαινυλοσουλφονυλ)αιθυλοδιμεθυλαμμώνιο

EN: 2-(4-(3-(4-chlorophenyl)-2-pyrazolin-1-yl)phenylsulfonyl)ethyltrimethylammonium formate

FR: formiate de 2-(4-(3-(4-chlorophényl)-2-pyrazoline-1-yl)phénylsulfonyl)éthyltriméthylammonium

IT: formiato di 2-(4-(3-(4-clorofenil)-2-pirazolin-1-il)fenilsulfonyl)etildimetilamonio

NL: 2-(4-(3-(4-chloorfenyl)-2-pyrazoline-1-yl)fenylsulfonyl)ethyltrimethylammoniumformiaat

PT: formiato de 2-(4-(3-(4-clorofenil)-2-pirazolin-1-il)fenilsulfonyl)etildimetilamónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

C; R 34

Xn; R 48/22

R 43

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

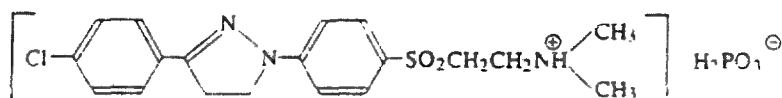
C	N	
		R : 34-43-48/22-50/53
		S : (1/2)-24-26-28-37/39 45-60-61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 106359-93-7

EEC No 402-490-5

No 613-084-00-4



ES: hidrógenofosfonato de 2-(4-(3-(4-clorofenil)-4,5-dihidropirazolil)fenilsulfonil)etiltrimetilamonio

DA: 2-(4-(3-(4-chlorophenyl)-4,5-dihydropyrazolyl)phenylsulfonyl)ethyltrimethylammoniumhydrogenphosphonat

DE: 2-(4-(3-(4-Chlorphenyl)-4,5-dihydropyrazolyl)phenylsulfonyl)ethyltrimethylammoniumhydrogenphosphonat

EL: υδρογονοφωσφονικό 2-(4-(3-(4-χλωροφαινυλο)-4,5-διυδροπυραζολυλο)φαινυλοσουλφονυλ)-αιθυλοδιμεθυλαμμώνιο

EN: 2-(4-(3-(4-chlorophenyl)-4,5-dihydropyrazolyl)phenylsulphonyl)ethyltrimethylammonium hydrogen phosphonate

FR: hydrogénophosphate de 2-(4-(3-(4-chlorophényl)-4,5-dihydropyrazolyl)phénylsulfonyl)éthyltriméthylammonium

IT: idrogenofosfonato di 2-(4-(3-(4-clorofenil)-4,5-diidropirazolil)fenilsolfonil)etiltrimetilammonio

NL: 2-(4-(3-(4-chlorofenyl)-4,5-dihydropyrazolyl)fenylsulfonyl)ethyltrimethylammoniumhydrogeenfosfaat

PT: hidrógenofosfonato de 2-(4-(3-(4-clorofenil)-4,5-dihidropirazolil)fenilsulfonil)etiltrimetilamónio

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	N	
		R : 36-50/53
		S : (2-)26-60-61

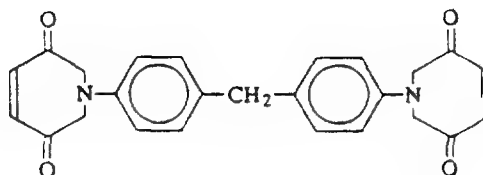
Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No —

EEC No 401-970-1

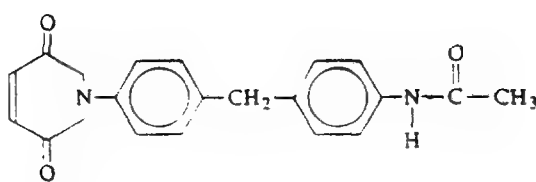
No 613-085-00-X

*Mezcla de, Blanding af, Gemisch aus, Μείγμα των, Mixture of, Mélange de, Miscela di, Mengsel van, Mistura de.*



- ES : 1,1'-(metilenbis(4,1-fenileno))dipirrol-2,5-diona  
 DA : 1,1'-(methylenbis(4,1-phenylen))dipyrrol-2,5-dion  
 DE : 1,1'-(Methylenbis(4,1-phenylen))dipyrrol-2,5-dion  
 EL : 1,1'-(μεθυλενοδισ(4,1-φαινυλενο))διπυρρολο-2,5-διόνη  
 EN : 1,1'-(methylenebis(4,1-phenylene))dipyrrole-2,5-dione  
 FR : 1,1'-(méthylènebis(4,1-phénylène))dipyrrole-2,5-dione  
 IT : 1,1'-(metilenbis(4,1-fenilen))dipirrol-2,5-dione  
 NL : 1,1'-(methyleenbis(4,1-fenyleen))dipyrrool-2,5-dion  
 PT : 1,1'-(metilenobis(4,1-fenileno))dipirrole-2,5-diona

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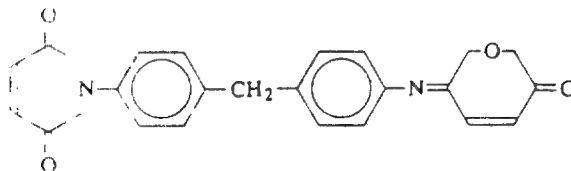
- ES : N-(4-(4-(2,5-dioxopirrol-1-il)bensil)fenil)acetamida  
 DA : N-(4-(4-(2,5-dioxopyrrol-1-yl)benzyl)phenyl)acetamid  
 DE : N-(4-(4-(2,5-Dioxopyrrol-1-yl)benzyl)phenyl)acetamid  
 EL : N-(4-(4-(2,5-διοξοπυρρολ-1-υλο)δενζυλο)φαινυλ)ακεταμιδίο  
 EN : N-(4-(4-(2,5-dioxopyrrol-1-yl)benzyl)phenyl)acetamide  
 FR : N-(4-(4-(2,5-dioxopyrrole-1-yl)benzyl)phényl)acétamide  
 IT : N-(4-(4-(2,5-diossopirrol-1-il)benzil)fenil)acetammide  
 NL : N-(4-(4-(2,5-dioxopyrrool-1-yl)benzyl)fenyl)aceetamide  
 PT : N-(4-(4-(2,5-dioxopirrole-1-il)benzi)fenil)acetamida

Cas No

EEC No 401-970-1

No 613-085-00-X

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- ES : 1-(4-(4-(5-oxo-2H-2-furylidenamino)benzil)fenil)pirrol-2,5-diona  
 DA : 1-(4-(4-(5-oxo-2H-2-furylidenamino)benzyl)phenyl)pyrrol-2,5-dion  
 DE : 1-(4-(4-(5-Oxo-2H-2-furylidenamino)benzyl)phenyl)pyrrol-2,5-dion  
 EL : 1-(4-(4-(5-οξο-2H-2-φουρυλιδεναμινο)δενζυλο)φαινυλο)πυρρολ-2,5-διόνη  
 EN : 1-(4-(4-(5-oxo-2H-2-furylidenamino)benzyl)phenyl)pyrrole-2,5-dione  
 FR : 1-(4-(4-(5-oxo-2H-2-furylidènamino)benzyl)phényl)pyrrole-2,5-dione  
 IT : 1-(4-(4-(5-osso-2H-2-furilidenammio)benzil)fenil)pirrol-2,5-dione  
 NL : 1-(4-(4-(5-oxo-2H-2-furylideenamino)benzyl)fenyl)pyrrool-2,5-dion  
 PT : 1-(4-(4-(5-oxo-2H-2-furilidenamino)benzil)fenil)pirtole-2,5-diona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

R 43

N; R 50-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	N	
		R : 43-50/53
		S : (2-)24-37-60-61

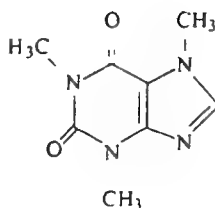
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã




Cas No 58-08-2

EEC No 200-362-1

No 613-086-00-5



ES : cafeína

DA : koffein

DE : Coffein ; Trimethylxanthin

EL : καφεΐνη

EN : caffeine

FR : caféine

IT : caffeina

NL : caffeine ; 1-metiltéobromine

PT : cafeína

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22

S : (2)

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 110-01-0

EEC No 203-728-9

No 613-087-00-0

ES: tetrahidrotiofeno  
 DA: tetrahydrothiophen  
 DE: Tetrahydrothiophen  
 EL: τετραϋδροθειοφαίνιο  
 EN: tetrahydrothiphen  
 FR: tetrahydrothiophène  
 IT: tetraidrotiofene  
 NL: tetrahydrothiofeen  
 PT: tetrahidrotiofeno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

F; R 11	Xn; R 20/21/22	Xi; R 36/38
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

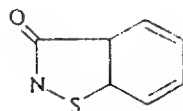
F	Xn	
		R : 11-20/21/22-36/38 S : (2-)16-23-36/37

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazioni, Concentratiegrenzen, Limites de concentraçào


Cas No 2634-33-5

EEC No 220-120-9

No 613-088-00-6



ES : 1,2-bencisotiazol-3(2H)-ona

DA : 1,2-benzisotiazol-3(2H)-on

DE : 1,2-Benzisotiazol-3(2H)-on

EL : 1,2-δενζο-ισοθιαζολ-3(2H)-όνη

EN : 1,2-benzisothiazol-3(2H)-one

FR : 1,2-benzisothiazole-3(2H)-one

IT : 1,2-benzoisotiazol-3(2H)-one

NL : 1,2-benzisothiazool-3(2H)-on

PT : 1,2-benzisotiazole-3(2H)-ona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Xi ; R 38

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22-38-43

S : (2)24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No —

EEC No —

No 613-089-00-1

NOTA A

ES: sales de diquat

DA: salte af diquat

DE: Salze von Diquat

EL: άλατα του diquat

EN: salts of diquat

FR: sels de diquat

IT: sali di diquat

NL: zouten van diquat

PT: sais de diquato

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiō, Classificazione, Indeling, Classificação

Γ; R 24/25

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Γ



R : 24/25-36/37/38

S : (1/2-)22-36/37/39-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçāo


Cas No

—

EEC No

—

No 613-090-00-7

NOTA A

ES: sales de paraquat  
 DA: salte af paraquat  
 DE: Salze von Paraquat  
 EL: άλατα του paraquat  
 EN: salts of paraquat  
 FR: sels de paraquat  
 IT: sali di paraquat  
 NL: zouten van paraquat  
 PT: sais de paracuat

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T; R 24/25

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 24/25-36/37/38

S : (1/2-)22-36/37/39-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No —

No 613-091-00-2

NOTA A

ES: sales de morfamquat  
 DA: salte af morfamquat  
 DE: Salze von Morfamquat  
 EL: αλατα του morfamquat  
 EN: salts of morfamquat  
 FR: sels de morfamquat  
 IT: sali di morfamquat  
 NL: zouten van morfamquat  
 PT: sais de morfamquato

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

Xi; R 36/37/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 22-36/37/38

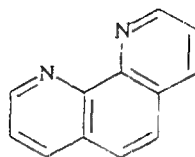
S : (2-)22-36

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 66-71-7

EEC No 200-629-2

No 613-092-00-8



ES: 1,10-fenantrolina

DA: 1,10-phenanthrolin

DE: 1,10-Phenanthrolin

EL: 1,10-φαινανθρολίνη

EN: 1,10-phenanthroline

FR: 1,10-phénanthroline

IT: 1,10-fenantrolina; 4,5-diazoferantrene

NL: 1,10-fenantroline

PT: 1,10-fenantrolina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T; R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

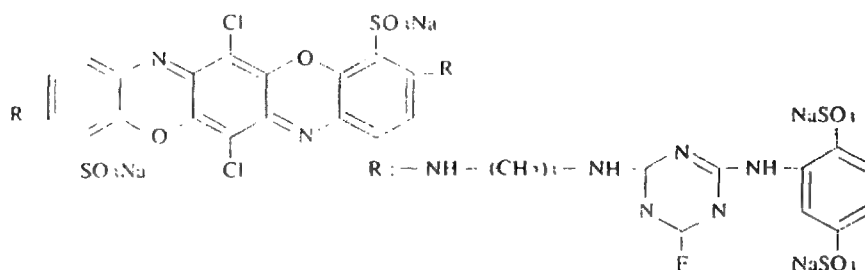
T	
	R : 25
	S : (1/2-)+5

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 85153-92-0

EEC No 400-050-7

No 613-093-00-3



- ES : 6,13-dicloro-3,10-bis((4-(2,5-disulfonatoanilino)-6-fluoro-1,3,5-triazin-2-ilamino)prop-3-ilamino)-5,12-dioxa-7,14-diazapentaceno-4,11-disulfonato de hexasodio
- DA : hexanatrium-6,13-dichlor-3,10-bis((4-(2,5-disulfonatoanilino)-6-fluor-1,3,5-triazin-2-ylamino)prop-3-ylamino)-5,12-dioxa-7,14-diazapentacen-4,11-disulfonat
- DE : Hexanatrium-6,13-dichlor-3,10-bis((4-(2,5-disulfonatoanilino)-6-fluor-1,3,5-triazin-2-ylamino)prop-3-ylamino)-5,12-dioxa-7,14-diazapentacen-4,11-disulfonat
- EL : 6,13-διχλωρο-3,10-δις((4-(2,5-δισουλφονατοανιλίνο)-6-φθορο-1,3,5-τριαζιν-2-υλαμινό)προπ-3-υλαμινό)-5,12-διοξα-7,14-διαζαπεντακενο-4,11-δισουλφονικό εξανάτριο
- EN : hexasodium 6,13-dichloro-3,10-bis((4-(2,5-disulfonatoanilino)-6-fluoro-1,3,5-triazin-2-ylamino)prop-3-ylamino)-5,12-dioxa-7,14-diazapentacene-4,11-disulfonate
- FR : 6,13-dichloro-3,10-bis((4-(2,5-disulfonatoanilino)-6-fluoro-1,3,5-triazine-2-ylamino)prop-3-ylamino)-5,12-dioxa-7,14-diazapentacène-4,11-disulfonate d'hexasodium
- IT : 6,13-dicloro-3,10-bis((4-(2,5-disolfonatoanilino)-6-fluoro-1,3,5-triazin-2-ilammio)prop-3-ilammio)-5,12-diossa-7,14-diazapentacen-4,11-disolfonato di esassodio
- NL : hexanatrium-6,13-dichloor-3,10-bis((4-(2,5-disulfonatoanilino)-6-fluor-1,3,5-triazine-2-ylamino)prop-3-ylamino)-5,12-dioxa-7,14-diazapentaceen-4,11-disulfonaat
- PT : 6,13-dicloro-3,10-bis((4-(2,5-dissulfonatoanilino)-6-fluoro-1,3,5-triazina-2-ilamino)prop-3-ilamino)-5,12-dioxa-7,14-diazapentaceno-4,11-dissulfonato de hexassódio

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

R 42/43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 42/43
	S : (2-)22-24-37

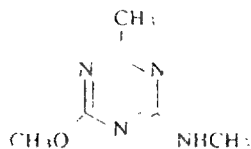
Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 5248-39-5

EEC No 401-360-5

No 613-094-00-9




- ES : 4-metoxi-N,6-dimetil-1,3,5-triazin-2-ilamina  
 DA : 4-methoxy-N,6-dimethyl-1,3,5-triazin-2-ylamin  
 DE : 4-Methoxy-N,6-dimethyl-1,3,5-triazin-2-ylamin  
 EL : 4-μεθοξυ-N,6-διμεθυλο-1,3,5-τριαζιν-2-υλαμίνη  
 EN : 4-methoxy-N,6-dimethyl-1,3,5-triazin-2-ylamine  
 FR : 4-méthoxy-N,6-diméthyl-1,3,5-triazine-2-ylamine  
 IT : 4-metossi-N,6-dimetil-1,3,5-triazin-2-ilamina  
 NL : 4-methoxy-N,6-dimethyl-1,3,5-triazine-2-ylamine  
 PT : 4-metoxi-N,6-dimetil-1,3,5-triazin-2-ilamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Xn ; R 22-48/22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

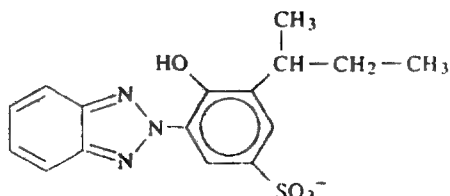
<p>Xn</p> 	<p>R : 22-48/22</p> <p>S : (2-)22-36</p>
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*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92484-48-5

EEC No 403-080-9

No 613-095-00-4



Na

- ES : 3-(2H-benzotriazol-2-il)-5-sec-butil-4-hidroxibencensulfonato de sodio  
 DA : natrium-3-(2H-benzotriazol-2-yl)-5-sec-butyl-4-hydroxybenzensulfonat  
 DE : Natrium-3-(2H-benzotriazol-2-yl)-5-sec-butyl-4-hydroxybenzolsulfonat  
 EL : 3-(2H-δενζοτρίαζολ-2-υλο)-5-σεκ-δουτυλ-4-υδροξυδενζόλοσουλφονικό νάτριο  
 EN : sodium 3-(2H-benzotriazol-2-yl)-5-sec-butyl-4-hydroxybenzenesulfonate  
 FR : 3-(2H-benzotriazole-2-yl)-5-sec-butyl-4-hydroxybenzènesulfonate de sodium  
 IT : 3-(2H-benzotriazol-2-il)-5-sec-butil-4-idrossibenzensolfonato di sodio  
 NL : natrium-3-(2H-benzotriazol-2-yl)-5-sec-butyl-4-hydroxybenzeensulfonaat  
 PT : 3-(2H-benzotriazole-2-il)-5-sec-butil-4-hidroxibenzenossulfonato de sódio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificaçào*

Xi; R 41

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

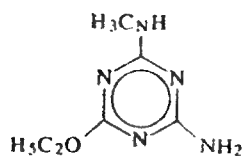
Xi	
	R : 41
	S : (2-)26-39

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 62096-63-3

EEC No 403-580-7

No 613-096-00-X



ES : 2-amino-6-etoxi-4-metilamino-1,3,5-triazina  
 DA : 2-amino-6-ethoxy-4-methylamino-1,3,5-triazin  
 DE : 2-Amino-6-ethoxy-4-methylamino-1,3,5-triazin  
 EL : 6-αιθοξυ-2-αμινο-4-μεθυλαμινο-1,3,5-τριαζίνη  
 EN : 2-amino-6-ethoxy-4-methylamino-1,3,5-triazine  
 FR : 2-amino-6-ethoxy-4-méthylamino-1,3,5-triazine  
 IT : 2-ammino-6-etossi-4-metilammino-1,3,5-triazina  
 NL : 2-amino-6-ethoxy-4-methylamino-1,3,5-triazine  
 PT : 2-amino-6-etoxi-4-metilamino-1,3,5-triazina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

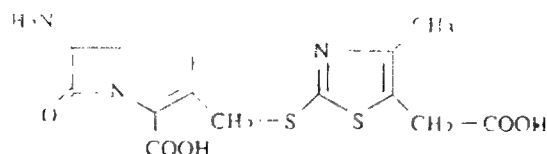
Xn	
	R : 22
	S : (2)

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 111258-82-9

EEC No 403-690-5

No 613-097-00-5



- ES: ácido 7-amino-3-((5-carboximetil-4-metil-1,3-tiazol-2-iltio)metil)-8-oxo-5-tia-1-azabicciclo(4.2.0)oct-2-eno-2-carboxílico
- DA: 7-amino-3-((5-carboxymethyl-4-methyl-1,3-thiazol-2-ylthio)methyl)-8-oxo-5-thia-1-azabicyclo(4.2.0)oct-2-en-2-carboxylsyre
- DE: 7-Amino-3-((5-carboxymethyl-4-methyl-1,3-thiazol-2-ylthio)methyl)-8-oxo-5-thia-1-azabicyclo(4.2.0)oct-2-en-2-carbonsaure
- EL: 7-αμινό-3-((5-καρβοξυμεθύλο-4-μεθύλο-1,3-θιαζολ-2-υλοθειο)μεθύλ)-8-οξο-5-θεια-1-αζαδικυκλο(4.2.0)οκτ-2-ενο-2-καρβοξυλικό οξύ
- EN: 7-amino-3-((5-carboxymethyl-4-methyl-1,3-thiazol-2-ylthio)methyl)-8-oxo-5-thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid
- FR: acide 7-amino-3-((5-carboxyméthyl-4-méthyl-1,3-thiazole-2-ylthio)méthyl)-8-oxo-5-thia-1-azabicyclo(4.2.0)oct-2-ène-2-carboxylique
- IT: ácido 7-ammino-3-((5-carbossimetil-4-metil-1,3-tiazol-2-iltio)metil)-8-osso-5-tia-1-azabicciclo(4.2.0)ott-2-en-2-carbossilico
- NL: 7-amino-3-((5-carboxymethyl-4-methyl-1,3-thiazool-2-ylthio)methyl)-8-oxo-5-thia-1-azabicyclo(4.2.0)oct-2-een-2-carbonzuur
- PT: ácido 7-amino-3-((5-carboximetil-4-metil-1,3-tiazol-2-iltio)metil)-8-oxo-5-tia-1-azabicciclo(4.2.0)oct-2-eno-2-carboxílico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

R 42/43

R 52-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

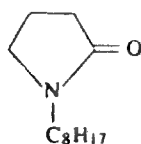
Xn	
	R : 42/43-52/53
	S : (2-)22-24-37-61

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 2687-94-7

EEC No 403-700-8

No 613-098-00-0



ES: 1-octil-2-pirrolidona

DA: 1-octyl-2-pyrrolidon

DE: 1-Octyl-2-pyrrolidon

EL: 1-οκτυλο-2-πυρρολιδόνη

EN: 1-octyl-2-pyrrolidone

FR: 1-octyl-2-pyrrolidone

IT: 1-ottil-2-pirrolidone

NL: 1-octyl-2-pyrrolidon

PT: 1-octil-2-pirrolidona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

C; R 34

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

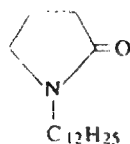
	C	R : 34
		S : (1/2-)23-26-36/37/39-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 2687-96-9

EEC No 403-730-1

No 613-099-00-6



ES 1-dodecil-2-pirrolidona  
 DA 1-dodecyl-2-pyrrolidon  
 DE 1-Dodecyl-2-pyrrolidon  
 EL 1-δωδεκυλο-2-πυρρολιδόνη  
 EN 1-dodecyl-2-pyrrolidone  
 FR 1-dodécyl-2-pyrrolidone  
 IT 1-dodecil-2-pirrolidone  
 NL 1-dodecyl-2-pyrrolidon  
 PT 1-dodecil-2-pirrolidona

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

C; R 34	R 43	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rosulagem*

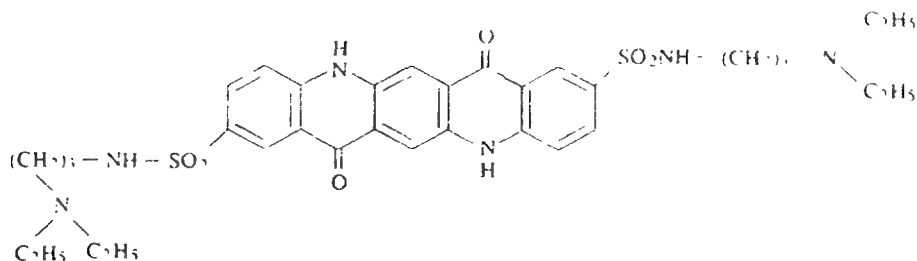
C	N	
		R : 34-43-50/53
		S : (1/2-)26-36/37/39-45-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συχέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No

EEC No 404-230-6

No 613-100-00-X



- ES : 2,9-bis(3-(diethylamino)propylsulfamoyl)quino(2,3-b)acridina-7,14-diona  
 DA : 2,9-bis(3-(diethylamino)propylsulfamoyl)quino(2,3-b)acridin-7,14-dion  
 DE : 2,9-Bis(3-(diethylamino)propylsulfamoyl)chino(2,3-b)acridin-7,14-dion  
 EL : 2,9-δισ(3-(διαεθυλαμινο)προπυλοσουλφαμύλο)κινο(2,3-β)ακριδινο-7,14-διόνη  
 EN : 2,9-bis(3-(diethylamino)propylsulfamoyl)quino(2,3-b)acridine-7,14-dione  
 FR : 2,9-bis(3-(diethylamino)propylsulfamoyl)quino(2,3-b)acridine-7,14-dione  
 IT : 2,9-bis(3-(diethylamino)propylsulfamoyl)chino(2,3-b)acridin-7,14-dione  
 NL : 2,9-bis(3-(diethylamino)propylsulfamoyl)chino(2,3-b)acridine-7,14-dion  
 PT : 2,9-bis(3-(diethylamino)propylsulfamoyl)quino(2,3-b)acridina-7,14-diona

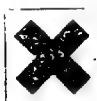
Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação

R 43

R 53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi



R : 43-53

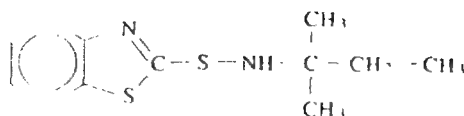
S : (2-)24-37-61

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 110799-28-5

EEC No 404-380-2

No 613-101-00-5



ES : N-terc-pentil-2-benzotiazolsulfenamida  
 DA : N-tert-pentyl-2-benzothiazolsulfenamid  
 DE : N-tert-Pentyl-2-benzothiazolsulfenamid  
 EL : Ν-τερτ-πεντυλο-2-θενζοθειαζολοσουλφεναμίδιο  
 EN : N-tert-pentyl-2-benzothiazolesulfenamide  
 FR : N-tert-pentyl-2-benzothiazolesulfénamide  
 IT : N-terz-pentil-2-benzotiazolsolfenammide  
 NL : N-tert-pentyl-2-benzothiazoolsulfenamide  
 PT : N-terc-pentil-2-benzotiazolsulfenamida

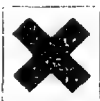
*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

R 43

R 52-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R : 43-52/53

S : (2-)36/37-61

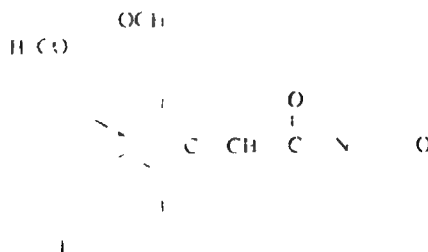
*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 1104-8-70-5

EEC No 404-200-2

No 613 102-00-0



- ES 4-(3-(4-clorofenil)-3-(3,4-dimetoxifenil)acriloil)morfolina  
 DA 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholin  
 DE 4-(3-(4-Chlorphenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholin  
 EL 4-(3-(4 χλωροφαινό)-3-(3,4 διμεθοξυφαινό)ακρυλκυλο)μορφολίνη  
 EN 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine  
 FR 4-(3-(4-chlorophényl)-3-(3,4-diméthoxyphényl)acryloyl)morpholine  
 IT 4-(3-(4-clorofenil)-3-(3,4-dimetossifenil)acriloil)morfolina  
 NL 4-(3-(4-chloortenyl)-3-(3,4-dimethoxytenyl)acryloyl)morpholine  
 PT 4-(3-(4-clorofenil)-3-(3,4-dimetoxifenil)acriloil)morfolina

Clasificación, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

N; R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem

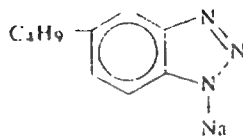
N	
	R : 51/53
	S : 61

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 118685-34-0

EEC No 404-450-2

No 613-103-00-6



ES: 5-n-butylbenzotriazol de sodio  
 DA: natrium-5-n-butylbenzotriazol  
 DE: Natrium-5-n-butylbenzotriazol  
 EL: 5-n-βουτυλοβενζοτρίαζόλιο του νατρίου  
 EN: sodium 5-n-butylbenzotriazole  
 FR: 5-n-butylbenzotriazole de sodium  
 IT: 5-n-butylbenzotriazolo di sodio  
 NL: natrium-5-n-benzotriazool  
 PT: 5-n-butylbenzotriazole de sodio

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22	C; R 34	R 43	N; R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

C	N	
		R : 22-34-43-51/53
		S : (1/2-3)25-36/37/39-45-61

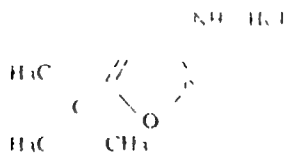
*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No

-

EEC No 404 840 2

No 613 014 60 1



- ES 5-tert-butyl-3-isoxazolinamina, clorhidrato  
 DA 5-tert-butyl-3-isoxazolinaminhydrochlorid  
 DE 5-tert-Butyl-3-isoxazolinaminhydrochlorid  
 EL 5-τερτ-βουτυλ-3-ισοξαζολιν-αμίνη υδροχλωρική  
 EN 5-tert-butyl-3-isoxazolinamine hydrochloride  
 FR 5-tert-butyl-3-isoxazolinamine, chlorhydrate  
 IT 5-terz-butil-3-isossazolinamina, cloridrato  
 NL 5-tert-butyl-3-isoxazolinaminehydrochloride  
 PT 5-tert-butyl-3-isoxazolinamina, cloridrato

Classification / Classificazione / Einstufung / Ταξινόμηση / Classificazione / Classification / Classificação / Classificação

Xn, R 22-48/22

Xi, R 41

R 52-53

Etiquetage / Etiketierung / Kennzeichnung / Επισήμανση / Labeling / Etiquetado / Etiquetado / Kennzeichen / Rotulagem

Xn



R 22-41-48/22-52/53

S (2-)26-36/39-61

Limits of concentration / Konzentrationsgrenzen / Konzentrationsgrenzen / Ορια συγκέντρωσης / Concentration limits / Limites de concentration / Limite di concentrazione / Concentatiegrenzen / Limites de concentrație


Cas. No. 131



- ES 4,4'-vinylenebis((3-sulfonato-4,1-phenyleneimino(6-morpholino-5,5'-triazole-2,7-disulfonate)) de hexakis(tetramethylammonium)
- DA hexakis(tetramethylammonium) 4,4'-vinylenebis((3-sulfonato-4,1-phenyleneimino(6-morpholino-5,5'-triazole-2,7-disulfonate)) de hexakis(tetramethylammonium)
- DE Hexakis(tetramethylammonium) 4,4'-vinylenebis((3-sulfonato-4,1-phenyleneimino(6-morpholino-5,5'-triazole-2,7-disulfonate)) de hexakis(tetramethylammonium)
- EL 4,4'-βινυλενισ(3-σουλφονατο-4,1-φαινυλενιμινο(6-μορφολινο-5,5'-τριαζολ-2,7-δισουλφονατο)) δε εξαηεξαμεθυλαμμωνιου
- EN hexakis(tetramethylammonium) 4,4'-vinylenebis((3-sulfonato-4,1-phenyleneimino(6-morpholino-5,5'-triazole-2,7-disulfonate)) de hexakis(tetramethylammonium)
- FR 4,4'-vinylenebis((3-sulfonato-4,1-phenyleneimino(6-morpholino-5,5'-triazole-2,7-disulfonate)) de hexakis(tetramethylammonium)
- IT 4,4'-vinylenebis((3-sulfonato-4,1-phenyleneimino(6-morpholino-5,5'-triazole-2,7-disulfonate)) de hexakis(tetramethylammonium)
- NL hexakis(tetramethylammonium) 4,4'-vinylenebis((3-sulfonato-4,1-phenyleneimino(6-morpholino-5,5'-triazole-2,7-disulfonate)) de hexakis(tetramethylammonium)
- PT 4,4'-vinylenebis((3-sulfonato-4,1-phenyleneimino(6-morpholino-5,5'-triazole-2,7-disulfonate)) de hexakis(tetramethylammonium)

Cas No 124537-39-0

EFC No 405-160-9

No 613-105-00-7

*Clasificación, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

T; R 25	R 43	R 52-53
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*Etiquetado e rotulagem, Kennzeichnung, Επισημάνση, Labelling, Etiquetage, Etikettag, Kenmerken, Rotulagem*

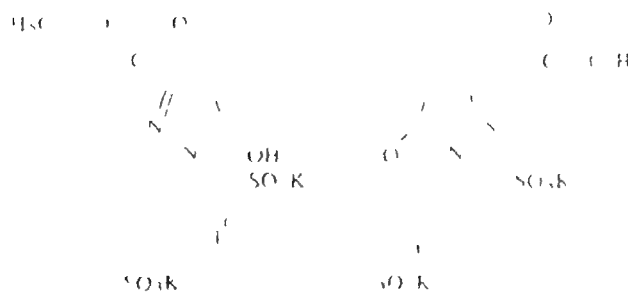
T	
	R : 25-43-52/53 S : (1/2) 24-37-45-61

*Límite de concentração, Konzentrationsgrenze, Κονцентрация, Όρια συγκέντρωσης, Concentration limit, Limite de concentraçao, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No

E.C. No 405 2 00 3

6 0 1 0 0 0 2



- ES 2-(4-{5-[(1-(2,5-disulfonatofenil)-3-etoxicarbonil-5-idroxi-pirazol-4-il]penta-2,4-dieniliden)-3-etoxicarbonil-5-oxo-2-pirazolin-1-il}benzeno-1,4-disulfonato de tetrapotasio
- DA tetrakalium 2-(4-{5-[(1-(2,5-disulfonatophenyl)-3-ethoxycarbonyl-5-hydroxypyrazol-4-yl]penta-2,4-dienyliden)-3-ethoxycarbonyl-5-oxo-2-pyrazolin-1-yl}benzen-1,4-disulfonat
- DE Tetrakalium 2-(4-{5-[(1-(2,5-disulfonatophenyl)-3-ethoxycarbonyl-5-hydroxypyrazol-4-yl]penta-2,4-dienyliden)-3-ethoxycarbonyl-5-oxo-2-pyrazolin-1-yl}benzol-1,4-disulfonat
- EL 2-(4-{5-[(1-(2,5-δισουλφονατοφαινυλο)-3-αιθοξυκαρβονυλ-5-δρασξυπυραζολ-4-ιλο]πεντα-2,4-διενυλιδεν)-3-αιθοξυκαρβονυλ-5-οξο-2-πυραζολιν-1-ιλο}βενζολο-1,4-δισουλφονικο τετραπικαλσιο
- EN tetrapotassium 2-(4-{5-[(1-(2,5-disulfonatophenyl)-3-ethoxycarbonyl-5-hydroxypyrazol-4-yl]penta-2,4-dienyliden)-3-ethoxycarbonyl-5-oxo-2-pyrazolin-1-yl}benzene-1,4-disulfonate
- FR 2-(4-{5-[(1-(2,5-disulfonatophenyl)-3-ethoxycarbonyl-5-hydroxypyrazole-4-yl]penta-2,4-dienyliden)-3-ethoxycarbonyl-5-oxo-2-pyrazoline-1-yl}benzene-1,4-disulfonate de tetrapotassium
- IT 2-(4-{5-[(1-(2,5-disulfonatofenil)-3-etossicarbonil-5-idrossipirazol-4-il]penta-2,4-dieniliden)-3-etossicarbonil-5-oxo-2-pirazolin-1-il}benzeno-1,4-disulfonato di tetrapotassio
- NL tetrakalium-2-(4-{5-[(1-(2,5-disulfonatofenyl)-3-ethoxycarbonyl-5-hydroxypyrazool-4-yl]penta-2,4-dienylideen)-3-ethoxycarbonyl-5-oxo-2-pyrazoline-1-yl}benzeno-1,4-disulfonaat
- PT 2-(4-{5-[(1-(2,5-dissulfonatofenil)-3-etoxicarbonil-5-idroxi-pirazolo-4-il]penta-2,4-dienilideno)-3-etoxicarbonil-5-oxo-2-pirazolina-1-il}benzeno-1,4-dissulfonato de tetrapotassio

Classification Classification Classification Classification Classification Classification Classification Classification Classification Classification

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Etiquetado, Etikettering, Kennzeichnung, Rotulagem

X<sub>1</sub>

R : 43

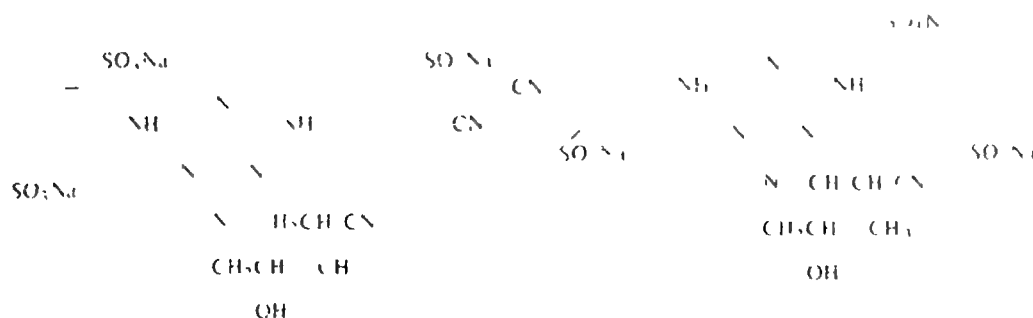
S : (2-)24-37

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçao


Cas No 76508-02-6

EEC No 405-260-1

No 613 107 00 8



- ES 2,2'-vinilenbis((3-sulfonato-4,1-fenilen)imino(6-(N-cianoetil-N-(2-idrossipropil)amino)-1,3,5-triazina-4,2-diil)iminodibenceno-1,4-disulfonato de hexasodio
- DA hexanatrium-2,2'-vinylenebis((3-sulfonato-4,1-phenylene)imino(6-(N-cyanethyl-N-(2-hydroxypropyl)amino)-1,3,5-triazin-4,2-diyl)iminodibenzene-1,4-disulfonat
- DE Hexanatrium-2,2'-vinylenebis((3-sulfonato-4,1-phenylene)imino(6-(N-cyanethyl-N-(2-hydroxypropyl)amino)-1,3,5-triazin-4,2-diyl)iminodibenzol-1,4-disulfonat
- EL 2,2'-δινυλενοδισ((3-σουλφονατο-4,1-φαινυλενο)ιμινο(6-(N-κυανοαιθυλ)-N-(2-υδροξυπροπυλ)αμινο)-1,3,5-τριαζινο-4,2-διυλ)ιμινοδιδενζολ-1,4-δισουλφονικό εξανατριο
- EN hexasodium 2,2'-vinylenebis((3-sulfonato-4,1-phenylene)imino(6-(N-cyanoethyl-N-(2-hydroxypropyl)amino)-1,3,5-triazine-4,2-diyl)iminodibenzene-1,4-disulfonate
- FR 2,2'-vinylènebis((3-sulfonato-4,1-phénylène)imino(6-(N-cyanoéthyl-N-(2-hydroxypropyl)amino)-1,3,5-triazine-4,2-diyl)iminodibenzène-1,4-disulfonate d'hexasodium
- IT 2,2'-vinilenbis((3-solfonato-4,1-fenilen)imino(6-(N-cianoetil-N-(2-idrossipropil)ammino)-1,3,5-triazin-4,2-diil)iminodibenzen-1,4-disolfonato di esassodio
- NL hexasodium-2,2'-vinyleenbis((3-sulfonato-4,1-fenyleen)imino(6-(N-cyanoethyl-N-(2-hydroxypropyl)amino)-1,3,5-triazine-4,2-diyl)iminodibenzene-1,4-disulfonaat
- PT 2,2'-vinilenobis((3-sulfonato-4,1-fenileno)imino(6-(N-cianoetil-N-(2-idrossipropil)amino)-1,3,5-triazina-4,2-diil)iminodibenceno-1,4-disulfonato de hexassodio

Classification Klassificering Företagning Ταξινόμηση Classification Classification Classificazione Indeling Classificatie

Xi, R 36

Etiquetado Etikettering Kennzeichnung. Επισημάνση, Labelling, Etiquetage Etichettatura Kennzeichen, Rotulagem

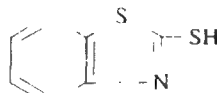
Xi	
	R : 36
	S : (2-)26

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορία συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 149-30-4

EEC No 205-736-8

No 613-108-00-3



ES: benzotiazol-2-tiol

DA: benzothiazol-2-thiol

DE: Benzothiazol-2-thiol, 2-Mercaptobenzothiazol

EL: δενζοθιαζολ-2-θειόλη

EN: benzothiazole-2-thiol

FR: benzothiazole-2-thiol, mercaptobenzothiazole

IT: benzotiazol-2-tiolo; mercaptobenzotiazolo

NL: benzothiazool-2-thiol

PT: benzotiazole-2-tiol

FI: bentsotiatsohi-2-tioli

SV: benzotiazol-2-tiol

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 43 N; R 50-53

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiketage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

Xi	N	
		R: 43-50/53
		S: (2-)24-37-60-61

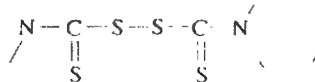
*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationsgränser*




Cas No 94-37-1

EEC No 202-328-1

No 613-109-00-9



- ES: disulfuro de bis(piperidinotiocarbonilo)  
 DA: bis(piperidinothiocarbonyl)disulfid  
 DE: Bis(piperidinothiocarbonyl)disulfid  
 EL: δισουλφίδιο του δις(πιπεριδινοθειοκαρβονυλίου)  
 EN: bis(piperidinothiocarbonyl) disulphide  
 FR: disulfure de bis(pipéridinothiocarbonyle)  
 IT: disolfuro di bis(piperidinotiocarbonile)  
 NL: bis(piperidinothiocarbonyl)disulfide  
 PT: dissulfureto de bis(piperidinotiocarbonilo)  
 FI: bis(piperidiinotioikarbonyyli)disulfidi  
 SV: bis(piperidintioikarbonyl)disulfid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/37/38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

Xi



R: 36/37/38-43

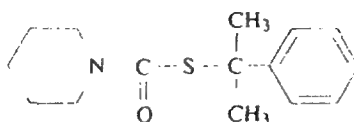
S: (2) 24-26-37

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrationsgrenzen,  
 Limites de concentraçào, Pitoissuusraajat, Konzentrationsgrænser*


Cas No 61432-55-1

EEC No 262-784-2

No 613-110-00-4



- ES: piperidina-1-carbotioato de *S*-(1-fenil-1-metiletilo)  
 DA: *S*-(1-methyl-1-phenylethyl)piperidin-1-carbothioat  
 DE: *S*-(1-Methyl-1-phenylethyl)piperidin-1-carbothioat  
 EL: πιπεριδινο-1-καρβοθειικό *S*-(1-μεθυλο-1-φαινυλαιθύλιο)  
 EN: *S*-(1-methyl-1-phenylethyl) piperidine-1-carbothioate  
 FR: piperidine-1-carbothioate de *S*-(1-méthyl-1-phényléthyle); dimépipérate  
 IT: piperidin-1-carbotioato di *S*-(1-fenil-1-metiletile)  
 NL: *S*-(1-fenyl-1-methylethyl)piperidine-1-carbothioaat  
 PT: piperidina-1-carbotioato de *S*-(1-fenil-1-metiletilo)  
 FI: *S*-(1-metyyli-1-fenyylietyyli)piperidiini-1-karbotioaatti; dimepiperaatin  
 SV: *S*-(1-metyl-1-fenyletyl)piperidin-1-karbotioat; dimepiperat (ISO)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xn, R 22	N, R 51-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnäi, Märkning*

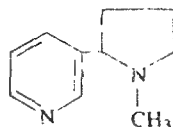
Xn	N	
		R: 22-51/53
		S: (2-)61

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusrajat, Konzentrationsgränser*


Cas No 54-11-5

EEC No 200-193-3

No 614-001-00-4



ES : nicotina

DA : nicotin

DE : Nikotin

EL : νικωτίνη

EN : nicotine

FR : nicotine

IT : nicotina

NL : nicotine

PT : nicotina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

T+ ; R 27	T ; R 25
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T +	
	R : 25-27
	S : (1/2-)36/37-45

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No

—

EEC No

—

No 614-002-00-X

NOTA A

ES: sales de nicotina

DA: salte af nicotin

DE: Nikotinsalze

EL: άλατα νικοτίνης

EN: salts of nicotine

FR: sels de nicotine

IT: sali di nicotina

NL: nicotinezouten

PT: sais de nicotina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 26/27/28

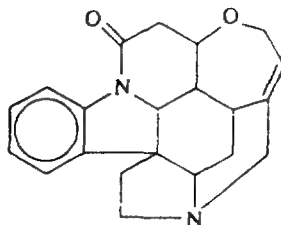
S : (1/2-)13-28-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 57-24-9

EEC No 200-319-7

No 614-003-00-5



ES: estricnina

DA: strychnin

DE: Strychnin

EL: στρυχνίνη

EN: strychnine

FR: strychnine

IT: stricnina

NL: strychnine

PT: estricnina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+ ; R 27/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 27/28
	S : (1/2-)36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 614-004-00-0

NOTA A

ES: sales de estricnina

DA: salte af strychnin; stryknin

DE: Strychninsalze

EL: αλατα στρυχνίνης

EN: salts of strychnine

FR: sels de strychnine

IT: sali di stricnina

NL: strychninezouten

PT: sais de estricnina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

T+ ; R 26/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

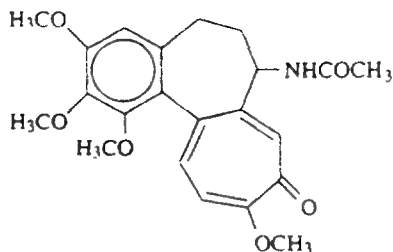
T+	
	R : 26/28
	S : (1/2-)13-28-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64-86-8

EEC No 200-598-5

No 614-005-00-6



ES: colchicina

DA: kolkicin

DE: Colchicin ; 7-Acetamido-1,2,3,10-tetramethoxy-5,6,7,9-tetrahydrobenzo[a]heptalen-9-on

EL: κολχικίνη

EN: colchicine

FR: colchicine

IT: colchicina

NL: colchicine

PT: colchicina

Clasificación. Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T+ ; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

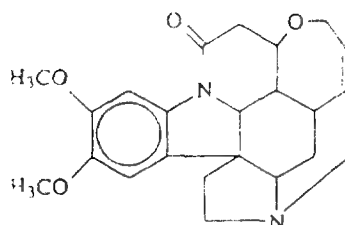
T+	
	R : 26/28
	S : (1/2-)13-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 357-57-3

EEC No 206-614-7

No 614-006-00-1



ES: brucina

DA: brucin

DE: Brucin; 2,3-Dimethoxy-strychnin

EL: βρυκίνη

EN: brucine

FR: brucine

IT: brucina

NL: brucine

PT: brucina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R: 26/28

S: (1/2-)13-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No —

EEC No —

No 614-007-00-7

NOTA A

ES: sales de brucina

DA: salte af brucin

DE: Brucinsalze

EL: άλατα θρυκίνης

EN: salts of brucine

FR: sels de brucine

IT: sali di brucina

NL: brucinezouten

PT: sais de brucina

Clasificación. Klassificering. Einstufung. Ταξινόμηση. Classification. Classification. Classificazione. Indeling. Classificação

T+ ; R 26/28

Etiquetado. Etikettering. Kennzeichnung. Επισήμανση. Labelling. Étiquetage. Etichettatura. Kenmerken. Rotulagem

T+



R · 26/28

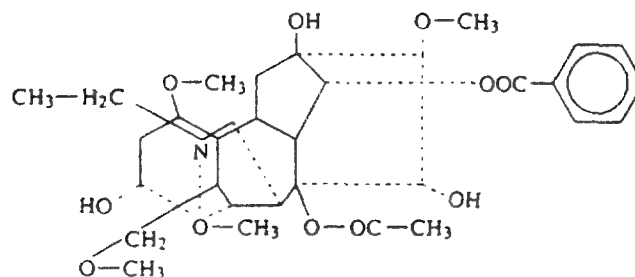
S : (1/2-)13-45

Límites de concentración. Koncentrationsgrænser. Konzentrationsgrenzwerte. Όρια συγκέντρωσης. Concentration limits. Limites de concentration. Limite di concentrazione. Concentratiegrenzen. Limites de concentraçāo


Cas No 302-27-2

EEC No 206-121-7

No 614-008-00-2



ES: aconitina  
 DA: aconitin  
 DE: Aconitin  
 EL: ακονιτινίνη  
 EN: aconitine  
 FR: aconitine  
 IT: aconitina  
 NL: aconitine  
 PT: aconitina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T+ ; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenn:erken, Rotulagem

T+	
	R : 26/28
	S : (1/2-)24-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 614-009-00-8

NOTA A

ES: sales de aconitina  
 DA: salte af aconitin  
 DE: Salze von Aconitin  
 EL: άλατα ακονιτινης  
 EN: salts of aconitine  
 FR: sels d'aconitine  
 IT: sali di aconitina  
 NL: aconitinezouten  
 PT: sais de aconitina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T+ ; R 26/28

*Etiquetado, Etikettering, Kennzeichnung, Επισημανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

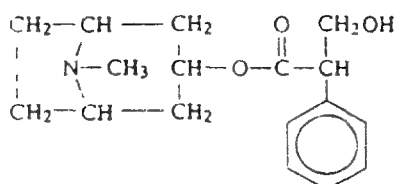
T+	
	R - 26/28
	S : (1/2-)24-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 51-55-8

EEC No 200-104-8

No 614-010-00-3



ES: atropina

DA: atropin

DE: Atropin, DL-Tropyl-tropat

EL: ατροπίνη

EN: atropine

FR: atropine; DL-tropate de tropyle

IT: atropina


NL: atropine

PT: atropina; DL-tropato de tropilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

T+; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T+</p> 	<p>R : 26/28</p> <p>S : (1/2-)25-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No —

EEC No —

No 614-011-00-9

NOTA A

ES: sales de atropina  
 DA: salte af atropin  
 DE: Salze von Atropine  
 EL: άλατα ατροπίνης  
 EN: salts of atropine  
 FR: sels d'atropine  
 IT: sali di atropina  
 NL: atropinezouten  
 PT: sais de atropina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

T+ ; R 26/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

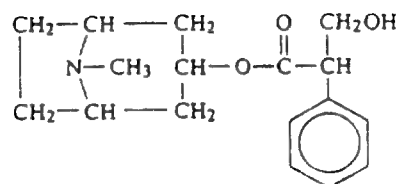
T+	
	R : 26/28 S : (1/2-)25-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101-31-5

EEC No 202-933-0

No 614-012-00-4



ES: hiosciamina

DA: hyoscyamin

DE: Hyoscyamin; L Tropol-tropat

EL: υοσκυαμίνη

EN: hyoscyamine

FR: hyoscyamine; L-tropate de tropyle

IT: iosciamina

NL: hyoscyamine

PT: hiosciamina; L-tropato de tropilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+



R : 26/28

S : (1/2-)24-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 614-013-00-X

NOTA A

ES: sales de hiosciamina  
 DA: salte af hyoscyamin  
 DE: Salze von Hyoscyamin  
 EL: άλατα υοσκυαμίνης  
 EN: salts of hyoscyamine  
 FR: sels de hyoscyamine  
 IT: sali di iosciamina  
 NL: hyoscyaminezouten  
 PT: sais de hiosciamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T+ ; R 26/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

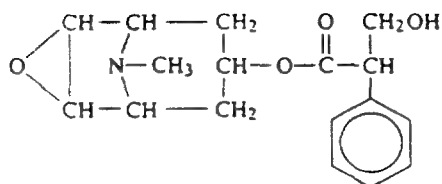
T+	
	R 26/28
	S : (1/2-)24-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσης, Concentration limits*  
*Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 51-34-3

EEC No 200-090-3

No 614-014-00-5



ES : escopolamina

DA : scopolamin

DE : Scopolamin ; L-6,7-Epoxy-tropyl-tropat

EL : σκοπολαμίνη

EN : hyoscine

FR : scopolamine

IT : scopolamina


NL : scopolamine

PT : escopolamina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

T+ ; R 26/27/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T+	
	R : 26/27/28
	S : (1/2-)25-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração*




Cas No

—

EEC No

—

No 614-015-00-0

NOTA A

ES: sales de escopolamina

DA: salte af scopolamin

DE: Salze von Scopolamin

EL: άλατα σκοπολαμινης

EN: salts of hyoscine

FR: sels de scopolamine

IT: sali di scopolamina

NL: scopolaminezouten

PT: sais de escopolamina

Clasificación. Klassificering. Einstufung. Ταξινόμηση. Classification. Classificazione. Classificazione. Indeling. Classificação

T+ ; R 26/27/28

Etiquetado. Etikettering. Kennzeichnung. Επισήμανση. Labelling. Étiquetage. Etichettatura. Kenmerken. Rotulagem

T+



R : 26/27/28

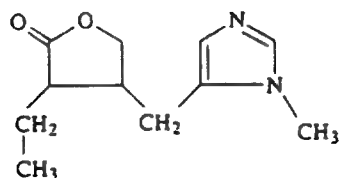
S : (1/2-)25-45

Límites de concentración. Koncentrationsgrænser. Konzentrationsgrenzwerte. Όρια συγκέντρωσης. Concentration limits. Limites de concentration. Limite di concentrazione. Concentratiegrenzen. Limites de concentração


Cas No 92-13-7

EEC No 202-128-4

No 614-016-00-6



ES: pilocarpina

DA: pilocarpin

DE: Pilocarpin ; 3-Ethyl-4-(1-methyl-imidazol-5-yl-methyl)-tetrahydrofuran-2-on

EL: πιλοκαρπίνη

EN: pilocarpine

FR: pilocarpine

IT: pilocarpina

NL: pilocarpine

PT: pilocarpina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ ; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem

T+



R : 26/28

S : (1/2-)25-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No —

EEC No —

No 614-017-00-1

NOTA A

ES: sales de pilocarpina

DA: salte af pilocarpin

DE: Salze von Pilocarpin

EL: άλατα' πιλοκαρπίνης

EN: salts of pilocarpine

FR: sels de pilocarpine

IT: sali di pilocarpina

NL: pilocarpinezouten

PT: sais de pilocarpina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling Classificação

T+ ; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

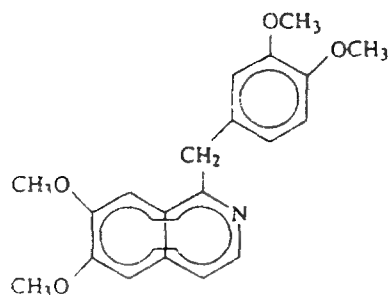
T+	
	R : 26/28
	S : (1/2-)25-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 58-74-2

EEC No 200-397-2

No 614-018-00-7



ES : paraverina

DA : paraverin

DE : Paraverin ; 1-(3',4'-Dimethoxy-benzyl)-6,7-dimethoxy-isochinolin

EL : παπαβερίνη

EN : paraverine

FR : paraverine ; 6,7-diméthoxy-1-vératrylisoquinoléine

IT : paraverina

NL : paraverine

PT : paraverina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2-)22

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No —

EEC No —

No 614-019-00-2

NOTA A

ES: sales de papaverina

DA: salte af papaverin

DE: Salze von Papaverin

EL: άλατα παπαδερίνης

EN: salts of papaverine

FR: sels de papavérine

IT: sali di papaverina

NL: zouten van papaverine

PT: sais de papaverina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 22

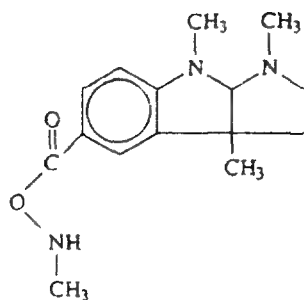
S : (2-)22

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçāo


Cas No 57-47-6

EEC No 200-332-8

No 614-020-00-8



ES: fisostigmina; esenna

DA: physostigmin

DE: Esenn; Physostigmin; 1,3a,8-Trimethyl-5-methylcarbamoyloxy-1,2,3,3a,8,8a-hexahdropixiolo[2,3-b]indol

EL: φυσοοστιγμίνη· εσενίνη

EN: physostigmine

FR: esenne; physostigmine

IT: esenna; fisostigmina


NL: physostigmine

PT: esenna; fisostigmina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiō, Classificazione, Indeling, Classificação

T+; R 26/28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T+	
	R : 26/28
	S : (1/2-)25-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 614-021-00-3

NOTA A

ES: sales de fisostigmina; sales de eserina

DA: salte af physostigmin

DE: Salze von Eserin

EL: άλατα φυσοοστιγμίνης· εσερίνης

EN: salts of physostigmine

FR: sels d'ésérine; physostigmine

IT: sali di eserina

NL: physostigminezouten

PT: sais de eserina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T+ ; R 26/28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

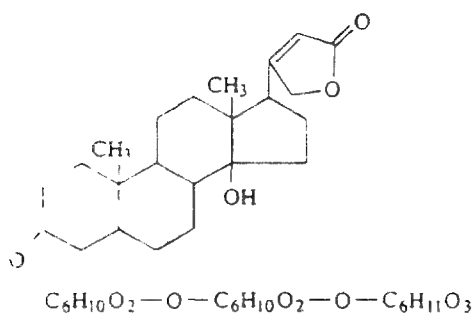
T+	
	R : 26/28
	S : (1/2-)25-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 71-63-6

EEC No 200-760-5

No 614-022-00-9



ES : digitoxina

DA : digitoxin

DE : Digitoxin . 3 $\beta$ ,14 $\beta$ -Dihydroxy-5 $\beta$ , -carden-20(22)-olid-3-tridigitoxid

EL : διγιτοξίνη

EN : digitoxin

FR : digitoxine ; digitoxoside

IT : digitossina

NL : digitaline

PT : digitoxina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

T ; R 23/25

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 23/25-33</p> <p>S : (1/2-)45</p>
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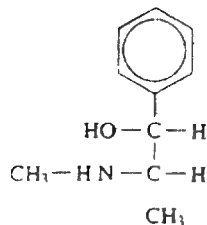
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 299-42-3

EEC No 206-080-5

No 614-023-00-4



ES: efedrina

DA: ephedrin

DE: Ephedrin ; L-erythro-2-Methylamino-1-phenyl-propan-1-ol

EL: εφεδρίνη

EN: ephedrine

FR: éphédrine ; L-2-méthylamino-1-phényl-1-propanol

IT: efedrina


NL: efedrine

PT: efedrina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn ; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 22
	S : (2-)22-25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No —

No 614-024-00-X

NOTA A

ES: sales de efedrina  
 DA: salte af ephedrin  
 DE: Salze von Ephedrin  
 EL: άλατα εφεδρίνης  
 EN: salts of ephedrine  
 FR: sels d'éphédrine  
 IT: sali di efedrina  
 NL: zouten van efedrine  
 PT: sais de efedrina

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn ; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

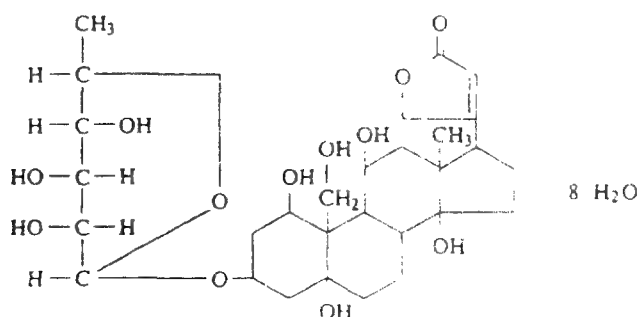
Xn	
	R : 22 S : (2-)22-25

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 630-60-4

EEC No 211-139-3

No 614-025-00-5



ES: G-estrofantina

DA: G-strophantin

DE: g-Strophantin; 1 $\beta$ ,3 $\beta$ ,5 $\beta$ ,11 $\beta$ ,14 $\beta$ ,19-Hexahydroxy-[20(22)-cardenolid]-3-L-rhamnosid

EL: G-στροφανθίνη · ουαπαίνη

EN: ouabain

FR: G-strophantine; ouabaine

IT: oubaina

NL: oubaine

PT: estrofantina-G; oubaina

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/25

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

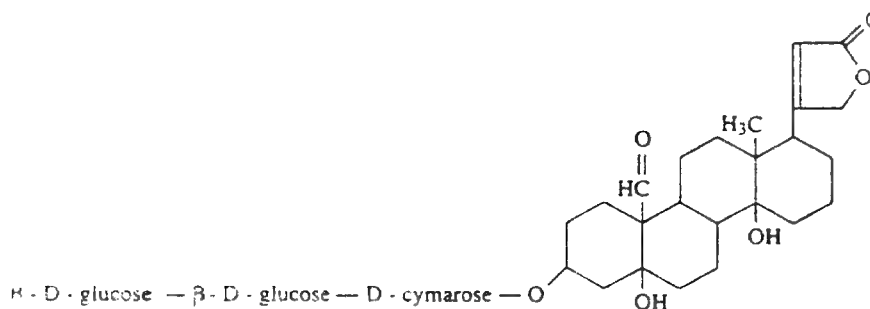
T	
	R: 23/25-33
	S: (1/2)-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 11005-63-3

EEC No 234-239-9

No 614-026-00-0



ES: K-estrofantina

DA: K-strophantin

DE: K-Strophantin, 5β,14β-Dihydroxy-3β-(β-D-glucopyranosido-4β-D-glucopyranosido-β-D-cymaropyranosido)-19-oxo-card-20(22)-enolid

EL: Κ-στροφανθίνη

EN: strophantin-K

FR: K-strophantine

IT: K-strofantina

NL: K-strophantine

PT: estrofantina-K

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23/25

R 33

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 23/25-33</p> <p>S : (1/2)-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 507-60-8

EEC No 208-077-4


No 614-027-00-6

ES : 6β-acetoxi-3 beta(β-D-glucopiranosiloxi)-8,14-dihidroxi-bufa-4,20,22-trienólido  
 DA : 6β-acetoxi-3γ(β-D-glucopyranosyloxy)-8,14-dihydroxybufa-4,20,22-trienolid  
 DE : 6β-Acetoxi-3beta(β-D-glucopyranosyloxy)-8,14-dihydroxybufa-4,20,22-trienolid  
 EL : 6δ-ακετοξυ-3βητα(δ-D-γλυκοπιρανοσυλοξυ)-8,14-διυδροξυδουφα-4,20,22-τριενολίδιο · scilliroside  
 EN : bufa-4,20,22-trienolide, 6-(acetyloxy)-3-(β-D-glucopyranosyloxy)-8,14-dihydroxy-, (3β, 6β)- ; red squill ; scilliroside  
 FR : 6β-acetoxi-3bétá(β-D-glucopyrannosyloxy)-8,14-dihydroxybufa-4,20,22-triénolide . scilliroside  
 IT : 6β-acetossi-3beta(β-D-glucopiranosilossi)-8,14-diidrossibufa-4,20,22-trienolide  
 NL : 6β-acetoxi-3beta(β-D-glucopyranosyloxy)-8,14-dihydroxybufa-4,20,22-trienolide  
 PT : 6β-acetoxi-3beta(β-D-glucopiranosiloxi)-8,14-diidroxibufa-4,20,22-trienolida

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T+ ; R 28

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

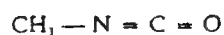
T+	
	R : 28
	S : (1/2-)36/37-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 624-83-9

EEC No 210-866-3

No 615-001-00-7



ES: isocianato de metilo

DA: methylisocyanat

DE: Methylisocyanat

EL: ισοκυανικός μεθυλεστέρας

EN: methyl isocyanate

FR: isocyanate de méthyle

IT: isocianato di metile; metilisocianato

NL: methylisocyanat

PT: isocianato de metilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

F+; R 12

T; R 23/24/25

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

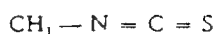
F+	T	
		R : 12-23/24/25-36/37/38
		S : (1/2-)9-30-43-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 556-61-6

EEC No 209-132-5

No 615-002-00-2



ES: isotiocianato de metilo

DA: methylisothiocyanat

DE: Methylisothiocyanat

EL: ισοθειοκυανικός μεθυλεστέρας

EN: methyl isothiocyanate

FR: isothiocyanate de méthyle

IT: isotiocianato di metile

NL: methylisothiocyanat

PT: isotiocianato de metilo


*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

T; R 23/25

C; R 34

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

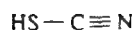
T	
	R 23/25-34-43 S (1/2)-36/37-38-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Gas No 463-56-9

EEC No 207-337-4

No 615-003-00-8



ES: ácido tiocianico; ácido sulfocianico

DA: thiocyanisyre

DE: Rhodanwasserstoffsäure

EL: θειοκυανικό οξύ

EN: thiocyanic acid

FR: acide thiocyanique; acide sulfocyanique

IT: acido solfocianico; acido tiocianico

NL: thiocvaanzuur

PT: ácido tiocianico; ácido sulfocianico

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Xn; R 20/21/22	R 32
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*Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 20/21/22-32
	S : (2-)13

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No —

EEC No —

No 615-004-00-3

NOTA A

ES: tiocianatos ; sulfocianatos

DA: salte af thiocysyre

DE: Salze von Rhodanwasserstoffsäure

EL: αλατα θειοκυανικού οξέος

EN: salts of thiocyanic acid

FR: sels de l'acide thiocyanique ; thiocyanates, sels de l'acide sulfocyanique ; sulfocyanates

IT: sali dell'acido solfocianico

NL: zouten van thiocyaanzuur

PT: sais do ácido tiociânico ; tiocianatos, sais do ácido sulfociânico ; sulfocianatos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Xn ; R 20/21/22 R 32

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

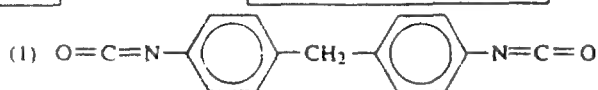
Xn	
	R : 20/21/22-32
	S : (2-)13

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*

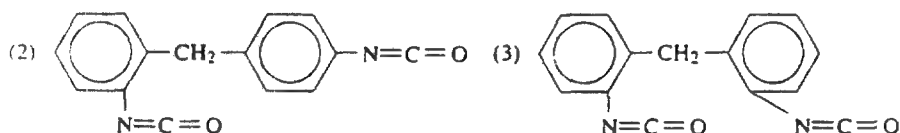

Cas No 101-68-8 [1]  
5873-54-1 [2]  
2536-05-2 [3]

EEC No 202-966-0 [1]  
227-534-9 [2]  
219-799-4 [3]

No 615-005-00-9



NOTA C



- ES : 4,4'-diisocianato de difenilmetano [1], 2,4'-diisocianato de difenilmetano [2], 2,2'-diisocianato de difenilmetano [3]  
DA : diphenylmethan-4,4'-diisocyanat [1], diphenylmethan-2,4'-diisocyanat [2], diphenylmethan-2,2'-diisocyanat [3]  
DE : Diphenylmethan-4,4'-diisocyanat [1], Diphenylmethan-2,4'-diisocyanat [2], Diphenylmethan-2,2'-diisocyanat [3]  
EL : 4,4'-δισοκυανικό-διφαινυλομεθάνιο [1], 2,4'-δισοκυανικό-διφαινυλομεθάνιο [2], 2,2'-δισοκυανικό-διφαινυλομεθάνιο [3]  
EN : diphenylmethane-4,4'-di-isocyanate [1], diphenylmethane-2,4'-di-isocyanate [2], diphenylmethane-2,2'-di-isocyanate [3]  
FR : 4,4'-diisocyanate de diphenylméthane [1], 2,4'-diisocyanate de diphenylméthane [2], 2,2'-diisocyanate de diphenylméthane [3]  
IT : difenilmetan-4,4'-diisocianato (MDI) [1], difenilmetan-2,4'-diisocianato (MDI) [2], difenilmetan-2,2'-diisocianato (MDI) [3]  
NL : difenylmethaan-4,4'-diisocyanat (MDI) [1], difenylmethaan-2,4'-diisocyanat (MDI) [2], difenylmethaan-2,2'-diisocyanat (MDI) [3]  
PT : 4,4'-diisocianato de difenilmetano (MDI) [1], 2,4'-diisocianato de difenilmetano (MDI) [2], 2,2'-diisocianato de difenilmetano (MDI) [3]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Xn ; R 20    Xi ; R 36/37/38    R 42

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 20-36/37/38-42 S : (2)-26-28-38-45

Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

NOTA 2

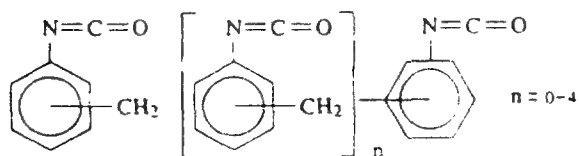
C ≥ 25 %	Xn ; R 20-36/37/38-42
5 % ≤ C < 25 %	Xn ; R 36/37/38-42
1 % ≤ C < 5 %	Xn ; R 42

Cas No 9016-87-9

EEC No —

No 615-005-01-6

NOTA C



ES: diisocianato de difenilmetano, isómeros y homólogos

DA: diphenylmethan-diisocyanat, isomere og homologe

DE: Diphenylmethandiisocyanat, Isomeren und Homologen

EL: διισοκυανικό διφαινυλομεθάνιο, ισομερή και ομόλογα

EN: diphenylmethanediisocyanate, isomeres and homologues

FR: diisocyanate de diphénylméthane, isomères et homologues

IT: difenilmetanodiisocianato, isomeri e omologhi

NL: difenylmethaandiisocyanat, isomeren en homologen

PT: diisocianato de difenilmetano, isómeros e homólogos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20

Xi; R 36/37/38

R 42

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken Rotulagem

Xn	
	R : 20-36/37/38-42
	S : (2-)26-28-38-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

NOTA

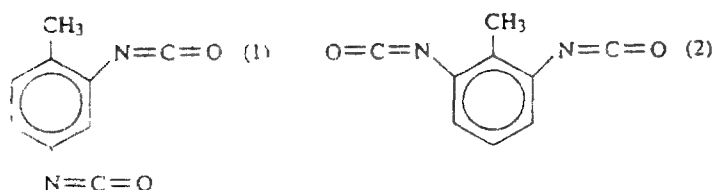
C ≥ 25 %	Xn; R 20-36/37/38-42
5 % ≤ C < 25 %	Xn; R 36/37/38-42
1 % ≤ C < 5 %	Xn; R 42

Cas No 584-84-9 [1]  
91-08-7 [2]

EEC No 209-544-5 [1]  
202-039-0 [2]

No 615-006-00-4

NOTA C



ES: 2,4-diisocianato de tolueno [1], 2,6-diisocianato de tolueno [2]  
 DA: 2,4-diisocyanatotoluen [1], 2,6-diisocyanatotoluen [2]  
 DE: 2,4-Diisocyanat-toluol [1], 2,6-Diisocyanat-toluol [2]  
 EL: 2,4-δισοκυανικοτολουόλιο [1], 2,6-δισοκυανικοτολουόλιο [2]  
 EN: toluene-2,4-di-isocyanate [1], toluene-2,6-di-isocyanate [2]  
 FR: 2,4-diisocyanate de toluylène [1], 2,6-diisocyanate de toluylène [2]  
 IT: 2,4-toluen-diisocianato [1], 2,6-toluen-diisocianato [2]  
 NL: toluen-2,4-diisocyanat [1], toluen-2,6-diisocyanat [2]  
 PT: 2,4-diisocianato de toluileno [1], 2,6-diisocianato de toluileno [2]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T; R 23	Xi; R 36/37/38	R 42
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

	<p>R: 23-36/37/38-42</p> <p>S: (1/2-)23-26-28-38-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*

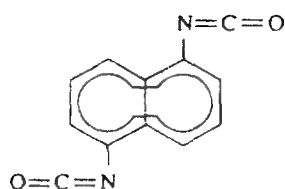
NOTA 2

C ≥ 20 %	T; R 23-36/37/38-42
2 % ≤ C < 20 %	T; R 23-42
0,5 % ≤ C < 2 %	Xn; R 20-42

Cas No 3173-72-6

EEC No 221-641-4

No 615-007-00-X



ES: diisocianato de 1,5-naftileno

DA: naphthylen-1,5-diisocyanat

DE: Naphthylen-1,5-diisocyanat

EL: 1,5 διισοκυανικό ναφθαλίνιο

EN: 1,5-naphthylene di-isocyanate

FR: diisocyanate de 1,5-naphtylène

IT: naftilen-1,5-diisocianato

NL: naftaleen-1,5-diisocyanat

PT: diisocianato de 1,5-naftileno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xn; R 20

Xi; R 36/37/38

R 42

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 20-36/37/38-42

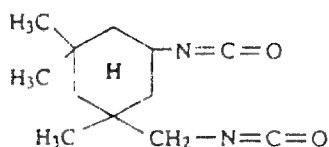
S : (2-)26-28-38-45

Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 4098-71-9

EEC No 223-861-6

No 615-008-00-5



ES 3-isocianometil-3,5,5-trimetilciclohexilisocianato

DA 3-isocyanatomethyl-3,5,5-trimethylcyclohexylisocyanat ; isophorondiisocyanat

DE 3-Isocyanatmethyl-3,5,5-trimethylcyclohexylisocyanat ; Isophorondiisocyanat

EL ισοκυανικός εστέρας του 3-ισοκυανικομεθυλο-3,5,5-τριμεθυλοκυκλοεξυλίου · διισοκυανική ισοφορόνη

EN 3-isocyanatomethyl-3,5,5-trimethylcyclohexylisocyanate ; isophorone di-isocyanate

FR isocyanate de 3-isocyanatomethyl-3,5,5-triméthylcyclohexyle ; diisocyanate d'isophorone

IT isoforon diisocianato

NL 3-isocyanatomethyl-3,5,5-trimethylcyclohexylisocyanat

PT isocianato de 3-isocianatometil-3,5,5-trimetilcicloexilo ; diisocianato de isoforão

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T ; R 23

Xi ; R 36/37/38

R 42/43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	R : 23-36/37/38-42/43
	S : (1/2-)26-28-38-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãõ

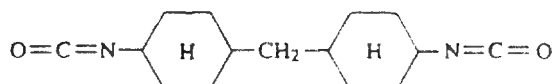
NOTA 2

C ≥ 20 %	T ; R 23-36/37/38-42/43
2 % ≤ C < 20 %	T ; R 23-42/43
0,5 % ≤ C < 2 %	Xn ; R 20-42/43

Cas No 5124-30-1

EEC No 225-863-2

No 615-009-00-0



ES: diisocianato de 4,4'-díciclohexilmetano

DA: dicyclohexylmethan-4,4'-diisocyanat

DE: Dicyclohexylmethan-4,4'-diisocyanat

EL: διισοκυανικός εστέρας του 4,4'-δικυκλοεξυλομεθανίου

EN: 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate

FR: diisocyanate de 4,4'-dicyclohexylméthanediiyle

IT: dicicloesilmetan-4,4'-diisocianato

NL: dicyclohexylmethaan-4,4'-diisocyanat

PT: 4,4'-diisocianato de dicicloexilmetano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T; R 23

Xi; R 36/37/38

R 42/43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 23-36/37/38-42/43
	S : (1/2-)26-28-38-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

NOTA 2

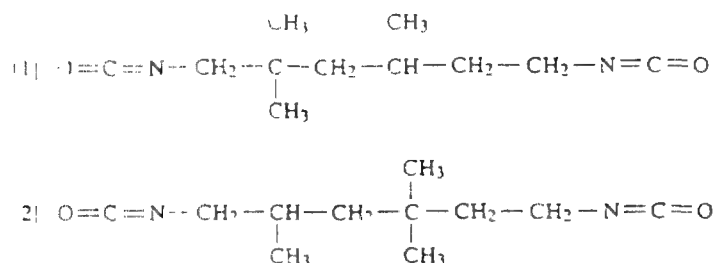
C ≥ 20 %	T; R 23-36/37/38-42/43
2 % ≤ C < 20 %	T; R 23-42/43
0,5 % ≤ C < 2 %	Xn; R 20-42/43

Cas No 16938-22-0 [1]  
15646-96-5 [2]

EEC No 241-001-8 [1]  
239-714-4 [2]

No 615-010-00-6

NOTA C



- ES diisocianato de 2,2,4-trimetil-1,6-hexametileno [1], diisocianato de 2,4,4-trimetil-1,6-hexametileno [2]  
 DA 2,2,4-trimethylhexamethylen-1,6-diisocyanat [1], 2,4,4-trimethylhexamethylen-1,6-diisocyanat [2]  
 DE 2,2,4-Trimethylhexamethylen-1,6-diisocyanat [1], 2,4,4-Trimethylhexamethylen-1,6-diisocyanat [2]  
 EL 1,6-δισοκυανικός εστέρας του 2,2,4-τριμεθυλοεξαμεθυλενίου [1] 1,6-δισοκυανικός εστέρας του 2,4,4-τριμεθυλοεξαμεθυλενίου [2]  
 EN 2,2,4-trimethylhexamethylene-1,6-di-isocyanate [1], 2,4,4-trimethylhexamethylene-1,6-di-isocyanate [2]  
 FR diisocyanate de 2,2,4-triméthyl-1,6-hexanediyle [1], diisocyanate de 2,4,4-triméthyl-1,6-hexanediyle [2]  
 IT 2,2,4-trimetilesametilen-1,6-diisocianato [1], 2,4,4-trimetilesametilen-1,6-diisocianato [2]  
 NL 2,2,4-trimethylhexamethyleen-1,6-diisocyanat [1], 2,4,4-trimethylhexamethyleen-1,6-diisocyanat [2]  
 PT 1,6-diisocianato de 2,2,4-trimetilexametilen [1], 1,6-diisocianato de 2,4,4-trimetilexametilen [2]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T; R 23      Xi; R 36/37/38      R 42

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

	<p>R : 23-36/37/38-42</p> <p>S : (1/2-)26-28-38-45</p>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

NOTA 2

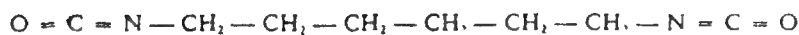
C ≥ 20 %	T; R 23-36/37/38-42
2 % ≤ C < 20 %	T; R 23-42
0,5 % ≤ C < 2 %	Xn; R 20-42



Cas No 822-06-0

EEC No 212-485-8

No 615-011-00-1



- ES 1,6-διisocianato de hexametileno  
 DA hexamethylen-1,6-diisocyanat  
 DE Hexamethylen-1,6-diisocyanat  
 EL διισοκυανικός εστέρας του εξαμεθυλενίου  
 EN hexamethylene-di-isocyanate  
 FR diisocyanate d'hexaméthylène  
 IT esametilen-1,6-diisocianato  
 NL hexamethyleen-1,6-diisocyanat  
 PT diisocianato de hexametileno

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

T, R 23	Xi, R 36/37/38	R 42/43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 23-36/37/38-42/43</p> <p>S : (1/2-)26 28-38-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limit, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*

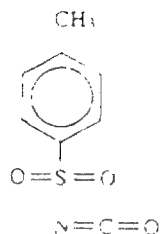
NOTA 2

C ≥ 20 %	T; R 23-36/37/38-42/43
2 % ≤ C < 20 %	T, R 23-42/43
0,5 % ≤ C < 2 %	Xn, R 20-42/43

Cas No 4083-64-1

EEC No 223-810-8

No 615-012-00-7



ES: 4-isocianato de sulfoniltolueno; toxilisocianato

DA: 4-toluensulfonylisocyanat, tosylisocyanat

DE: 4-Toluensulfonylisocyanat, Tosylisocyanat

EL: ισοκυανικός εστέρας του 4-σουλφονυλοτολουολίου

EN: 4-isocyanatosulphonyltoluene, tosyl isocyanate

FR: isocyanate de tosylo

IT: tosilisocianato; 4-isocianatosulfonyl-toluene

NL: 4-isocyanatosulfonyl-tolueen; tosylisocyanaat

PT: isocianato de tosilo, 4-isocianatossulfoniltolueno

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

R 14

Xi, R 36/37/38

R 42

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R : 14-36/37/38-42

S : (2-)26-28-30

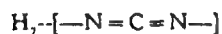
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 5 %	Xn; R 36/37/38-42
1 % ≤ C < 5 %	Xn; R 42

Cas No 420-04-2

EEC No 206-992-3

No 615 013 00 2



ES cianamida carbanonitril  
 DA cyanamid , carbanonitril  
 DE Cyanamid Carbanonitril  
 EL κυαναμίδιο· carbanonitril  
 EN cyanamide , carbanonitril  
 FR cyanamide , carbanonitril  
 IT cianammide carbanonitril  
 NL cyaanamide , carbanonitril  
 PT cianamida carbanonitril

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

T ; R 25	Xn ; R 21	Xi ; R 36/38	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

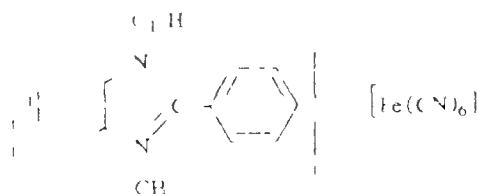
T	
	R : 21-25-36/38-43
	S : (1/2)-3-22-36/37-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 70 201

EC No

No 613 014 00-9



ES hexacloro(ciclotriazina) (1,3,5-trisubstituidoimidazoli)

DA trisubstitueret (imidazol) (1,3,5)hexachlorotetra

DE Trisubstituiertes (1,3,5)phenylbenzimidazolhexachloran

EL εξαχλωρο(αλκυλ) (1,3,5)φαινυλβενζιμιδαζολιο (1,3,5)φαινυλβενζιμιδαζολιο (1,3,5)φαινυλβενζιμιδαζολιο)

EN (1-dodecyl-3-methyl-5-phenylbenzimidazolium)hexachlorotetra

FR hexachlorotetra (1-dodecyl-3-methyl-5-phenylbenzimidazolium)

IT esiclorotetra (1-dodecil-3-metil-5-fenilbenzimidazolio)

NI (1-dodecyl-3-methyl-5-phenylbenzimidazolium)hexachloran

PT hexachlorotetra (1-dodecil-3-metil-5-fenilbenzimidazolio)

Classification Klassifisering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação

Xn, R 22

Etiketado Etikettering Etikettering Ετικετοποίηση Labelling Étiquetage Etiketatus Kenmerken Retultoom

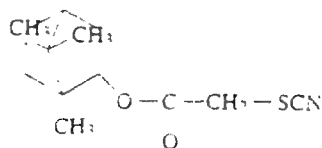
Xn	
	R 22
	S (2)24

Limits de concentration Konzentration grenzen Konzentrationsgrenzuerte Όρια συγκεντρώσεως Concentration limits Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao


Cas No 115-31-1

EEC No 204-081-5

No 615-015-00-3



ES: tiocianatoacetato de 1,7,7-trimetilbíciclo(2,2,1)hept-2-ilo

DA: 1,7,7-trimethylbicyclo(2,2,1)hept-2-ylthiocyanatoacetat

DE: 1,7,7-Trimethylbicyclo(2,2,1)hept-2-ylthiocyanatoacetat

EL: θειοκυανωτο-οξικός 1,7,7-τριμεθυλοδικυκλο(2,2,1)επτ-2-υλ-εστέρας

EN: 1,7,7-trimethylbicyclo(2,2,1)hept-2-ylthiocyanatoacetate; isobornyl thiocyanacetate

FR: thiocyanatoacetate de exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-yle

IT: tiocianatoacetato di 1,7,7-trimetilbíciclo(2,2,1)ept-2-ile

NL: 1,7,7-trimethylbicyclo(2,2,1)hept-2-ylthiocyanatoacetaat

PT: tiocianatoacetato de 1,7,7-trimetilbíciclo(2,2,1)hept-2-ilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R: 22
	S: (2-)24/25

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 590-28-3

EEC No 209-676-3

No 615-016-00-9

KOCN

ES: cianato de potasio  
 DA: kaliumcyanat  
 DE: Kaliumcyanat  
 EL: κυανικο καλιο  
 EN: potassium cyanate  
 FR: cyanate de potassium  
 IT: cianato di potassio  
 NL: kaliumcyanaat  
 PT: cianato de potassio

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione Indeling, Classificação*

Xn, R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

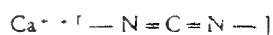
Xn	
	R 22
	S (2-)24/25

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 156-62-7

EEC No 205-861-8

No 615-017-00-4



ES: cianamida cálcica

DA: calciumcyanamid

DE: Calciumcyanamid; Carbamonitril, Calciumsalz (1:1)

EL: ασβεστοκυαναμίδιο

EN: calcium cyanamide

FR: cyanamide de calcium

IT: calciocianammide; calcio cianammide

NL: calciumcyanamide

PT: cianamida cálcica

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação

Xn: R 22

Xi: R 37-41

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

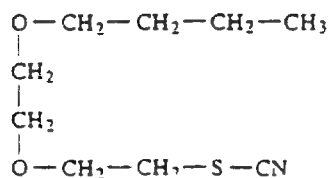
Xn	
	R: 22-37-41
	S: (2-)22-26-36/37/39

Límites de concentración, Koncentratiegrenzen, Konzentrationsgrenzwerte, Ορίες συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 112-56-1

EEC No 203-985-7

No 615-018-00-X



ES: tiocianato de 2-(2-butoxi)etilo

DA: 2-(2-butoxythoxy)ethylthiocyanat

DE: 2-(2-Butoxyethoxy)ethylthiocyanat

EL: θειοκυανικός 2-(2-δουτοξυαιθοξυ)αιθυλεστέρας

EN: 2-(2-butoxyethoxy)ethyl thiocyanate

FR: thiocyanate de 2-(2-butoxyéthoxy)éthyle

IT: tiocianato di 2-(2-butosietossi)etile; 2-butosi-2-tiociandietilere

NL: 2-(2-butoxyethoxy)ethylthiocyanaar

PT: tiocianato de 2-(2-butoxi)etilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação

R 10

T; R 24/25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 10-24/25 S : (1/2-)13-36/37-45

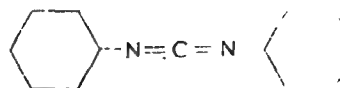
Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 538-75-0

EEC No 208-704-1

No 615-019-00-5



ES: dicitclohexilcarbodiimida  
 DA: dicyclohexylcarbodiimid  
 DE: Dicyclohexylcarbodiimid  
 EL: δικυκλοεξυλοκαρβοδιιμίδιο  
 EN: dicyclohexylcarbodiimide  
 FR: dicyclohexylcarbodiimide  
 IT: dicicloesilcarbodiimide  
 NL: dicyclohexylcarbodiimide  
 PT: dicitclohexilcarbodiimida  
 FI: disykloheksyylikarbodi-imidi  
 SV: dicyklohexylkarbodiimid

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassifisering*

T; R 24	Xn; R 22	Xi, R 41	R 43
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Fischeltatura, Kenmerken, Rotulagem, Merkinnat, Markning*

T



R: 22 24 41 43

S: (1/2) 24 26 37/39 45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*


Cas No 6317-18-6

EEC No 228-652-3

No 615-020-00-0



NC S CH S CN

ES: ditiocianato de metileno  
 DA: methylenedithiocyanat  
 DE: Methylenedithiocyanat  
 EL: διθειοκυανικό μεθυλένιο  
 EN: methylene dithiocyanate  
 FR: dithiocyanate de méthylène  
 IT: ditiocianato di metilene; metilene ditiocianto  
 NL: methyleendithiocyanaat  
 PT: ditiocianato de metileno  
 FI: metyleeniditiosyanaatti  
 SV: metylendithiocyanat, ditiocyanatometan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 43	N; R 50
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnot, Märkning*

Xi	N	
		
		R: 43-50
		S: (2)24-37-61

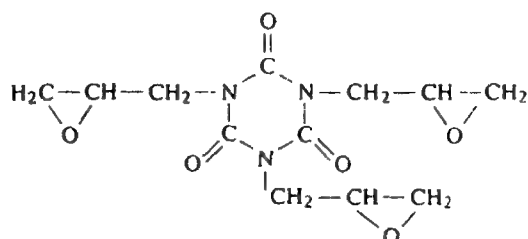
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrationsgrenzen,  
 Limites de concentraçào, Pitoorvurajat Koncentrationsgranser*


Cas No 2451-62-9

EEC No 219-514-3

No 615-021-00-6

NOTA




- ES: 1,3,5-tris(oxiranilmetil)-1,3,5-triazina-2,4,6(1 *H*,3 *H*,5 *H*)-triona; TGIC  
 DA: 1,3,5-tris(oxiranylmethyl)-1,3,5-triazin-2,4,6(1 *H*,3 *H*,5 *H*)-trion, TGIC  
 DE: 1,3,5-Tris(oxiranylmethyl)-1,3,5-triazin-2,4,6(1 *H*,3 *H*,5 *H*)-trion, TGIC  
 EL: 1,3,5-τριξοξιρανυλομεθυλο-1,3,5-τριαζινο-2,4,6(1 *H*,3 *H*,5 *H*)-τριόνη TGIC  
 EN: 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1 *H*,3 *H*,5 *H*)-trione, TGIC  
 FR: 1,3,5-tris(oxiranylméthyl)-1,3,5-triazine-2,4,6(1 *H*,3 *H*,5 *H*)-trione, TGIC  
 IT: 1,3,5-tris(ossiranilmetil)-1,3,5-triazin-2,4,6(1 *H*,3 *H*,5 *H*)-trione, TGIC  
 NL: 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1 *H*,3 *H*,5 *H*)-trion, TGIC  
 PT: 1,3,5-tris(oxiranilmetil)-1,3,5-triazina-2,4,6(1 *H*,3 *H*,5 *H*)-triona, TGIC  
 FI: 1,3,5-tris(oksiranyylimettyyli)-1,3,5-triatsiini-2,4,6(1 *H*,3 *H*,5 *H*)-trioni, TGIC  
 SV: triglycidylisocyanurat, TGIC

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Muta Cat. 2, R 46	T; R 23/25	Xn; R 48/22	Xi, R 41	R 43	R 52-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>T</p>  </div> <div> <p>R: 46-23/25-41-43-48/22-52/53</p> <p>S: 53-45-61</p> </div> </div>	

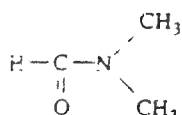
*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Konzentrationgrænser*


Cas No 68-12-2

EEC No 200-679-5

No 616-001-00-X

NOTA E



ES: N,N-dimetilformamida

DA: N,N-dimethylformamid

DE: N,N-Dimethylformamid

EL: N,N-διμεθυλαφορμαμίδιο

EN: N,N-dimethylformamide; dimethyl formamide

FR: N,N-diméthylformamide

IT: N,N-dimetilformamide

NL: N,N-dimethylformamide

PT: N,N-dimetilformamida

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Repr. Cat. 2, R 61	Xn; R 20/21	Xi; R 36
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

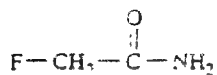
T	
	
R: 61-20/21-36	
S: 53-45	

Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiepeilen, Limites de concentração


Cas No 640-19-7

EEC No 211-363-1

No 616-002-00-5



ES: 2-fluoroacetamida

DA: 2-fluoracetamid

DE: 2-Fluoracetamid

EL: 2-φθοροακεταμίδιο

EN: 2 fluoroacetamide

FR: 2 fluoroacétamide

IT: 2-fluoroacetammide

NL: 2-fluoraceetamide


PT: 2 fluoroacetamida

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T+ : R 28

T : R 24

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken Rotulagem

T+	
	R : 24-28
	S : (1/2-)36/37-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

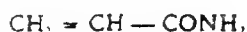

Cas No 79-06-1

EEC No 201-173-7

No 616-003-00-0

NOTA D

NOTA E



ES: acrilamida  
 DA: acrylamid  
 DE: Acrylamid  
 EL: ακρυλαμίδιο  
 EN: acrylamide  
 FR: acrylamide  
 IT: acrilamide  
 NL: acrylamide  
 PT: acrilamida

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc. Cat. 2: R 45

Muta. Cat. 2: R 46

T: R 24/25-48/23/24/25

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R: 45-46-24/25-48/23/24/25

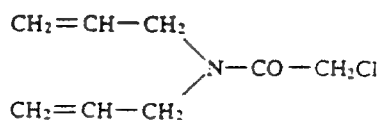
S: 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 93-71-0

EEC No 202-270-7

No 616-004-00-6



ES: alidocloro (ISO); N,N-dialilcloroacetamida  
 DA: allidochlor (ISO); N,N-diallylchloracetamid  
 DE: allidochlor (ISO); N,N-Diallylchloracetamid  
 EL: allidochlor (ISO); N,N-διαλλυλοχλωροακεταμίδιο  
 EN: allidochlor (ISO); N,N-diallylchloroacetamide  
 FR: alidochlore (ISO); N,N-diallylchloroacétamide  
 IT: alidocloro (ISO); N,N-dialilcloroacetammide  
 NL: allidocnloor (ISO); N,N-diallylchloroacetamide  
 PT: alidoclor (ISO); N,N-dialilcloroacetamida

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn; R 21/22

Xi; R 36/38

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

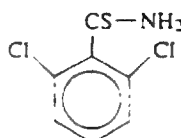
Xn	
	R : 21/22-36/38
	S : (2-)26-28-36/37/39

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 1918-13-4

EEC No 217-637-7

No 616-005-00-1



ES: clortiamida (ISO); 2,6-dicloro(tiobenzamida)  
 DA: chlorthiamid (ISO); 2,6-dichlor (thiobenzamid)  
 DE: chlorthiamid (ISO); 2,6-Dichlor (thiobenzamid)  
 EL: chlorthiamid (ISO); 2,6-δυχλωρο(θειοθενζαμίδιο)  
 EN: chlorthiamid (ISO); 2,6-dichloro (thiobenzamide)  
 FR: chlorthiamide (ISO); 2,6-dichloro (thiobenzamide)  
 IT: clortiamide (ISO); 2,6-dicloro (tiobenzammide)  
 NL: chloorthiamide (ISO); 2,6-dichloor (thiobenzamide)  
 PT: clortiamida (ISO); 2,6-dicloro (tiobenzamida)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 22
	S : (2-)36

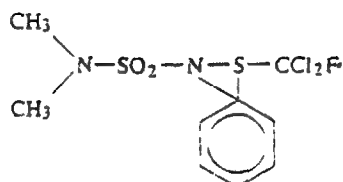
*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 1085-98-9

EEC No 214-118-7

No 616-006-00-7



- ES: diclofluanida (ISO); N-diclorofluorometiltio-N-fenil-N',N'-dimetilsulfamida  
 DA: diclofluanid (ISO); N-dichlorfluormethylthio-N',N'-dimethyl-N-phenylsulfamid  
 DE: diclofluanid (ISO); N-Dichlorfluormethylthio-N',N'-dimethyl-N-phenylsulfamid  
 EL: diclofluanid (ISO); N-διχλωροφθορομεθυλοθιο-N',N'-διμεθυλο-N-φαινυλοσουλφαμίδιο  
 EN: diclofluanid (ISO); N-dichlorofluoromethylthio-N',N'-dimethyl-N-phenylsulphamide  
 FR: diclofluanide (ISO); N-dichlorofluoromethylthio-N',N'-dimethyl-N-phenylsulfamide  
 IT: diclofluanide (ISO); N-diclorofluorometiltio-N-fenil-N',N'-dimetilsolfammide  
 NL: dichlofluanide (ISO); N-dichloofluormethylthio-N-fenyl-N',N'-dimethylsulfamide  
 PT: diclofluanide (ISO); N-diclorofluorometiltio-N-fenil-N',N'-dimetilsulfamida

Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36	R 43	N, R 50-53
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

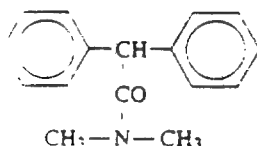
Xi	N	
		R . 36-43-50/53 S . (2-)22-24-60-61

Limits de concentration, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits,  
 Limite de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 957-51-7

EEC No 213-482-4

No 616-007-00-2



ES : difenamida (ISO) ; 2,2-difenil-N,N-dimetilacetamida  
 DA : difenamid (ISO) ; N,N-dimethyl-2,2-diphenylacetamid  
 DE : difenamid (ISO) ; N,N-Dimethyl-2,2-diphenylacetamid  
 EL : difenamid (ISO) ; N,N-διμεθυλο-2,2-διφαινυλακεταμίδιο  
 EN : difenamid (ISO) ; N,N-dimethyl-2,2-diphenylacetamide  
 FR : difénamide (ISO) ; N,N-diméthyl-2,2-diphénylacetamide  
 IT : difenamide (ISO) ; 2,2-difenil-N,N-dimetilacetammide  
 NL : difenamide (ISO) ; 2,2-difenyi-N,N-dimethylacetamide  
 PT : difenamide (ISO) ; 2,2-difenil-N,N-dimetilacetamida

Clasificación. Klassificering. Einstufung. Ταξινόηση. Classification. Classificazione. Indeling. Classificação

Xn ; R 22

Εtiquetado. Etikettering. Kennzeichnung. Επισημάνση. Labelling. Étiquetage. Etichettatura. Kenmerken. Rotulagem

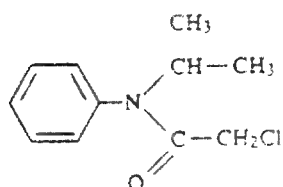
Xn	
	R : 22
	S : (2)

Límites de concentración. Koncentrationsgrænser. Konzentrationsgrenzwerte. Όρια συγκέντρωσης. Concentration limits.  
 Limites de concentration. Limiti di concentrazione. Concentratiegrenzen. Limites de concentração


Cas No 1918-16-7

EEC No 217-638-2

No 616-008-00-8

ES : propacloro ; *N*-isopropil-*N*-fenil-2-cloroacetamidaDA : propachlor ; 2-chlor-*N*-isopropylacetanilidDE : Propachlor ; *N*-Isopropyl-*N*-phenyl-2-chlor-acetamidEL : propachlor ; 2-χλωρο-*N*-ισοπροπυλακετανιλίδιοEN : propachlor ; 2-chloro-*N*-isopropylacetanilideFR : propachlore ; *N*-isopropyl-*N*-phényl-2-chloroacetamideIT : propaclor ; *N*-isopropil-*N*-fenil-2-cloroacetamideNL : propachloor ; 2-chloor-*N*-fenyl-*N*-isopropylacetamidePT : propacloro ; *N*-isopropil-*N*-fenil-2-cloroacetamida

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn ; R 22

Xi ; R 36

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn



R 22-36-43

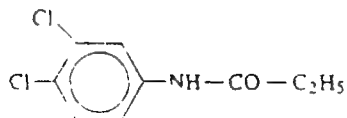
S : (2-)24-37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 709-98-8

EEC No 211-914-6

No 616-009-00-3



- ES:** propanil (ISO) , 3',4'-dicloropropionanilida  
**DA:** propanil (ISO) , 3',4'-dichloropropionanilid  
**DE:** Propanil (ISO) , 3',4'-Dichloropropionanilid  
**EL:** propanil (ISO) , 3',4'-διχλωροπροπιονανιλιο  
**EN:** propanil (ISO) , 3',4'-dichloropropionanilide  
**FR:** propanil (ISO) , 3',4'-dichloropropionanilide  
**IT:** propanil (ISO) , 3',4'-dicloropropionanilide  
**NL:** propanil (ISO) , 3',4'-dichloropropionanilide  
**PT:** propanil (ISO) , 3',4'-dicloropropionanilida

Classification Klassifizierung Einstufung Ταξινόμηση Classification Classificazione Indeling Classificação

Xn ; R 22

Etiquetado Etikettering Kennzeichnung ετισημανση, Labeling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

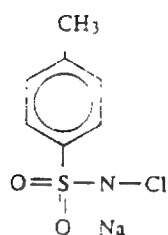
Xn	
	R 22
	S : (2-)22

Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzuerte, Όρια συγκεντρώσης, Concentration limits  
 Limites de concentration Limite di concentrazione Concentratiegrenzen Limites de concentraçao


Cas No 127-65-1

EEC No 204-854-7

No 616-010-00-9

ES: N-cloro-*p*-toluensulfonamida; cloramina T (sal de sodio)DA: chloramin T natriumsalt; natrium-*N*-chlor-*para*-toluensulphonamid

DE: Chloramin T; Tosylchloramid-natrium

EL: χλωραμίνη-Τ άλας νατρίου· άλας νατρίου του *N*-χλωρο-*p*-τολουόλοσουλφοναμιδίουEN: chloramine T (sodium salt); sodium-*N*-chloro-*p*-toluenesulphonamideFR: chloramine T; *N*-chloro-*p*-toluènesulfonamide, sel de sodiumIT: cloramina T (sale sodico); sodio-*p*-toluen-*N*-clorosulfamideNL: chloramine T (natriumzout); *p*-tolueen-*N*-chloorsulfamidePT: cloramina T (sal de sódio); *N*-cloro-*p*-toluenossulfonamida sódica

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36/37/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

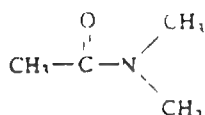
Xi	
	R : 36/37/38
	S : (2-)-7-15

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 127-19-5

EEC No 204-826-4

No 616-011-00-4


**ES:** N,N-dimetilacetamida**DA:** N,N-dimethylacetamid**DE:** N,N-Dimethylacetamid**EL:** N,N-διμεθυλοακεταμίδιο**EN:** N,N-dimethylacetamide**FR:** N,N-dimethylacetamide**IT:** N,N-dimetilacetamide**NL:** N,N-dimethylacetamide**PT:** N,N-dimetilacetamida

Classification Klassificering, Einstufung Ταξινόηση, Classification Classificazione, Classificação

Xn, R 20/21

Xi, R 36

Etiquetado Etikettering Kennzeichnung Επισήμανση, Labelling, Etiquetage, Etichettatura Kenmerken Rotulagem

Xn	
	R 20/21-36
	S : (2-)26-28-36

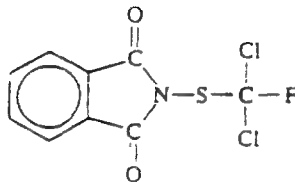
Límites de concentración Konzentrationsgrenser Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentraçào

C ≥ 20 %	Xn R 20/21-36
12,5 % ≤ C < 20 %	Xn, R 20/21

Cas No 719-96-0

EEC No 211-952-3

No 616-012-00-X



ES : N-(diclorofluorometiltio)ftalimida

DA : N-(fluorodichloromethylthio)-phtalimid

DE : N-(Dichlorfluormethylthio)phtalimid ; Phtalimido-dichlorfluor-thiomethan

EL : N-(διχλωροφθορομεθυλοθειο)-φθαλιμίδιο

EN : N-(dichlorofluoromethylthio)phthalimide ; N-(fluorodichloromethylthio)phthalimide

FR : N-(dichlorofluorométhylthio)phtalimide

IT : N-(diclorofluorometiltio)-ftalimide

NL : N-(fluordichloormethylthio)-ftaalimid

PT : N-(diclorofluorometiltio)ftalimida

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Xi ; R 38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

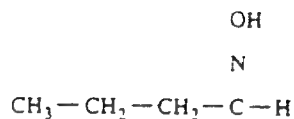
Xi	
	R : 38
	S : (2-)28

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 110-69-0

EEC No 203-792-8

No 616-013-00-5




ES: butiraldehido-oxima  
 DA: butyraldehydoxid  
 DE: Butyraldehydoxid  
 EL: βουτυραλδεϋδοξίμη  
 EN: butyraldehyde oxime  
 FR: butyraldéhyde-oxime  
 IT: butiraldeideossima  
 NL: butyraldehydoxid  
 PT: butiraldeido-oxima

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

T: R 24	Xn: R 22	Xi: R 36
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*Εtiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R: 22-24-36
	S: (1/2-)23-36-45

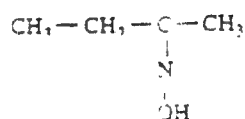
*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*




Cas No 96-29-7

EEC No 202-496-6

No 616-014-00-0



ES: 2-butanona-oxima

DA: 2-butanonoxim; ethylmethylketoxim

DE: 2-Butanonoxim; Ethylmethylketoxim

EL: αιθυλομεθυλοκετοξίμη

EN: 2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime

FR: 2-butanone-oxime; éthylméthylcétoxime

IT: 2-butanonossima; etilmetilchetossima

NL: 2-butanonoxim; ethylmethylketoxim

PT: 2-butanona-oxima; etilmetilcetoxima

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi; R 36	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

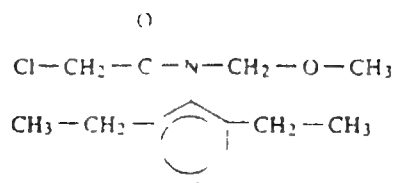
Xi	
	R: 36-43
	S: (2-)23-24

Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 15972-60-8

EEC No 240-110-8

No 616-015-00-6



- ES:** alacolor (ISO), 2-cloro-2',6'-dietil-N-(metossimetil)acetanilida  
**DA:** alachlor (ISO), 2-chlor-2',6'-diethyl-N-(methoxymethyl)acetanilid  
**DE:** alachlor (ISO), 2 Chlor-2',6'-diethyl-N-(methoxymethyl)acetanilid  
**EL:** alachlor (ISO), 2-χλωρο-2',6'-διαιθυλο-N-(μεθοξυμεθυλ)ακετανιλίδιο  
**EN:** alachlor (ISO), 2-chloro-2',6'-diethyl-N-(methoxymethyl)acetanilide  
**FR:** alachlore (ISO), 2-chloro-2',6'-diethyl-N-(methoxymethyl)acetanilide  
**IT:** alacolor (ISO), 2-cloro-2',6'-dietil-N-(metossimetil)acetanilide  
**NL:** alachloor (ISO), 2-chloor-2',6'-diethyl-N-(methoxymethyl)acetanilide  
**PT:** alachlor (ISO), 2 cloro 2',6'-dietil-N-(metoximetil)acetanilida

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classificazione, Classificatie, Classificazione, Indeling, Classificação

Carc. Cat. 3, R 40

Xn, R 22

R 43

Επισήμανση, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

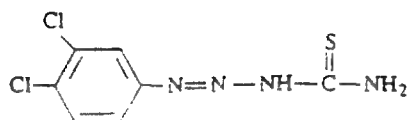
Xn	
	R 22-40-43
	S: (2)36/37-39

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 5836-73-7

EEC No —

No 616-016-00-1



ES : 1-(3,4-diclorofenilimino) tiosemicarbazida ; promurit

DA : 1-(3,4-dichlorophenylimino) thiosemicarbazid

DE : 1-(3,4-Dichlorophenylimino) thiosemicarbazid

EL : 1-(3,4-διχλωροφαινυλιμινό)θειοσεμικαρβαζίδιο

EN : 1-(3,4-dichlorophenylimino) thiosemicarbazide

FR : 1-(3,4-dichlorophénylimino) thiosemicarbazide

IT : 1-(3,4-diclorofenilimmino) tiosemicarbazide

NL : 1-(3,4-dichloorfenylimino) thiosemicarbazide

PT : 1-(3,4-diclorofenilimino)tiossemicarbazida ; promurite

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

T+ ; R 28

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

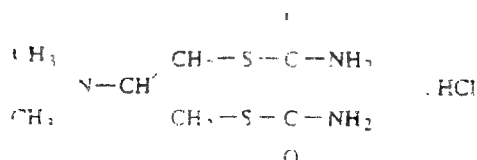
T+	
	R : 28
	S : (1/2-122-36/37-45)

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas. No 15263-52-2

EEC No 239-309-2

No 016-017-00-7



ES: clornidrato de cartap

DA: cartaphydrochlorid

DE: Cartaphydrochlorid

EL: cartap υδροχλωρικό · υδροχλωρικός διθειοκαρβαμικός εστερας του S,S'-(2-διμεθυλαμινοτριμεθυλενίου)

EN: cartap hydrochloride

FR: cartap-chlorhydrate; monochlorhydrate de bis(thiocarbamate) de S,S'-(2-diméthylaminotriméthylène)

IT: clonidrato di cartap

NL: cartaphydrochloride

PT: clonidrato de cartape

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

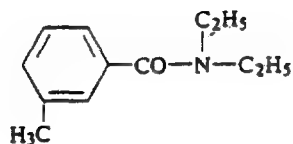
Xn	
	R: 21/22 S: (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 134-62-3

EEC No 205-149-7

No 616-018-00-2



ES: N,N-dietyl-m-toluamida  
 DA: N,N-diethyl-m-toluamid  
 DE: N,N-Diethyl-m-toluamid  
 EL: N,N-διαιθυλο-μ-τολουαμίδιο  
 EN: N,N-diethyl-m-toluamide; deet  
 FR: N,N-diéthyl-m-toluamide  
 IT: N,N-dietyl-m-toluammide  
 NL: N,N-diethyl-m-toluamide  
 PT: N,N-dietyl-m-toluamida

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação

Xn; R 22

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

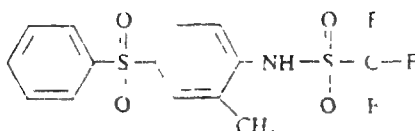
Xn 	R : 22-36/38 S : (2)
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Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 37924-13-3

EEC No 253-718-3

No 616-C 9 00-8



ES	1,1,1-trifluoro-N-(4-fenilsulfonil-o-tolil)metanosultonamida, pertiuidona
DA	1,1,1-trifluor-N-(4-phenylsulfonyl-o-tolyl)methansulfonamid, pertiuidon
DE	1,1,1-Trifluor-N-(4-phenylsulfonyl-o-tolyl)methansulfonamid, Pertluidon
EL	1,1,1-τριφθορο-N-(4-φαινυλσουλφονυλ-ο-τολολολο)μεθανοσουλφοναμίδιο
EN	1,1,1-trifluoro-N-(4-phenylsulphonyl-o-tolyl)methanesulphonic amide, pertiuidone
FR	1,1,1-trifluoro-N-(4-phenylsulfonyl-o-tolyl)methanesulfonamide, pertiuidone
IT	1,1,1-trifluoro-N-(4-fenilsolfonil-o-tolil)metanosoltonammide, pertiuidone
NL	1,1,1-trifluor-N-(4-fenylsulfonyl-o-tolyl)methansulfonamide, pertiuidon
PT	1,1,1-trifluoro-N-(4-fenilsulfonil-o-tolil)metanossulfonamida, pertiuidona

Classification Klassificering, Einstufung Ταξινόμηση classification classification (class) 12 18 19 20

Xn , R 22

X1. R 36

\* *metado Etikettering Kennzeichnung Erläuterung Labelling Inscriptions, Etichettatura*. *merkmen Betekenis*

 $x_n$ 

R 72 36

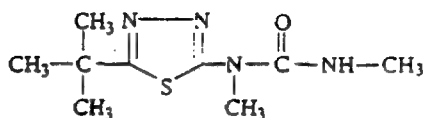
5 (2)

Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορία συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentration


Cas No 34014-18-1

EEC No 251-793-7

No 616-020-00-3




- ES: tebuthiuron (ISO); 1-(5-terc-butil-1,3,4-tiadiazol-2-il)-1,3-dimetilurea  
 DA: tebuthiuron (ISO); 1-(5-tert-butyl-1,3,4-thiadiazol-2-yl)-1,3-dimethylurinstof  
 DE: Tebuthiuron (ISO); 1-(5-tert-Butyl-1,3,4-thiadiazol-2-yl)-1,3-dimethylharnstoff  
 EL: tebuthiuron (ISO); 1-(5-τερτ-βουτυλο-1,3,4-θειαδιαζολ-2-υλο)-1,3-διμεθυλουρία  
 EN: tebuthiuron (ISO); 1-(5-tert-butyl-1,3,4-thiadiazol-2-yl)-1,3-dimethylurea  
 FR: tebuthiuron (ISO); 1-(5-tert-butyl-1,3,4-thiadiazole-2-yl)-1,3-diméthylurée  
 IT: tebuthiuron (ISO); 1-(5-terz-butil-1,3,4-tiadiazol-2-il)-1,3-dimetilurea  
 NL: tebuthiuron (ISO); 1-(5-tert-butyl-1,3,4-thiadiazool-2-yl)-1,3-dimethylureum  
 PT: tebuthiuron (ISO); 1-(5-terc-butil-1,3,4-tiadiazol-2-il)-1,3-dimetilureia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn; R 22

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

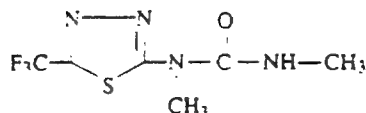
Xn	
	R : 22 S : (2-)37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 25366-23-8

EEC No 246-901-4

No 616-021-00-9



- ES: thiazfluron (ISO); 1,3-dimetil-1-(5-trifluorometil-1,3,4-tiadiazol-2-il)urea  
 DA: thiazfluron (ISO); 1,3-dimethyl-1-(5-trifluormethyl-1,3,4-thiadiazol-2-yl)urinstof  
 DE: Thiazfluron (ISO); 1,3-Dimethyl-1-(5-trifluormethyl-1,3,4-thiadiazol-2-yl)harnstoff  
 EL: thiazfluron (ISO); 1,3-διμεθυλο-1-(5-τριφθορομεθυλο-1,3,4-θειαδιαζολ-2-υλ)ουρία  
 EN: thiazfluron (ISO); 1,3-dimethyl-1-(5-trifluoromethyl-1,3,4-thiadiazol-2-yl)urea  
 FR: thiazfluron (ISO); 1,3-diméthyl-1-(5-trifluorométhyl-1,3,4-thiadiazole-2-yl)urée  
 IT: thiazfluron (ISO); 1,3-dimetil-1-(5-trifluorometil-1,3,4-tiadiazol-2-il)urea  
 NL: thiazfluron (ISO); 1,3-dimethyl-1-(5-trifluormethyl-1,3,4-thiadiazool-2-yl)ureum  
 PT: thiazfluron (ISO); 1,3-dimetil-1-(5-trifluorometil-1,3,4-tiadiazol-2-il)ureia

Clasificación. Klassificering. Einstufung. Ταξινόμηση. Classification. Classificazione. Classificação. Indeling. Classificação

Xn; R 22

Etiquetado. Etikettering. Kennzeichnung. Επισήμανση. Labelling. Étiquetage. Etichettatura. Kenmerken. Rotulagem

Xn	
	R : 22
	S : (2)

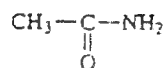
Limites de concentración. Koncentrationsgrænser. Konzentrationsgrenzwerte. Όρια συγκέντρωσης. Concentration limits. Limites de concentration. Limite di concentrazione. Concentratiegrenzen. Limites de concentração




Cas No 60-35-5

EEC No 200-473-5

No 616-022-00-4



ES: acetamida  
 DA: acetamid  
 DE: Acetamid  
 EL: ακεταμιδίο  
 EN: acetamide  
 FR: acetamide  
 IT: acetammide  
 NL: acetamide  
 PT: acetamida

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

Carc. Cat. 3: R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R: 40 S: (2-36/37)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No —

EEC No 401-980-6

No 616-023-00-X




- ES : N-hexadecil(o octadecil)-N-hexadecil(o octadecil)benzamida  
 DA : N-hexadecyl(eller octadecyl)-N-hexadecyl(eller octadecyl)benzamid  
 DE : N-Hexadecyl(oder octadecyl)-N-hexadecyl(oder octadecyl)benzamid  
 EL : Ν-δεκαεξυλο(ή δεκαοκτυλο)-Ν-δεκαεξυλο(ή δεκαοκτυλο)δενζαμίδιο  
 EN : N-hexadecyl(or octadecyl)-N-hexadecyl(or octadecyl)benzamide  
 FR : N-hexadécyl(ou octadécyl)-N-hexadécyl(ou octadécyl)benzamide  
 IT : N-esadecil(o ottadecil)-N-esadecil(o ottadecil)benzammide  
 NL : N-hexadecyl(of octadecyl)-N-hexadecyl(of octadecyl)benzamide  
 PT : N-hexadecil(o octadecil)-N-hexadecil(o octadecil)benzamida

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Xi : R 38

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

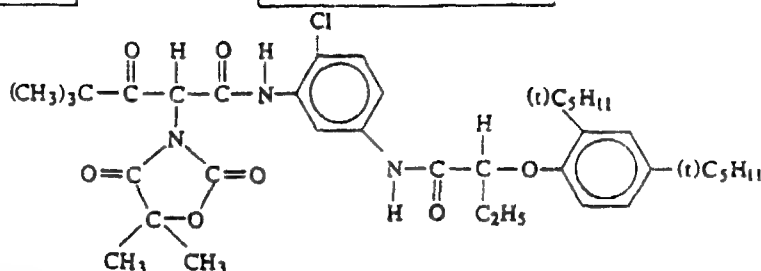
Xi 	R : 38-43 S : (2-)24-37
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No —

EEC No 402-260-4

No 616-024-00-5



- ES : 2-(4,4-dimetil-2,5-dioxooxazolidin-1-il)-2'-cloro-5'-(2-(2,4-di-terc-pentilfenossi)butirámido)-4,4-dimeul-3-oxovaleraniida
- DA : 2-(4,4-dimethyl-2,5-dioxooxazolidin-1-yl)-2'-chlor-5'-(2-(2,4-di-tert-pentylphenoxy)butyramido)-4,4-dimethyl-3-oxovaleraniid
- DE : 2-(4,4-Dimethyl-2,5-dioxooxazolidin-1-yl)-2'-chlor-5'-(2-(2,4-di-tert-pentylphenoxy)butyramido)-4,4-dimetnvl-3-oxovaleraniid
- EL : 2-(4,4-διμεθύλο-2,5-διοξοοξαζολιδιν-1-υλο)-5'-(2-(2,4-δι-τερτ-πεντυλοφαινοξύ)βουτυραμιδο)-4,4-διμεθύλ-3-οξο-2'-χλωροβαλερανιλίδιο
- EN : 2-(4,4-dimethyl-2,5-dioxooxazolidin-1-yl)-2'-chloro-5'-(2-(2,4-di-tert-pentylphenoxy)butyramido)-4,4-dimethyl-3-oxovaleraniide
- FR : 2-(4,4-diméthyl-2,5-dioxooxazolidine-1-yl)-2'-chloro-5'-(2-(2,4-di-tert-pentylphén oxy)butyramido)-4,4-diméthyl-3-oxovaléranilide
- IT : 2-(4,4-dimetil-2,5-diossoossazolidin-1-il)-2'-cloro-5'-(2-(2,4-di-terz-pentilfenossi)butirammido)-4,4-dimetil-3-ossovaleraniide
- NL : 2-(4,4-dimethyl-2,5-dioxooxazolidine-1-yl)-2'-chloro-5'-(2-(2,4-di-tert-pentylphenoxy)butyramido)-4,4-dimethyl-3-oxovaleeraniide
- PT : 2-(4,4-dimetil-2,5-dioxooxazolidina-1-il)-2'-cloro-5'-(2-(2,4-di-terc-pentilfenossi)butirámido)-4,4-dimetil-3-oxovaleraniida

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificaçã

E; R 2 R 53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

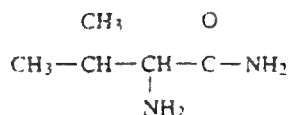
E	
	R : 2-53
	S : (2-)61

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 20108-78-5

EEC No 402-840-7

No 616-025-00-0



ES valinamida  
 DA valinamid  
 DE Valinamid  
 EL βαλιναμίδιο  
 EN valinamide  
 FR valinamide  
 IT valinammide  
 NL valinamide  
 PT valinamida

Classification: Klassifizierung, Einordnung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Xi, R 36	R 43
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Labelling: Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R: 36-43
	S: (2-)24-26-37

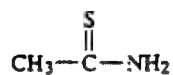
Concentration limits: Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντώσεως, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 62-55-5

EEC No 200-541-4

No 616-026-00-6

NOTA E




ES: tiacetamida  
 DA: thioacetamid  
 DE: Thioacetamid  
 EL: θειοακεταμίδιο  
 EN: thioacetamide  
 FR: thioacétamide  
 IT: tiacetammide  
 NL: thioacetamide  
 PT: tiacetamida

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Carc. Cat. 2; R 45	Xn; R 22	Xi; R 36/38
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

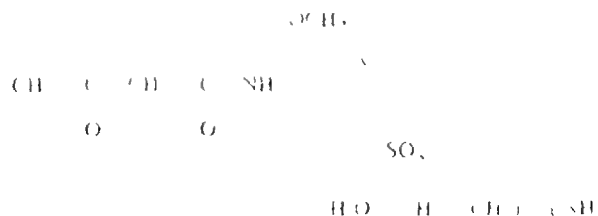
T	
	R : 45-22-36/38 S : 53-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas. No.

EFC No. 403.760.5

No. 616-027-00-1




- ES 3 acetacetamido 4 metossibenzenosulfonato de tris(2 (2 hidroxietoxi)etil)ammonio
- DA tris( (2 hydroxyethoxy)ethyl)ammonium 3 acetacetamido 4 methoxybenzenesulfonate
- DE Tris(2 (2-Hydroxyethoxy)ethyl)ammonium 3-Acetacetamid-4-Methoxybenzenesulfonat
- EL 3 acetacetamido 4 metoxi benzene sulfonato de tris(2 (2 hidroxi etoxi)etil)ammonio
- FN tris(2 (2-hydroxyethoxy)ethyl)ammonium 3-acetacetamido 4-methoxybenzenesulfonate
- FR 3 acetacetamido 4 methoxybenzenesulfonate de tris(2 (2 hydroxyethoxy)ethyl)ammonium
- IT 3 acetacetamido 4 metossibenzenosulfonato de tris(2 (2 idrossietoxi)etil)ammonio
- NL tris(2 (2-hydroxyethoxy)ethyl)ammonium 3-acetacetamido 4-methoxybenzenesulfonate
- PT 3 acetacetamido 4 metossibenzenosulfonato de tris(2 (2 hidroxietoxi)etil)ammonio

ΕΛΕΓΧΟΣ ΚΑΤΑΛΟΓΟΥ ΤΩΝ ΕΙΣΑΓΟΜΕΝΩΝ ΦΑΡΜΑΚΩΝ ΣΤΗΝ ΕΛΛΑΔΑ

P. 43

ΕΛΕΓΧΟΣ ΚΑΤΑΛΟΓΟΥ ΤΩΝ ΕΙΣΑΓΟΜΕΝΩΝ ΦΑΡΜΑΚΩΝ ΣΤΗΝ ΕΛΛΑΔΑ

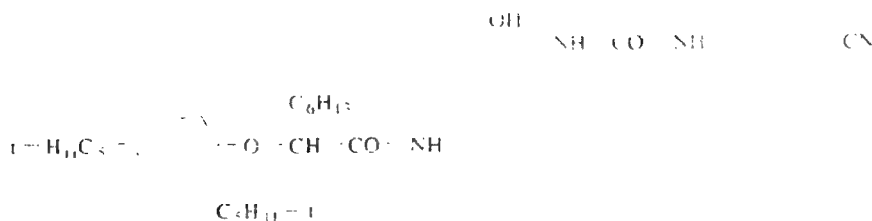
No. 	R. 43 S. (2)24.3
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ΕΛΕΓΧΟΣ ΚΑΤΑΛΟΓΟΥ ΤΩΝ ΕΙΣΑΓΟΜΕΝΩΝ ΦΑΡΜΑΚΩΝ ΣΤΗΝ ΕΛΛΑΔΑ


C25 No 168673-51-4

EEC No 403-790-9

No. 616-028-00-7



ES: N-(4-(3-(4-cianofenil)ureido)-3-idroxiifenil)-2-(2,4-di-terc-pentilfenossi)octanamida  
DA: N-(4-(3-(4-cyanophenyl)ureido)-3-hydroxyphenyl)-2-(2,4-di-tert-pentylphenoxy)octanamid  
DE: N-(4-(3-(4-Cyanphenyl)ureido)-3-hydroxyphenyl)-2-(2,4-di-tert-pentylphenoxy)octanamid  
EL: N-(4-(3-(4-κυανοφαινυλ)ουρεΐδο)-3-υδροξυφαινυλο)-2-(2,4-δι-τερτ-πεντυλοφαινοξυ)οκταναμίδιο  
EN: N-(4-(3-(4-cyanophenyl)ureido)-3-hydroxyphenyl)-2-(2,4-di-tert-pentylphenoxy)octanamide  
FR: N-(4-(3-(4-cyanophényl)uréido)-3-hydroxyphényl)-2-(2,4-di-tert-pentylphenoxy)octanamide  
IT: N-(4-(3-(4-cianofenil)ureido)-3-idrossifenil)-2-(2,4-di-terz-pentilfenossi)octanammide  
NL: N-(4-(3-(4-cyaanfenyl)ureido)-3-hydroxyfenyl)-2-(2,4-di-tert-pentylfenoxy)octanamide  
PT: N-(4-(3-(4-cianofenil)ureido)-3-idroxiifenil)-2-(2,4-di-terc-pentilfenoxi)octanamida

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiōn, Classificaziōne, Indeling, Classificaçāo*

R 43

R 53

Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

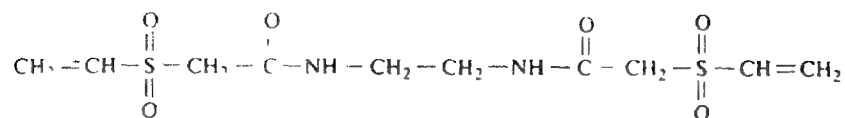
<p><math>X_i</math></p> 	<p>R : 43-53</p> <p>S : (2-)24-37-61</p>
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*Limites de concentración, Konzentrationsgrenze, Konzentrationsgrenze, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, límites de concentración*


Cas No 66710-66-5

EEC No 404-790-1

No 616-029-00-2



- ES : N,N'-etilenbis(vinilsulfonilacetamida)  
 DA : N,N'-ethylenbis(vinylsulfonylacetaamid)  
 DE : N,N'-Ethylenbis(vinylsulfonylacetaamid)  
 EL : N,N'-αιθυλενοδισ(βινυλοσουλφονυλακεταμίδιο)  
 EN : N,N'-ethylenebis(vinylsulfonylacetaamide)  
 FR : N,N'-éthylènebis(vinylsulfonylacétamide)  
 IT : N,N'-etilénbis(vinilsolfonilacetammide)  
 NL : N,N'-ethyleenbis(vinylsulfonylaceetamide)  
 PT : N,N'-etilenobis(vinilsulfonilacetamida)

Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Xi ; R 41	R 43
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	
	R : 41-43
	S : (2-)24-26-37/39

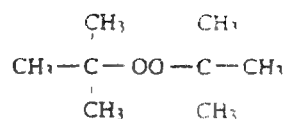
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 110-05-4

EEC No 203-733-6

No 617-001-00-2

ES: peroxido de di-*tert*-butiloDA: di-*tert*-butylperoxidDE: Di-*tert*-Butylperoxid

EL: δι-τριτοταγες-δουτυλο-υπεροξειδιο

EN: di-*tert*-butyl peroxideFR: peroxyde de di-*tert*-butyleIT: perossido di butile *terziario*; *terz*-butil-perossidoNL: di-*tert*-butylperoxidePT: peroxido de di-*tert*-butilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

O: R7

F: R11

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

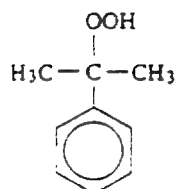
O	F	
		R: 7-11
		S: (2-)3/7-14-16-36/37/39

Limites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 80-15-9

EEC No 201-254-7

No 617-002-00-8



ES: hidroperóxido de α-α-dimetilbenceno; hidroperóxido de cumeno 80 %

DA: α-hydroperoxicumen 80 %

DE: αα-Dimethylbenzyl hydroperoxid; Cumolhydroperoxyd 80 %

EL: αα-διμεθυλοβενζυλο-υδροϋπεροξειδιο 80 % · υδροϋπεροξειδιο του κουμολιου

EN: αα-dimethylbenzyl hydroperoxide; cumene hydroperoxide 80 %

FR: hydroperoxyde de αα-diméthylbenzyle; hydroperoxyde de cumène 80 %

IT: idroperossido di cumene; cumene idroperossido 80 %

NL: cumeenhydroperoxide 80 %

PT: hidroperóxido de α,α-dimetilbenzilo; hidroperóxido de cumeno 80 %

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

O; R 7 | C; R 34 | Xn; R 20/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		
		R : 7-20/22-34
		S : (1/2-)3/7-14-36/37/39-45-50

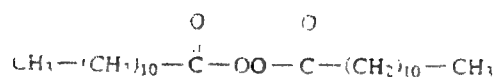
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 25 %	C; R 20/22-34
10 % ≤ C < 25 %	C; R 34
5 % ≤ C < 10 %	Xi; R 36/37/38

Cas No 105-74-8

EEC No 203-326-3

No 617-003-00-3



ES: peroxido de dilauroilo

DA: dilauroylperoxid

DE: Dilauroylperoxid

EL: διλαουριλ-υπεροξειδιο

EN: dilauroyl peroxide

FR: peroxyde de dilauroyle

IT: perossido di dilauroile; dilauroile perossido

NL: dilauroylperoxide

PT: peróxido de dilauroilo

Classificacão, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

O; R 7

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

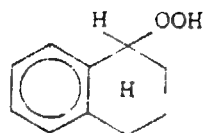


Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


CE No 771-29-9

EEC No 212-230-0

No 617-004-00-9



ES: hidroperoxido de 1,2,3,4-tetrahidro-1-naftilo; hidroperoxido de tetralina

DA: 1,2,3,4-tetrahydro-1-naphthylhydroperoxid, tetralinhydroperoxid

DE: 1,2,3,4-Tetrahydro-1-naphthylhydroperoxid; 1-Tetralinhydroperoxid

EL: 1,2,3,4-τετραύδρο-1-ναφθυλο-υδρουπεροξειδιο

EN: 1,2,3,4-tetrahydro-1-naphthyl hydroperoxide; tetralin hydroperoxide

FR: hydroperoxyde de 1,2,3,4-tetrahydro-1-naphthyle, hydroperoxyde de tetraline

IT: idroperossido di 1,2,3,4-tetraidro-1-naftile; idroperossido di tetralina

NL: 1,2,3,4-tetrahydro-1-naftylhydroperoxide, tetralinenvdroperoxide

PT: hidroperoxido de 1,2,3,4-tetraidro-1-naftilo, hidroperoxido de tetralina

Classificacão, Klassificering, Einstufung, Ταξινόηση Classification Classification Classificazão, Indexing, Classificacão

O, R 7 C, R 34 Xn, R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		R 7-22-34
		S (1/2-3/7-14-20, 37/39-45)

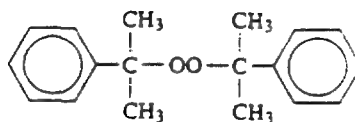
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzen, Ορια συγκεντρώσεως, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 25 %	C, R 22-34
10 % ≤ C < 25 %	C, R 34
5 % ≤ C < 10 %	Xi; R 36/37/38

Cas No 80-43-3

EEC No 201-279-3

No 617-006-00-X



ES: peróxido de bis(α,α-dimetilbencilo); peróxido de di-α-cumilo

DA: 8,8'-dicumenylperoxid

DE: 8,8'-Dicumenylperoxid; Dicumylperoxid

EL: δις (α,α-διμεθυλοδενζυλο)υπεροξειδιο

EN: bis (α,α-dimethylbenzyl) peroxide; dicumyl peroxide

FR: peroxyde de bis(α,α-diméthylbenzyle); peroxyde de di-α-cumyle

IT: perossido di 8,8'-dicumile; dicumile perossido

NL: 8,8'-dicumenylperoxide; dicumylperoxide

PT: peróxido de bis (α,α-dimetilbenzilo); peróxido de 8,8'-dicumilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

O; R 7

Xi; R 36/38

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

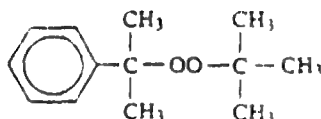
O	Xi	
		R : 7-36/38
		S : (2-)/3/7-14-36/37/39

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 3457-61-2

EEC No 222-389-8

No 617-007-00-5

ES peroxido de *tert*-butilo y de α,α-dimetilbenciloDA *tert*-butyl-8-cumenylperoxidDE *tert*-Butyl-8-cumenylperoxid

EL τερταγέξ-βουτυλο-α,α-διμεθυλο-δενζυλο-υπεροξειδιο

EN *tert*-butyl α,α-dimethylbenzyl peroxide, *tert*-butyl cumyl peroxideFR peroxyde de *tert*-butyle et de α,α-diméthylbenzyle, peroxyde de *tert* butyle et de α cumyleIT perossido di *terz*-butil-8-cumile, *terz*-butil-cumil-perossidoNL *tert* butyl-8-cumenylperoxidePT peroxido de *tert*-butilo e de α,α-dimetilbenzilo, peroxido de *tert* butilo e de α cumilo

Classification Klassifizierung Einstufung Ταξινόμηση Classification, Classification Classificação

O, R 7

Xi, R 38

Labelling Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem

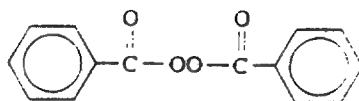
O	Xi	
		R 7-38
		S (2-)3/7-14-36/37/39

Limits of concentration Konzentrationsgrenzen Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits  
Limites de concentration, Limite di concentrazione Concentratiegrenzen, Limites de concentração


Cas No 94-36-0

EEC No 202-327-6

No 617-008-00-0



ES: peroxido de dibenzoilo

DA: dibenzoylperoxid; benzoylperoxid

DE: Dibenzoylperoxid; Benzoylperoxid

EL: διβενζουλο-υπεροξειδιο · βενζουλο-υπεροξειδιο

EN: dibenzoyl peroxide; benzoyl peroxide

FR: peroxyde de dibenzoyle

IT: perossido di dibenzoile; benzoile perossido

NL: dibenzoylperoxide; benzoylperoxide

PT: peroxido de dibenzoilo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

E; R 2

O; R 7

Xi; R 36

R 43

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E	Xi	
		R : 2-7-36-43
		S : (2-)3/7-14-36/37/39

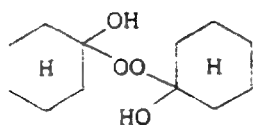
Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 12262-58-7

EEC No 235-527-7

No 617-010-00-1

NOTA C



ES: peroxido de bis(1-hidroxiciclohexilo); peróxido de ciclohexanona, mezcla

DA: bis(1-hydroxycyclohexyl)-peroxid, blanding

DE: Bis(1-hydroxycyclohexyl)-peroxid, Mischung

EL: bis (1-υδροξυκυκλοεξυλο)υπεροξείδιο · υπεροξείδιο της κυκλοεξανόλης, μείγμα

EN: cyclohexanone peroxide, mixture

FR: peroxyde de bis(1-hydroxycyclohexyle); peroxyde de cyclohexanone, mélange

IT: perossido di bis(1-idrossicicloesile); 1-idrossicicloesile perossido, miscela

NL: bis-(1-hydroxycyclohexyl)-peroxide, mengsel

PT: peroxido de bis(1-hidroxicicloexilo); peróxido de cicloexanona, mistura

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

E; R 2    O; R 7    C; R 34    Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

E	C	
		R: 2-7-22-34
		S: (1/2-)3/7-14-36/37/39-45

Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limite di concentrazione, Limite di concentrazione, Concentratiegrenzen, Limites de concentração

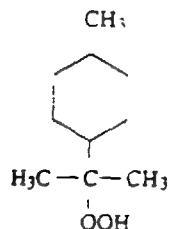
C ≥ 25 %	C; R 22-34
10 % ≤ C < 25 %	C; R 34
5 % ≤ C < 10 %	Xi; R 36/37/38



Cas No 80-47-7

EEC No 201-281-4



No 617-012-00-2

ES: hidrperóxido de 8-*p*-mentuloDA: 8-*p*-menthanylhdroperoxidDE: 8-*p*-MenthanylhdroperoxidEL: 8- $\pi$ -μενθυλο-υδροϋπεροξειδιο · υπεροξειδιο του  $\pi$ -μινθανιουEN: 8-*p*-menthyl hydroperoxide; *p*-menthane hydroperoxideFR: hvdperoxyde de 8-*p*-menthvleIT: idroperossido di 8-*p*-mentanile; *p*-mentano idroperossidoNL: 8-*p*-menthanylhdroperoxidePT: hidrperóxido de 8-*p*-menulo; hidrperóxido de *p*-mentano

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificasão

O; R 7	C; R 34	Xn; R 20
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

O	C	
		
		R : 7-20-34
		S : (1/2-)3/7-14-36/37/39-45

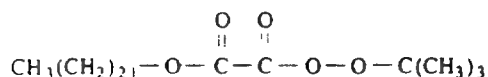
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limit  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao

C ≥ 25 %	C, R 20-34
10 % ≤ C < 25 %	C; R 34
5 % ≤ C < 10 %	Xi; R 36/37/38

Cas No 116753-76-5

EEC No 404-300-6

No 617-013-00-8



- ES : monoperoxioxalato de O,O-terc-butilo e O-docosilo  
 DA : O,O-tert-butyl-O-docosylmonoperoxyoxalat  
 DE : O,O-tert-Butyl-O-docosylmonoperoxyoxalat  
 EL : μονοπεροξοξαιλικό O,O-τερτ-δουτύλιο O-δοκοσύλιο  
 EN : O,O-tert-butyl O-docosyl monoperoxyoxalate  
 FR : monoperoxyoxalate de O,O-tert-butyle et de O-docosyle  
 IT : monoperossiossalato di O,O-terz-butile e O-docosile  
 NL : O,O-tert-butyl-O-docosylmonoperoxyoxalaat  
 PT : monoperoxioxalato de O,O-terc-butilo e O-docosilo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

O; R 7	N; R 50-53
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

O	N	
		R : 7-50/53 S : (2-)7-14-36/37/39-47-60-61

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 9001-22-3

EEC No 232-589-7

No 647 001 00-8

ES: glucosidasa, 6-  
 DA: glucosidase, 6-  
 DE: Glucosidase, 6-  
 EL: γλυκοζιδάση, 6-  
 EN: Glucosidase, 6-  
 FR: glucosidase, 6-  
 IT: glucosidasi, 6-  
 NL: glucosidase, 6-  
 PT: glucosidase, 6-  
 FI: glukosidaasi, 6-  
 SV: glukosidas, 6-

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Étiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnot, Markning*

Xn



R: 42

S: (2 )22 24 36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όλμι συνκεντρώσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Konzentrationgrænser*


Cas No 9012 54 8

E C N 232 734 4

No 647 002 00

ES celulasa  
 DA cellulase  
 DE Cellulase  
 FI куттариваста  
 EN Cellulase  
 FR cellulase  
 IT cellulasi  
 NL cellulase  
 PT celulase  
 FI sellulaasi  
 SV cellulas

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classificator  
 Classificazione, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling  
 Etiquetage, Etichetatura, Kenmerken, Rotulagem, Merkmal, Markierung*

Xn



R 42

S (2) 22 24 36/37

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzen, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen  
 Limites de concentraçào, Pitoajuuvaajat, Konzentrationsgrenzen*

Cas No 37329-65-0

EEC No 253-465-9

No 647-003-00-9

ES: celobiohidrolasa, exo-  
 DA: cellobiohydrolase, exo-  
 DE: Cellobiohydrolase, Exo-  
 EL: κελλοβιοϋδρολάση, εξω-  
 EN: Cellobiohydrolase, exo-  
 FR: cellobiohydrolase, exo-  
 IT: cellobioidrolasi, eso-  
 NL: cellobiohydrolase, exo-  
 PT: celobiohidrolase, exo-  
 FI: sellobiohydraasi, ekso-  
 SV: cellobiohydralas, exo-

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

Xn



R: 42

S: (2-)22-24-36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*



Gas No	HC No	No 647-004-00-4
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- |           |  |
|-----------|--|
| <b>ES</b> | celulasa excepto aquellos específicamente expresados en este Anexo                   |
| <b>DA</b> | cellulaser undtagen sådanne nævnt andetsteds i dette bilag                           |
| <b>DE</b> | Cellulasen mit Ausnahme der namentlich in diesem Anhang bezeichneten                 |
| <b>EL</b> | κυτταρινάσες εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος  |
| <b>EN</b> | cellulases with the exception of those specified elsewhere in this Annex             |
| <b>FR</b> | cellulases à l'exception de celles nommément désignées dans cette annexe             |
| <b>IT</b> | cellulasi escluse quelle espressamente indicate in questo allegato                   |
| <b>NL</b> | cellulase met uitzondering van de in deze bijlage met name genoemde                  |
| <b>PT</b> | celulase com excepção dos expressamente referidos no presente anexo                  |
| <b>FI</b> | sellulaasit paitsi muualla tassa luetussa mainitut                                   |
| <b>SV</b> | cellulaser med undantag för de förnämnda som är uppräknade på annat ställe i bilagan |

*Classification Klassificering, Einstufung Ταξινόμηση Classification  
Classification Classificazione, Indeling Classificacao Luokitus Klassificering*

R 42

*Etiquetado Etikettering Kennzeichnung Etichetovanie Labelling  
Etiketage, Etikettatura Kenmerken Rotulagem Merkmals Markning*

<p><b>Xn</b></p> 	<p><b>R</b> 4/</p> <p><b>S</b> (2) 22 24 36/37</p>
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*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenze Όρια συγκέντρωσης*  
*Concentration limits Limites de concentration Limiti di concentrazione Concentratiegrenzen*  
*Limites de concentraçao Pitoiuvuvgat Konzentrationsgrænser*

[illegible]

Cas No 9001-00-7

EEC No 232-572-4

No 647-005-00-X

ES: bromelaína, jugo  
 DA: bromelain, saft  
 DE: Bromelain, Fruchtsaft-  
 EL: δρομελαίνης, χυμός  
 EN: Bromelain, juice  
 FR: broméline, jus  
 IT: bromelina, succo  
 NL: bromelia, sap  
 PT: bromelaína, suco  
 FI: bromelaiini, mehu  
 SV: bromelain, saft

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificaçào, Luokitus, Klassificering*

Xi; R 36/37/38

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

Xn



R: 36/37/38-42

S: (2-)22-24-26-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrationsgrenzen,  
 Limites de concentraçào, Pitoisuusraajat, Konzentrationsgrænser*


Cas No 9001-33-6

EEC No 232-599-I

No 647-006-00-5

ES: ficina  
 DA: ficin  
 DE: Ficin  
 EL: φισίνη  
 EN: Ficin  
 FR: ficine  
 IT: ficina  
 NL: ficine  
 PT: ficina  
 FI: fisiin  
 SV: ficin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi, R 36/37/38	R 42
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Markning*

Xn



R: 36/37/38-42

S: (2-)22-24-26-36/37

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitovisusgrajat, Koncentrationsgränser*




Cas No 9001-73-4

EEC No 232-627-2

No 647-007-00-0

ES: papaina  
 DA: papain  
 DE: Papain  
 EL: παπαίνη  
 EN: Papain  
 FR: papaine  
 IT: papaina  
 NL: papaine  
 PT: papaina  
 FI: papaini  
 SV: papain

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/37/38	R 42
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinäät, Märkning*

Xn



R: 36/37/38-42

S: (2)22 24-26-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçã, Pitoisuuksarajat, Koncentrationsgrænser*


Cas No 9001-75-6

EEC No 232-629-3

No 647-008-00-6

ES: pepsina A

DA: pepsin A

DE: Pepsin A

EL: πεψίνη Α

EN: Pepsin A

FR: pepsine A

IT: pepsina A

NL: pepsine A

PT: pepsina A

FI: pepsini A

SV: pepsin A

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/37/38

R 42

*E etiquado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn



R: 36/37/38-42

S: (2-)22-24-26-36/37

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentraçào, Pitoisusrajat, Konzentrationsgrænser*


Cas No 9001-98-3

EEC No 232-645-0

No 647-009-00-1

ES: renina

DA: rennin

DE: Rennin

EL: ρεννίνη

EN: Rennin

FR: rennine

IT: rennina

NL: rennine

PT: renina

FI: rennini

SV: rennin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/37/38

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn



R: 36/37/38 42

S: (2) 22 24 26 36/37

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzuerte, Όρια συσφύγισης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiesgrenzen,  
Limites de concentração, Pitoaismaarajat, Konzentrationssgrenzen*


Cas No 9002 07-7

EEC No 232-650-8

No 647-010-00-7

ES: tripsina  
 DA: trypsin  
 DE: Trypsin  
 EL: θρυψίνη  
 EN: Trypsin  
 FR: trypsine  
 IT: tripsina  
 NL: trypsine  
 PT: tripsina  
 FI: trypsiini  
 SV: trypsin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi, R 36/37/38

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labeling  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

Xn



R. 36/37/38 42

S (2) 22 24 26 36 37

*Limits de concentracion, Konzentrationsgrenzen, Konzentrationsgrenzen, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen  
 Limites de concentração, Piirajärjestys, Konzentrationsgrenzen*


Cas No 9004-07-3

EEC No 232-671-2

No 647-011-00-2

ES: quimotripsina  
 DA: chymotrypsin  
 DE: Chymotrypsin  
 EL: χυμοδρυψίνη  
 EN: Chymotrypsin  
 FR: chymotrypsine  
 IT: chimotripsina  
 NL: chymotrypsine  
 PT: quimotripsina  
 FI: kymotrypsini  
 SV: chymotrypsin

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/37/38	R 42
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

Xn



R: 36/37/38-42

S: (2-)22-24-26-36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen,  
 Limites de concentraçào, Pitoisusrazai, Koncentrationsgrænser*


Cas No 9014-01-1

EEC No 232 752 2

No 647-012-00-8

ES subtilisina  
 DA subtilisin  
 DE Subtilisin  
 EL σουπιλίσίνη  
 EN Subtilisin  
 FR subtilisine  
 IT subtilisina  
 NL subtilisine  
 PT subtilisina  
 FI subtilisimi  
 SV subtilisin

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classificazione  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

X<sub>1</sub>, R 37/38 41

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Märkning*

X<sub>n</sub>

R 37/38 41 42

S (2) 22 24 26 36 37/39

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentraçao, Pitoovusrajat, Konzentrationsgränzer*


Cas No 9068-59-1

EEC No 232-966-6

No 647-013-00-3

ES: proteinasa, microbiana neutra

DA: proteinase, mikrobiel neutral-

DE: Proteinase, mikrobennutral

EL: πρωτεϊνάση, μικροβιακή ουδέτερη

EN: Proteinase, microbial neutral

FR: protéinase neutre microbienne

IT: proteinasi, microbica neutra

NL: proteïnase, microbieel neutraal

PT: proteinase, neutra microbiana

FI: proteinaasi, neutraali mikrobiperäinen

SV: proteas, neutralt mikrobiellt

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/37/38

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

Xn



R: 36/37/38-42

S: (2-)22-24-26-36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
Limites de concentração, Pitoisuusraajat, Koncentrationsgrænser*


Cas No —

EEC No —

No 647-014-00-9

- ES: protease excepto aquellos específicamente expresados en este Anexo  
 DA: proteaser undtagen sådanne nævnt andetsteds i dette bilag  
 DE: Proteasen mit Ausnahme der namentlich in diesem Anhang bezeichneten  
 EL: πρωτεάσες εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος  
 EN: proteases with the exception of those specified elsewhere in this Annex  
 FR: proteases à l'exception de celles nommément désignées dans cette annexe  
 IT: proteasi escluse quelle espressamente indicate in questo allegato  
 NL: protease met uitzondering van de in deze bijlage met name genoemde  
 PT: protease com excepção dos expressamente referidos no presente anexo  
 FI: proteaasit paitsi muualla tässä liitteessä mainitut  
 SV: proteaser med undantag för de föreningar som är upptagna på annat ställe i bilagan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classificazione, Indeling, Classificação, Luokitus, Klassificering*

Xi; R 36/37/38

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn



R: 36/37/38-42

S: (2 )22-24-26-36-37

*Límites de concentración, Koncentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*




Cas No 9000-90-2

EEC No 232-565-6

No 647-015-00-4

ES: amilasa, α-  
 DA: amylase, α-  
 DE: Amylase, α-  
 EL: αμυλάση, α-  
 EN: Amylase, α-  
 FR: amylase, α-  
 IT: amilasi, α-  
 NL: amylase, α-  
 PT: amilase, α-  
 FI: amylaasi, α-  
 SV: amylas, α-

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification,  
 Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  
 Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnat, Markning*

Xn



R: 42

S (2 )22 24 36/37

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης,  
 Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen,  
 Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*


Cas No

—

EEC No

—

No 647-016-00-X

- ES: amilasa excepto aquellos específicamente expresados en este Anexo
- DA: amylaser undtagen sådanne nævnt andetsteds i dette bilag
- DE: Amylasen mit Ausnahme der namentlich in diesem Anhang bezeichneten
- EL: αμυλάσες εκτός εκείνων που κατονομάζονται σε άλλο σημείο αυτού του παραρτήματος
- EN: amylases with the exception of those specified elsewhere in this Annex
- FR: amylases à l'exception de celles nommément désignées dans cette annexe
- IT: amilasi escluse quelle espressamente indicate in questo allegato
- NL: amylase met uitzondering van de in deze bijlage met name genoemde
- PT: amilase com excepção dos expressamente referidos no presente anexo
- FI: amylaasit paitsi muualla tässä liitteessä mainitut
- SV: amylaser med undantag för de föreningar som är upptagna på annat ställe i bilagan

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação, Luokitus, Klassificering*

R 42

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem, Merkinnät, Märkning*

Xn



R: 42

S: (2-)22-24-36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração, Pitoisuusraajat, Koncentrationsgränser*


Cas No 84650-02-2

EEC No 283-482-7

No 648-001-00-0

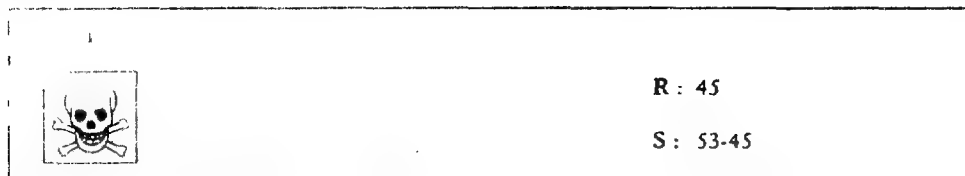
NO 64 H

- ES: destilados (alquitrán de hulla), fracción de benceno, Aceite ligero  
[Combinación compleja de hidrocarburos obtenida por destilación de alquitrán de hulla. Compuesta de hidrocarburos con un número de carbonos principalmente dentro del intervalo  $C_4$  a  $C_{10}$  y con un intervalo de destilación aproximado de 80 °C a 160 °C.]
- DA: destilar (stenkultsjære), benzenfraktion; letolie  
[En sammensat blanding af carbonhydrier opnået ved destillationen af stenkultsjære. Den består af carbonhydrider, primært  $C_4$  til  $C_{10}$ , med kogesinterval omtrent fra 80 °C til 160 °C.]
- DE: Destillate (Kohlenteer), Benzol-Fraktion, Leichtöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Kohlenteer. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen in erster Linie im Bereich von  $C_4$  bis  $C_{10}$  und destilliert im ungefähren Bereich von 80 °C bis 160 °C.]
- EL: αποσταγμάτα (λιθανθρακόπισσας), κλάσμα βενζολίου· Ελαφρά έλαια  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με την απόσταξη λιθανθρακόπισσας. Συσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C^4$  έως  $C^{10}$  και αποσταζει στη περιοχή από 80 °C ως 160 °C περίπου.]
- EN: Distillates (coal tar), benzole fraction; Light Oil  
[A complex combination of hydrocarbons obtained by the distillation of coal tar. It consists of hydrocarbons having carbon numbers primarily in the range of  $C_4$  to  $C_{10}$  and distilling in the approximate range of 80 °C to 160 °C (175 °F to 320 °F).]
- FR: distillats de goudron de houille, fraction benzol, Huile légère  
[Combinaison complexe d'hydrocarbures obtenue par distillation du goudron de houille. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{10}$  et distillant approximativement entre 80 °C et 160 °C.]
- IT: distillati (catrame di carbone), frazione benzolo, Olio leggero  
[Combinazione complessa di idrocarburi ottenuta per distillazione del catrame di carbone. E' costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{10}$  e temperatura di distillazione nell'intervallo 80 °C - 160 °C ca.]
- NL: destillaten (koolteer), benzolfractie, Lichte teerolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van koolteer. Bestaat uit koolwaterstoffen overwegend  $C_4$  tot en met  $C_{10}$ , met een destillatie-traject van ongeveer 80 °C tot 160 °C.]
- PT: destilados (alcatrão de carvão), fracção de benzole; óleos leves  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação do alcatrão de carvão. É constituída por hidrocarbonetos com números de átomos de carbono principalmente na gama de  $C_4$  até  $C_{10}$  e destilando no intervalo de aproximadamente 80 °C a 160 °C.]

*Classificação, Klasificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-40-6

EEC No 302-674-4

No 648-002-00-6

NOTA H

NOTA J

- ES : acidos de alquitrán, lignito ; Aceite ligero  
[Destillado del alquitrán de lignito con un intervalo de ebullición aproximado de 80 °C a 250 °C. Compuesto principalmente de hidrocarburos alifáticos y aromáticos y fenoles monobásicos.]
- DA : træreolier, brunkuls- ; Letolie  
[Destillatet fra brunkulstjære, med kogesinterval omtrent fra 80 °C til 250 °C. Sammensat primært af aliphatiske og aromatiske carbonhydrider og monobasiske phenoler.]
- DE : Teeröle, Braunkohle ; Leichtöl  
[Destillat aus Braunkohlenteer, siedet im Bereich von etwa 80 °C bis 250 °C. Besteht in erster Linie aus aliphatischen und aromatischen Kohlenwasserstoffen und monobasischen Phenolen.]
- EL : ελαία πίσσας, λιγνίτη· Ελαφρά έλαια  
[Το απόσταγμα από πίσσα λιγνίτη που βράζει στην περιοχή από 80 °C ως 250 °C περίπου. Αποτελείται πρωτίστως από αλειφατικούς και αρωματικούς υδρογονάνθρακες και μονοβασικές φαινόλες.]
- EN : Tar oils, brown-coal ; Light Oil  
[The distillate from lignite tar boiling in the range of approximately 80 °C to 250 °C (176 °F to 482 °F). Composed primarily of aliphatic and aromatic hydrocarbons and monobasic phenols.]
- FR : huiles de goudron, lignite ; Huile légère  
[Distillat du goudron de lignite dont le point d'ébullition est approximativement compris entre 80 °C et 250 °C. Se compose principalement d'hydrocarbures aliphatiques et aromatiques et de phénols monobasiques.]
- IT : oli di catrame, carbone bruno ; Olio leggero  
[Il distillato da catrame di lignite con un intervallo di ebollizione 80 °C - 250 °C ca. Costituito principalmente da idrocarburi alifatici ed aromatici e fenoli monobasici.]
- NL : teeroliën, bruinkool ; Lichte teerolie  
[Het destillaat van bruinkoolteer, met een kooktraject van ongeveer 80 °C tot 250 °C. Bestaat voornamelijk uit alifatische en aromatische koolwaterstoffen en monobasische fenolen.]
- PT : oleos de alcatrão, lenhite ; óleos leves  
[O destilado de alcatrão de lenhite que destila no intervalo de aproximadamente 80 °C a 250 °C. É constituído principalmente por hidrocarbonetos alifáticos e aromáticos e fenóis monobásicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etikettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-88-5

EEC No 266-023-5

No 648-003-00-1

NOTA H

NOTA J

- ES : precursores del benzol (hulla) ; Redestilado aceite ligero, bajo punto de ebullición  
[Destillado del aceite ligero del horno de coque con un intervalo de destilación aproximado por debajo de 100 °C. Compuesto principalmente de hidrocarburos alifáticos de C<sub>4</sub> a C<sub>6</sub>.]
- DA : benzenforløb (kul) ; Redestilleret letolie, lavtkogende  
[Destillat fra koksofvenletolie med et omtrentligt destillationsinterval under 100 °C. Sammensat primært af aliphatiske C<sub>4</sub>-til C<sub>6</sub>-carbonhydrider.]
- DE : Benzolvorläufe (Kohle) ; Leichtöl-Redestillat, tiefsiedend  
[Destillat aus Koksofvenleichtöl mit einem Destillationsbereich von etwa unter 100 °C. Besteht in erster Linie aus C<sub>4</sub> bis C<sub>6</sub> aliphatischen Kohlenwasserstoffen.]
- EL : βενζολίου πρόδρομα (άνθρακα)· Επαναπόσταγμα ελαφρών ελαίων, χαμηλού σημείου ζέσης  
[Το απόσταγμα από ελαφρό έλαιο κλιθάνου παραγωγής κοκ με περιοχή απόσταξης κατά προσέγγιση κάτω από 100 °C. Αποτελείται κυρίως από αλειφατικούς υδρογονάνθρακες με C<sub>4</sub> ως C<sub>6</sub>.]
- EN : Benzol fore-runings (coal) ; Light Oil Redistillate, low boiling  
[The distillate from coke oven light oil having an approximate distillation range below 100 °C (212 °F). Composed primarily of C<sub>4</sub> to C<sub>6</sub> aliphatic hydrocarbons.]
- FR : précurseurs du benzol (charbon) ; Distillat d'huile légère, bas point d'ébullition  
[Distillat issu de l'huile légère de four à coke dont le point d'ébullition se situe approximativement au-dessous de 100 °C. Se compose principalement d'hydrocarbures aliphatiques en C<sub>4</sub>-C<sub>6</sub>.]
- IT : benzolo, frazioni di testa (carbone) ; Olio leggero ridistillato, frazione bassobollente  
[Distillato da olio leggero di forno da coke, con intervallo di distillazione sotto i 100 °C. È composto principalmente da idrocarburi alifatici C<sub>4</sub>-C<sub>6</sub>.]
- NL : benzolvoorloop (kool) ; Lichte teerolie, laagkokende fractie  
[Het destillaat van lichte olie uit de cokesoven met een destillatietraject beneden ongeveer 100 °C. Voornamelijk samengesteld uit C<sub>4</sub>- tot C<sub>6</sub>-alifatische koolwaterstoffen.]
- PT : fracções pré-benzénicas (carvão) ; óleos leves redestilados, baixa ebulição  
[O destilado do óleo leve do alto forno tendo um intervalo de destilação inferior a 100 °C. Compõe-se principalmente de hidrocarbonetos alifáticos de C<sub>4</sub> até C<sub>6</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="368 468 389 492" data-label="Text">T</div> <div data-bbox="331 515 427 607" data-label="Image"> </div> <div data-bbox="938 515 1019 544" data-label="Text">R : 45</div> <div data-bbox="938 566 1051 598" data-label="Text">S : 53-45</div>
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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 101896-26-8

EEC No 309-984-9

No 648 004-00-7

NOTA H

NOTA I

- ES :** destilados (alquitrán de hulla), fracción de benceno, rica en BTX, Redestilado aceite ligero, bajo punto de ebullición  
[Residuo de la destilación de benceno crudo para separar. Compuesto principalmente de benceno, tolueno y xilenos con un intervalo de ebullición aproximado de 75 °C a 200 °C.]
- DA :** destillater (stenkultsjære), benzenfraktion, benzen-, toluen- og xylene; Redestilleret lerolie, lavtkogende  
[En rest fra destillationen af rå benzen til fjernelse af de første benzendestillationsprodukter. Sammensat primært af benzen, toluen og xylene, med koginterval omtrent fra 75 °C til 200 °C.]
- DE :** Destillate (Kohlenteer), Benzol-Fraktion, BTX-reich; Leichtöl-Redestillat, tiefsiedend  
[Rückstand aus der Destillation von rohem Benzol zur Abrennung von Benzolvorläufen. Besteht in erster Linie aus Benzol, Toluol und Xylenen und siedet im Bereich von etwa 75 °C bis 200 °C.]
- EL :** αποσταγμάτα (λιθανθρακόπισσας), κλάσμα βενζολίου, πλούσιο σε βενζόλιο-τολουόλιο-ξυλόλιο· Επαναποσταγµα ελαφρών ελαίων, χαμηλού σημείου ζέσης  
[Υπόλειμμα από την απόσταξη ακατέργαστου βενζολίου για να απομακρυνθούν τα πρώτα κλάσματα βενζολίου. Αποτερείται πρωτίστως από βενζόλιο, τολουόλιο και ξυλόλια με περιοχή βρασμού από 75 °C ως 200 °C περίπου.]
- EN :** Distillates (coal tar), benzole fraction, BTX-rich; Light Oil Redistillate, low boiling  
[A residue from the distillation of crude benzole to remove benzole fronts. Composed primarily of benzene, toluene and xylenes boiling in the range of approximately 75 °C to 200 °C (167 °F to 392 °F).]
- FR :** distillats riches en BTX (goudron de houille), fraction benzol; Distillat d'huile légère, bas point d'ébullition  
[Résidu d'une distillation du benzol brut destinée à éliminer les produits les plus légers. Se compose principalement de benzène de toluène et de xylènes dont le point d'ébullition est compris approximativement entre 75 °C et 200 °C.]
- IT :** distillati (catrame di carbone), frazione benzolo, ricchi di benzene, toluene e xileni; Olio leggero ridistillato, frazione bassobollente  
[Residuo della distillazione di benzolo grezzo per eliminare le teste di benzolo. Costituito principalmente da benzene, toluene e xileni con punto di ebollizione nell'intervallo 75 °C-200 °C ca.]
- NL :** destillaten (koolteer), benzolfractie, rijk aan benzeen, toluen en xyleen; Lichte teerolie, laagkokende fractie  
[Een residu dat afkomstig is uit de destillatie van ruwe benzol om benzolvoorfracties te verwijderen. Voornamelijk samengesteld uit benzeen, toluen en xylene, met een kooktraject van ongeveer 75 °C tot 200 °C.]
- PT :** destilados (alcatrão de carvão), fracção de benzole, rica em benzeno-tolueno-xilenos; óleos leves redestilados, baixa ebulição  
[Um residuo da destilação de benzole bruto para remover produtos de cabeça. É constituído principalmente por benzeno, tolueno e xilenos e destila no intervalo de aproximadamente 75 °C a 200 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 45

S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90989-41-6

EEC No 292-697-5

No 648-005 00-2

NOTA H  
NOTA I

- ES · hidrocarburos aromáticos,  $C_{6-10}$ , ricos en  $C_8$ , Redestilado aceite ligero, bajo punto de ebullición
- DA · aromatiske carbonhydrider,  $C_{6-10}$ ,  $C_8$ -rige; Redestilleret letolie, lavtkogende
- DE · Aromatische Kohlenwasserstoffe,  $C_{6-10}$ ,  $C_8$ -reich; Leichtöl-Redestillat, tiefsiedend
- EL · αρωματικοι υδρογονάνθρακες,  $C_{6-10}$ , πλούσιοι σε  $C_8$ ; Επαναπόσταγμα ελαφρών ελαίων, χαμηλού σημείου ζέσης
- EN · Aromatic hydrocarbons,  $C_{6-10}$ ,  $C_8$ -rich; Light Oil Redistillate, low boiling
- FR · hydrocarbures aromatiques en  $C_{6-10}$ , riches en  $C_8$ ; Distillat d'huile légère, bas point d'ébullition
- IT · idrocarburi aromatici,  $C_{6-10}$ , ricchi di  $C_8$ ; Olio leggero ridistillato, frazione bassobollente
- NL · aromatische koolwaterstoffen,  $C_{6-10}$ , rijk aan  $C_8$ ; Lichte teerolie, laagkokende fractie
- PT · hidrocarbonetos aromáticos,  $C_{6-10}$ , ricos em  $C_8$ ; óleos leves redestilados, baixa ebulição

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rutulagem

T	
	R : 45
	S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 85536-17-0

EEC No 287-498-5

No 648-006-00-8


NOTA H  
NOTA J

- ES nafta disolvente (hulla), fraccion ligera, Redestilado aceite ligero, bajo punto de ebullición
- DA mineralskterpentin (kul), let, Redestilleret letolie, lavtkogende
- DE Solvent Naphtha (Kohle), leicht, Leichtöl-Redestillat, tiefsiedend
- EL διαλυτής ναφθα (άνθρακα), ελαφρύ κλάσμα Επαναπόσταγμα ελαφρών ελαίων, χαμηλού σημείου ζεσης
- FN Solvent naphtha (coal), light, Light Oil Redistillate, low boiling
- FR solvant naphtha léger (charbon), Distillat d'huile légère, bas point d'ébullition
- IT nafta solvente (carbone), leggera, Olio leggero ridistillato, frazione bassobollente
- NI teerolie (kool), licht, Lichte teerolie, laagkokende fractie
- PT nafta, (carvão), leve, óleos leves redestilados, baixa ebulição

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límite de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentrație*


Cas No 85536-20-5

EEC No 287-502-5

No 648-007-00-3

NOTA H  
NOTA I

- ES : nafta disolvente (hulla), fracción de estireno-xileno ; Redestilado aceite ligero, medio punto de ebullición
- DA : solventnaphtha (kul), xylen-styrenfraktion ; Redestilleret letolie, mellemdestillat
- DE : Solvent Naphtha (Kohle), Xyol-Styrolschnitt , Leichtöl-Redestillat, mittelsiedend
- EL : διαλύτης νάφθα (άνθρακα), κλάσμα ξυλενίου-στυρενίου· Επαναπόσταγμα ελαφρών ελαίων, μέσου σημείου ζέσεως
- EN : Solvent naphtha (coal), xylene-styrene cut ; Light Oil Redistillate, intermediate boiling
- FR : solvant naphtha (charbon), coupe xylène-styrène ; Distillat d'huile légère, point d'ébullition intermédiaire
- IT : nafta solvente (carbone), taglio xilene-stirene ; Olio leggero ridistillato, frazione intermedia
- NL : lichte teerolie (kool), xyleen-styreen gedeelte ; Lichte teerolie, middenfractie
- PT : nafta (carvão), fracção de xileno e estireno ; óleos leves redestilados, ebulição intermediária

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2 ; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	R : 45
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limit  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 85536-19-2

EEC No 287-500-4

No 648-008-00-9

NOTA H

NOTA J

- ES : nafta disolvente (hulla), con estireno-cumarona ; Redestilado aceite ligero, medio punto de ebullición
- DA : mineralskterpentin (kul), coumaron-styrenholdigt ; Redestilleret letolie, mellemdestillat
- DE : Solvent Naphtha (Kohle), Cumaron-Styrolhaltig ; Leichtöl-Redestillat, mittelsiedend
- EL : διαλυτική νάφθα (άνθρακα), περιέχουσα κουμαρόνη στυρένιο· Επαναπόσταγμα ελαφρών ελαίων, μέσου σημείου ζέσης
- EN : Solvent naphtha (coal), coumarone-styrene contg. ; Light Oil Redistillate, intermediate boiling
- FR : solvant naphté (charbon), contenant de la coumarone et du styrène ; Distillat d'huile légère, point d'ébullition intermédiaire
- IT : nafta solvente (carbone), contenente cumarone-stirene ; Olio leggero ridistillato, frazione intermedia
- NL : lichte teerolie (kool), cumaroon-styreen bevattend ; Lichte teerolie, middenfractie
- PT : nafta (carvão), contendo cumarona e estireno ; oleos leves redestilados, ebulição intermediária

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentraciön, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãu*


Cas No 90641-12-6

EEC No 292-636-2

No 648-009-00-4

NOTA H

NOTA J

- ES: nafta (hulla), residuos de destilación; Redestilado aceite ligero, alto punto de ebullición  
[Residuo que queda de la destilación de nafta recuperada. Compuesto principalmente de naftaleno y productos de condensación de indeno y estireno.]
- DA: naphtha (kul), destillationsrester; Redestilleret letolie, højt kogende  
[Resten tilbageblever ved destillation af genvundet naphtha. Sammensat primært af naphthalen og kondensationsprodukter af inden og styren.]
- DE: Naphtha (Kohle), Destillationsrückstände; Leichtöl-Redestillat, hochsiedend  
[Rückstand, der aus der Destillation wiedergewonnener Naphtha zurückbleibt, Besteht in erster Linie aus Naphthalin und Kondensationsprodukten von Inden und Styrol.]
- EL: ναφθα (άνθρακα), υπολείμματα απόσταξης. Επαναπόσταγμα ελαφρών ελαίων, υψηλού σημείου ζέσης  
[Το υπόλειμμα που παραμένει από την απόσταξη ανακτημένης νάφθας. Αποτελείται πρωτίστως από ναφθαλίνη και προϊόντα συμπύκνωσης ινδενίου και στυρολίου.]
- EN: Naphtha (coal), distn. residues; Light Oil Redistillate, high boiling  
[The residue remaining from the distillation of recovered naphtha. Composed primarily of naphthalene and condensation products of indene and styrene.]
- FR: naphtha (charbon), résidus de distillation; Distillat d'huile légère, haut point d'ébullition  
[Résidu de la distillation de naphtha régénéré. Se compose principalement de naphthalène et de produits de condensation de l'indène et du styrène.]
- IT: nafta (carbone), residui della distillazione; Olio leggero ridistillato, frazione altobollente  
[Residuo che rimane della distillazione di nafta recuperata. Costituito prevalentemente da naftalene e da prodotti di condensazione di indene e stirene.]
- NL: nafta (kool), destillatieresiduen; Lichte teerolie, hoogkokende fractie  
[Het residu dat resteert uit de destillatie van herwonnen nafta. Voornamelijk samengesteld uit naftaleen en condensatieprodukten van indeen en styreen.]
- PT: nafta (carvão), resíduos da destilação; óleos leves redestilados, alta ebulição  
[O resíduo remanescente da destilação de nafta recuperada. É constituído principalmente por naftaleno e produtos da condensação de indeno e estireno.]

*Classification, Klassificering, Einordnung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Επιγραφές, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentración, Konzentration grenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 90989-38-1

EEC No 292-694-9

No 648-010-00-X

NOTA H

NOTA I

ES: hidrocarburos aromáticos, C<sub>8</sub>; Redestilado aceite ligero, alto punto de ebulliciónDA: aromatiske carbonhydrider, C<sub>8</sub>-; Redestilleret letolie, højt kogendeDE: Aromatische Kohlenwasserstoffe, C<sub>8</sub>-; Leichtöl-Redestillat, hochsiedendEL: αρωματικοί υδρογονάνθρακες, C<sub>8</sub>; Επαναπόσταγμα ελαφρών ελαίων, υψηλού σημείου ζέσηςEN: Aromatic hydrocarbons, C<sub>8</sub>; Light Oil Redistillate, high boilingFR: hydrocarbures aromatiques en C<sub>8</sub>; Distillat d'huile légère, haut point d'ébullitionIT: idrocarburi aromatici, C<sub>8</sub>; Olio leggero ridistillato, frazione altobollenteNL: aromatische koolwaterstoffen, C<sub>8</sub>-; Lichte teerolie, hoogkokende fractiePT: hidrocarbonetos aromáticos, C<sub>8</sub>; óleos leves redestilados, alta ebulição

Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kennmerken, Rotulagem

T	R 45
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração


Cas No 91995-20-9

EEC No 295-281-1

No 648-012-00-0

NOTA H

NOTA I

- ES: hidrocarburos aromáticos,  $C_{8-9}$ , subproducto de polimerización de resina hidrocarbonada; Redestilado aceite ligero, alto punto de ebullición  
[Combinación compleja de hidrocarburos obtenida de la evaporación a vacío del disolvente de resinas hidrocarbonadas polimerizadas. Compuesta en su mayor parte de hidrocarburos aromáticos con un número de carbonos en su mayor parte en el intervalo de  $C_8$  a  $C_9$  y con un intervalo de ebullición aproximado de 120 °C a 215 °C.]
- DA: aromatiske carbonhydrider,  $C_{8-9}$ , biprodukter fra carbonhydridharpikspolymerisation; Redestilleret letolie, højt kogende  
[En sammensat blanding af carbonhydrider opnået ved afdampning af solvent, under vakuum, fra polymeriseret carbonhydridharpiks. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_8$  til og med  $C_9$ , med koginterval omtrent fra 120 °C til 215 °C.]
- DE: Aromatische Kohlenwasserstoffe,  $C_{8-9}$ , Kohlenwasserstoffharz Polymerisationsnebenprodukt; Leichtöl-Redestillat, hochsiedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus der Evaporation von Lösungsmittel unter Vakuum aus polymerisiertem Kohlenwasserstoffharz erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_9$  und siedet im Bereich von etwa 120 °C bis 215 °C.]
- EL: αρωματικοί υδρογονάνθρακες,  $C_{8-9}$ , υποπροϊόν πολυμερισμού ρητίνης υδρογονανθράκων· Επαναπόσταγμα ελαφρών ελαίων, υψηλού σημείου ζέσης  
[Πολύπλοκος συνδυασμός των υδρογονανθράκων λαμβάνεται από την εξάτμιση διαλύτη υπό κενό από πολυμερισμένη ρητίνη υδρογονανθράκων. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως  $C_8$  και  $C_9$  και βράζει στη περιοχή από 120 °C ως 215 °C περίπου.]
- EN: Aromatic hydrocarbons,  $C_{8-9}$ , hydrocarbon resin polymn. by-product; Light Oil Redistillate, high boiling  
[A complex combination of hydrocarbons obtained from the evaporation of solvent under vacuum from polymerized hydrocarbon resin. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_9$  and boiling in the range of approximately 120 °C to 215 °C (248 °F to 419 °F).]
- FR: hydrocarbures aromatiques en  $C_{8-9}$ , polymérisation de résines hydrocarbures, sous produit; Distillat d'huile légère, haut point d'ébullition  
[Combinaison complexe d'hydrocarbures obtenue par évaporation du solvant sous vide à partir d'une résine hydrocarbure polymérisée. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ - $C_9$  et dont le point d'ébullition est compris approximativement entre 120 °C et 215 °C.]
- IT: idrocarburi aromatici,  $C_{8-9}$ , sottoprodotto della polimerizzazione di resine idrocarburiche; Olio leggero ridistillato, frazione altobollente  
[Combinazione complessa di idrocarburi ottenuta dall'evaporazione sotto vuoto di solvente dalla resina idrocarburica polimerizzata. Costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_9$  e con punto di ebollizione nell'intervallo 120 °C-215 °C ca.]
- NL: aromatische koolwaterstoffen,  $C_{8-9}$ , koolwaterstofhars-polymerisatie-bijproduct; Lichte teerolie, hoogkokende fractie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de verdamping, onder vacuüm, van solvent uit gepolymeriseerde koolwaterstofhars. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_8$  en  $C_9$ , met een kooktraject van ongeveer 120 °C tot 215 °C.]
- PT: hidrocarbonetos aromáticos,  $C_{8-9}$ , subproduto da polimerização de resinas de hidrocarbonetos; óleos leves redestilados, alta ebulição  
[Uma combinação complexa de hidrocarbonetos obtida da evaporação do solvente sob vácuo de resinas de hidrocarbonetos polimerizados. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_8$  até  $C_9$  e destila no intervalo de aproximadamente 120 °C a 215 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indefinición, Classificati...*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 92062-36-7

EFC No 295-551-9

No 648-013-00-6

NOTA H

NOTA J

- ΕΤ Ηydrocarburos aromáticos,  $C_{6-14}$ , destilación de benceno, Redestilado aceite ligero, alto punto de ebullición
- DA Aromatiske carbonhydrider,  $C_{6-14}$ , benzendestillation, Redestilleret letolie, højt kogende
- LE Aromatische Kohlenwasserstoffe,  $C_{6-14}$ , Benzoldestillation, Leichtöl-Redestillat, hochsiedend
- ΕΙ Αρωματικοί υδρογονάνθρακες,  $C_{6-14}$ , αποστάξης βενζολίου. Επαναπόσταγμα ελαφρών ελαίων, υψηλού σημείου βρασμού
- EN Aromatische hydrocarbons  $C_{6-14}$ , benzene distn., Light Oil Redistillate, high boiling
- FR Huile aromatique en  $C_{6-14}$ , distillation du benzene, Distillat d'huile legere, haut point d'ébullition
- IT Idrocarburi aromatici  $C_{6-14}$ , distillazione del benzene, Olio leggero ridistillato, frazione altobollente
- NL Aromatische hydrowaterstoffen  $C_{6-14}$ , benzeendestillatie, Lichte teerolie, hoogkokende fractie
- PT Hidrocarbonetos aromáticos,  $C_{6-14}$ , destilação do benzeno, óleos leves redestilados, alta ebulição

Αριθμός / No / Nummer, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2 R 45

Ετικέτα / Etikettering, Kerzi chnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

	<p>R 45</p> <p>S 53-45</p>
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Όρια συγκεντρώσεων / Concentrationsgrenzen, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limiti di concentrazione, Limites de concentraçao


Cas No 91995-61-8

EEC No 295-323-9

No 648-014-00-1

NOTA H

NOTA J

- ES : residuos del extracto (hulla), fracción alcalina del benzol, extracto ácido ; Extracto residuo de aceite ligero, bajo punto de ebullición  
[Redestilado de la destilación libre de ácidos de alquitrán y bases de alquitrán, de alquitrán de hulla bituminosa a elevada temperatura dentro del intervalo de ebullición aproximado de 90 °C a 160 °C. Compuesto en su mayor parte de benceno, tolueno y xilenos.]
- DA : ekstraktionsrester (kul), alkalisk benzenfraktion, syreekstrakt ; Syrefri letolie, lavtkogende  
[Redestillat fra destillatet, befriet for tjæresyrer og tjærebaser, fra højtemperaturstjære fra bituminøse kul, med kogesinterval omtrent fra 90 °C til 160 °C. Det består overvejende af benzen, toluen og xylener.]
- DE : Extraktückstände (Kohle), Benzol-Fraktion alkalisch, saurer Extrakt ; Leichtölextrakt-Rückstand, tiefsiedend  
[Redestillat aus dem von Teersäuren und Teerbasen befreiten Destillat aus Steinkohlen-Hochtemperatur-Teer, siedet im ungefährlichen Bereich von 90 °C bis 160 °C. Besteht vorherrschend aus Benzol, Toluol und Xylenen.]
- EL : υπολειμμάτων εκχυλίσματος (άνθρακα), αλκαλικού κλάσματος δενζόλης, εκχύλισμα οξέος ; Ελαφρών ελαίων υπολειμματα εκχυλίσσης, χαμηλού σημείου ζέσης  
[Το επαναπόσταγμα από το απόσταγμα, απαλλαγμένο οξέων και βάσεων πίσσας, από υψηλής θερμοκρασίας πίσσα bitουμενικού άνθρακα που δράζει περίπου στην περιοχή από 90 °C ως 160 °C. Συνίσταται κυρίως από δενζόλιο, τολουόλιο και ξυλόλια.]
- EN : Extract residues (coal), benzole fraction alk., acid ext. ; Light Oil Extract Residues, low boiling  
[The redistillate from the distillate, freed of tar acids and tar bases, from bituminous coal high temperature tar boiling in the approximate range of 90 °C to 160 °C (194 °F to 320 °F). It consists predominantly of benzene, toluene and xylenes.]
- FR : résidu d'extrait alcalin (charbon), fraction benzole, extrait acide ; Résidu d'extraction d'huile légère, bas point d'ébullition  
[Redistillat du distillat, débarrassé des acides et des bases de goudron, issu du goudron de houille bitumineux à haute température dont le point d'ébullition est approximativement compris entre 90 °C et 160 °C. Se compose principalement de benzène, de toluène et de xylènes.]
- IT : residui di estrazione (carbone), frazione benzolica alcalina, estrazione con acido ; Olio leggero lavato, bassobollente  
[Ridistillato dal distillato, liberato da acidi di catrame e basi di catrame, da catrame ad alta temperatura da carbone bituminoso con punto di ebollizione nell'intervallo 90 °C-160 °C ca. E' costituito prevalentemente da benzene, toluene e xileni.]
- NL : extract-residuen (kool, benzolfraction alkalisch, zuurextract ; Lichte teerolie, extractie-residu, laagkokende fractie  
[Het herdestillaat dat afkomstig is uit het destillaat, ontdaan van teerzuren en teerbasen, uit bitumineuze kool hoge temperatuur teer en dat een kooktraject heeft van ongeveer 90 °C tot 160 °C. Bestaat voornamelijk uit benzeen, toluen en xyleneen.]
- PT : resíduos de extracção (carvão), alcalinos da fracção de benzole, extracto ácido ; Extracto de resíduo de óleo leve baixa ebulição  
[O redestilado do destilado, sem ácidos e bases do alcatrão, de alcatrão de carvão betuminoso de temperatura elevada que destila no intervalo de aproximadamente 90 °C a 160 °C. É constituído predominantemente por benzeno, tolueno e xilenos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indefining, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Roetelagem*

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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101316-63-6

EEC No 309-868-8

No 648-015-00-7

NOTA H

NOTA J

- ES:** residuos del extracto (alquitrán de hulla), alcalino de la fracción de benzol, extracto ácido; Extracto residuo de aceite ligero, bajo punto de ebullición  
[Combinación compleja de hidrocarburos obtenida por la redestilación del destilado de alquitrán de hulla (libre de ácido de alquitrán y de base de alquitrán) a elevada temperatura. Compuesta en su mayor parte de hidrocarburos aromáticos mononucleares sustituidos y no sustituidos con un intervalo de ebullición de 85 °C-195 °C.]
- DA:** ekstraktionsrester (stenkultstjære), benzolfraktion alkaliske, syreekstrakt; Syrefri letolie, lavtkogende  
[En sammensat blanding af carbonhydrider opnået ved redestillationen af destillatet af højtemperatursstenkultstjære (tjæresyre- og tjærebaseret). Den består overvejende af usubstituerede og substituerede monocycliske, aromatiske carbonhydrider kogende i området 85 °C-195 °C.]
- DE:** Extraktückstände (Kohlenteer), Benzolfraktion alkalisch; Säureextrakt; Leichtölextrakt-Rückstand, tiefsiedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Redestillation der Destillate von Hochtemperatur-Kohlenteer (Teersäure- und Teerbase-frei). Besteht vorrangig aus unsubstituierten und substituierten mononuklearen aromatischen Kohlenwasserstoffen, die im Bereich von 85 °C-195 °C siedend.]
- EL:** υπολείμματα εκχύλισματος (λιθανθρακόπισσας), κλάσματος δενζόλης αλκαλικού, όξινο εκχύλισμα· Ελαφρών ελαίων υπολείμματα εκχύλισης, χαμηλού σημείου ζέσης  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με την ανακρυστάλλωση του αποστάγματος λιθανθρακόπισσας υψηλής θερμοκρασίας (ελεύθερο οξύ και βάσης πίσσας). Συνίσταται κυρίως από μη υποκατεστημένους και υποκατεστημένους μονοπυρηνικούς αρωματικούς υδρογονάνθρακες με περιοχή βρασμού από 85 °C έως 195 °C.]
- EN:** Extract residues (coal tar), benzole fraction alk., acid ext.; Light Oil Extract Residues, low boiling  
[A complex combination of hydrocarbons obtained by the redistillation of the distillate of high temperature coal tar (tar acid and tar base free). It consists predominantly of unsubstituted and substituted mononuclear aromatic hydrocarbons boiling in the range of 85 °C-195 °C (185 °F-383 °F).]
- FR:** résidus d'extraits alcalins de la fraction benzol (goudron de houille), extraction à l'acide; Résidus d'extraction d'huile légère, bas point d'ébullition  
[Combinaison complexe d'hydrocarbures obtenue par redistillation du distillat de goudron de houille à haute température (exempt d'huiles de goudron acides et de bases de goudron). Se compose principalement d'hydrocarbures monocycliques substitués et non substitués dont le point d'ébullition se situe entre 85 °C et 195 °C.]
- IT:** residui di estrazione (catrame di carbone), frazione benzolica alcalina, estratto acido; Olio leggero lavato, bassobollente  
[Combinazione complessa di idrocarburi ottenuta dalla ridistillazione di distillato di catrame di carbone (privo di acidi e basi di catrame) ad elevata temperatura. E' costituita prevalentemente da idrocarburi mononucleari aromatici sostituiti e non sostituiti con punto di ebollizione nell'intervallo 85 °C-195 °C.]
- NL:** extractresiduen (koolteer), benzolfraction alkalische, zuur-extract; Lichte teerolie, extractie-residu, laagkokende fractie  
[Een complexe verzameling van koolwaterstoffen die wordt verkregen door de herdestillatie van het destillaat van bij hoge temperatuur verkregen koolteer (teerzuur- en teerbase-vrij). Bestaat voornamelijk uit ongesubstitueerde en gesubstitueerde mononucleaire aromatische koolwaterstoffen met een kookpunt in het traject van 85 °C tot 195 °C.]
- PT:** resíduos de extracção (alcatrão de carvão), fracção de benzole do extracto alcalino, extracto ácido; Extracto de residuo de óleo leve, baixa ebulição  
[Uma combinação complexa de hidrocarbonetos obtida pela redestilação do destilado de alcatrão de carvão de temperatura elevada (sem ácidos e bases do alcatrão). É constituída predominantemente por hidrocarbonetos aromáticos mononucleares não-sustituídos e substituídos e destila no intervalo de 85 °C-195 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="370 463 389 488" data-label="Text">T</div> <div data-bbox="331 512 429 607" data-label="Image"> </div> <div data-bbox="943 512 1023 544" data-label="Text">R : 45</div> <div data-bbox="943 566 1053 595" data-label="Text">S : 53-45</div>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 93821-38-6

EEC No 298-725-2

No 648-016-00-2

NOTA H

NOTA I

- ES : residuos del extracto (hulla), productos ácidos de la fracción de benzol ; Extracto residuo de aceite ligero, bajo punto de ebullición  
[Sedimento ácido subproducto del refino con ácido sulfúrico de hulla bruta a alta temperatura. Compuesto principalmente de ácido sulfúrico y compuestos orgánicos.]
- DA : ekstraktionsrester (kul), benzenfraktion syre- ; Syrefri letolie, lavtkogende  
[Et syreslamsbiprodukt fra svovlsyrerafineringen af rå højtemperaturskul. Sammensat primært af svovlsyre og organiske forbindelser.]
- DE : Extraktückstände (Kohle), Benzol-Fraktion sauer ; Leichtölextrakt-Rückstand, tiefsiedend  
[Saurer Bodensatz, Nebenprodukt der schwefelsauren Aufbereitung von roher Hochtemperatur-Kohle. Besteht in erster Linie aus Schwefelsäure und organischen Verbindungen.]
- EL : υπολείμματα εκχύλισης (άνθρακα) κλάσμα βενζολίου όξινο- Ελαφρών ελαίων υπολείμματα εκχύλισης, χαμηλού σημείου ζέσης  
[Όξινη λάσπη, υποπροϊόν καθαρισμού με θειικό οξύ ακατέργαστου άνθρακα υψηλής θερμοκρασίας. Αποτελείται πρωτίστως από θειικό οξύ και οργανικές ενώσεις.]
- EN : Extract residues (coal), benzole fraction acid ; Light Oil Extract Residues, low boiling  
[An acid sludge by-product of the sulphuric acid refining of crude, high temperature coal. Composed primarily of sulfonic acid and organic compounds.]
- FR : résidus d'extrait acide (charbon), fraction benzole ; Résidus d'extraction d'huile légère, bas point d'ébullition  
[Boue acide obtenue comme sous-produit du raffinage à l'acide sulfurique de charbon brut à haute température. Se compose principalement d'acide sulfurique et de composés organiques.]
- IT : residui di estratto (carbone), acido della frazione benzolo ; Olio leggero lavato, bassobollente  
[Fanghi acidi sottoprodotti della raffinazione mediante acido solforico di carbone grezzo ad alta temperatura. Composti principalmente da acido solforico e composti organici.]
- NL : extractieresiduen (kool), benzolfractie zuur ; Lichte teerolie, extractie-residu, laagkokende fractie  
[Een zuur bezinksel dat als bijproduct gevormd wordt bij de zuivering met zwavelzuur van ruwe hoge temperatuur kool. Bestaat voornamelijk uit zwavelzuur en organische verbindingen.]
- PT : resíduos de extração (carvão), ácidos da fracção de benzole ; Extracto de residuo de óleo leve, baixa ebulição  
[Um subproduto que é uma lama ácida da refinação com ácido sulfúrico do carvão de temperatura elevada bruto. É constituído principalmente por ácido sulfúrico e compostos orgânicos.]

*Classification Klassifizierung Einstellung Ταξινόηση Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90641-02-4

EEC No 292-625-2

No 648-017-00-8

NOTA H

NOTA I

- ES:** residuos del extracto (hulla), producto alcalino del aceite ligero, productos de cabeza de la destilación. Extracto residuo de aceite ligero, bajo punto de ebullición  
[Fracción primera de la destilación de residuos del fondo del prefractionador ricos en hidrocarburos aromáticos, cumarona, naftaleno e indeno o de aceite carbólico lavado, con un punto de ebullición sustancialmente por debajo de 145 °C. Compuesta principalmente de hidrocarburos aromáticos y alifáticos de C<sub>7</sub> y C<sub>8</sub>.]
- DA:** ekstraktionsrester (kul), letolie alkaliske, destillationstopfraktioner; Syrefri letolie, lavtkogende  
[Den første fraktion fra destillation af aromatiske carbonhydrider, coumaron-, naphthalen- og indenrige præfraktionskolonnebundfraktioner eller vasket carbololie, kogede væsentligt under 145 °C. Sammensat primært af C<sub>7</sub> og C<sub>8</sub> alifatisk og aromatiske carbonhydrider.]
- DE:** Extraktückstände (Kohle), Leichtöl alkalisch, Kopfdestillate; Leichtölextrakt-Rückstand, tiefsiedend  
[Erste Fraktion aus der Destillation von aromatischen Kohlenwasserstoffen, Cumaron-, Naphthalin- und Indenreichen Präfraktions-Bodenläufen oder gewaschenem Karbolöl siedet wesentlich unter 145 °C. Besteht in erster Linie aus C<sub>7</sub>- und C<sub>8</sub>-aliphatischen und aromatischen Kohlenwasserstoffen.]
- EL:** υπολείμματα εκχυλίσματος (άνθρακα), αλκαλικού ελαφρού ελαίου, προϊόντα κυρυφής απόσταξης. Ελαφρών ελαίων υπολείμματα εκχύλισης, χαμηλού σημείου ζέσης  
[Το πρώτο κλάσμα από την απόσταξη υπολειμμάτων πυθμένα προκλασματήρα πλούσιων σε αρωματικούς υδρογονάνθρακες, κουμαρόνη, ναφθαλίνη και ινδένιο, ή εκπλυθέντος καρβολικού ελαίου που βράζει ουσιαστικά κάτω από τους 145 °C. Αποτελείται πρωτίστως από αλιφατικούς υδρογονάνθρακες με C<sub>7</sub> και C<sub>8</sub>.]
- EN:** Extract residues (coal), light oil alk., distn. overheads; Light Oil Extract-Residues, low boiling  
[The first fraction from the distillation of aromatic hydrocarbons, coumarone, naphthalene and indene rich prefractionator bottoms or washed carbolic oil boiling substantially below 145 °C (293 °F). Composed primarily of C<sub>7</sub> and C<sub>8</sub> aliphatic and aromatic hydrocarbons.]
- FR:** résidu d'extrait alcalin (charbon), huile légère, distillats de tête; Résidu d'extraction d'huile légère, bas point d'ébullition  
[Première fraction de la distillation d'huile carbolique lavée ou de résidu de colonne de préfractionnement riches en hydrocarbures aromatiques, en coumarone, en naphthalène et en indène, dont le point d'ébullition est nettement inférieur à 145 °C. Se compose principalement d'hydrocarbures aromatiques et aliphatiques en C<sub>7</sub> et en C<sub>8</sub>.]
- IT:** residui di estrazione (carbone), olio leggero alcalino, frazioni di testa della distillazione; Olio leggero lavato, basso-bollente  
[La prima frazione della distillazione di fondo da prefazione ricchi di idrocarburi aromatici, cumarone, naftalene e indene oppure di olio carbolic lavato con un punto di ebollizione molto al di sotto dei 145 °C. Costituita prevalentemente da idrocarburi alifatici ed aromatici C<sub>7</sub> e C<sub>8</sub>.]
- NL:** extract-residuen (kool), lichte olie alkalisch, destillatietoppdukten; Lichte teerolie, extractieresidu, laagkokende fractie  
[De eerste fractie uit de destillatie van voorfractioneeringsbodemfracties, rijk aan aromatische koolwaterstoffen, coumaroon, naftaleen en indeen, of gespoelde carbololie. Kookt grotendeels beneden 145 °C. Voornamelijk samengesteld uit alifatische en aromatische C7- en C8-koolwaterstoffen.]
- PT:** resíduos de extracção (carvão), alcalinos de óleo leve, produtos de cabeça da destilação; Extracto de residuo de óleo leve, baixa ebulição  
[A primeira fracção da destilação de hidrocarbonetos aromáticos, cumarona, naftaleno e produtos de cauda do prefractionador ricos em indeno ou carboleína lavada que destila substancialmente abaixo de 145 °C. É constituída principalmente por hidrocarbonetos alifáticos e aromáticos em C7 e C8.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 101316-62-5

EEC No 309-867-2

No 648-018-00-3

NOTA H

NOTA J

- ES: residuos del extracto (hulla), alcalino de aceite ligero, extracto ácido, fracción de indeno, Extracto residuo de aceite ligero, medio punto de ebullicion
- DA: ekstraktionsrester (kul), letolie-alkaliske, syreekstrakt, indenfraktion, Syrefri letolie, mellemdestillat
- DE: Extraktuckstande (Kohle), Leichtöl alkalisch, Saurextrakt, Indenfraktion, Leichtolextrakt-Ruckstand, mittelsiedend
- EL: υπολείμματα εκχυλίσματος (άνθρακα), ελαφρού ελαίου αλκαλικού, όξινου εκχυλίσματος, κλάσμα ινδολίου  
Ελαφρών ελαίων υπολείμματα εκχυλίσματος, μέσου σημείου ζέσης
- EN: Extract residues (coal), light oil alk, acid ext, indene fraction, Light Oil Extract Residues, intermediate boiling
- FR: résidus d'extraits alcalins d'huile légère (charbon), extraction à l'acide, fraction indène, Résidus d'extraction d'huile légère, point d'ébullition intermédiaire
- IT: residui di estrazione (carbone), olio leggero alcalino, estratto acido, frazione indenica Olio leggero lavato, medio bollente
- NL: extractieresiduen (kool), lichte olie alkalische, zuur-extract, indeenfractie, Lichte teerolie, extractie residu midden fractie
- PT: resíduos de extração (carvão), óleo leve alcalino, extracto ácido, fracção de indeno, Extracto de residuo de óleo leve, media ebulição

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem*

<p>T</p> 	R: 45
	S 53 45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limite de concentratie*


Cas No 90641-03-5

EEC No 292-626-8

No 648-019-00-9

NOTA H

NOTA J

- ES residuos del extracto (hulla), producto alcalino del aceite ligero, fracción de nafta de indeno ; Extracto residuo de aceite ligero, alto punto de ebullición  
[Destilado de los residuos del fondo del prefractionador ricos en hidrocarburos aromáticos, cumarona, naftaleno e indeno o de aceites carbolicos lavados, con un intervalo de ebullición aproximado de 155 °C a 180 °C. Compuesto principalmente de indeno, indano y trimetilbencenos.]
- DA ekstraktionsrester (kul), letolie alkaliske, indennaphthafraktion ; Syrefri letolie, højkogende  
[Destillatet fra aromatiske carbonhydrider, coumaron-, naphthalen- og indenrige præfraktioneringskolonnebundfraktioner eller vasket carbololie, med koginterval omtrent fra 155 °C til 180 °C. Sammensat primært af inden, indan og trimethylbenzener.]
- DE Extraktückstände (Kohle), Leichtöl alkalisch, Inden-Naphtha-Fraktion ; Leichtölextrakt-Rückstand, hochsiedend  
[Destillat aus aromatischen Kohlenwasserstoffen, Cumaron-, Naphthalin- und Indenreichen Präfraktionator Bodenläufen oder gewaschenem Karbolöl mit einem Siedebereich von etwa 155 °C bis 180 °C. Besteht in erster Linie aus Inden, Indan und Trimethylbenzolen.]
- EL υπολείμματα εκχύλισματος (άνθρακα), αλκαλικού ελαφρού ελαίου, κλάσμα νάφθας ινδενίου· Ελαφρών ελαίων υπολείμματα εκχύλισης, υψηλού σημείου ζέσης  
[Το απόσταγμα από υπολείμματα πυθμένα προκλασματήρα, πλούσιων σε αρωματικούς υδρογονάνθρακες, κουμαρόνη, ναφθαλίνη και ινδένιο ή από εκπληθύντα καρβολικά έλαια, που δράζει στην περιοχή από 155,8°C έως 180 °C περίπου. Αποτελείται πρωτίστως από ινδένιο, ινδάνιο και τριμεθυλοβενζόλια.]
- EN Extract residues (coal), light oil alk., indene naphtha fraction ; Light Oil Extract Residues, high boiling  
[The distillate from aromatic hydrocarbons, coumarone, naphthalene and indene rich prefractionator bottoms or washed carbolie oils, having an approximate boiling range of 155 °C to 180 °C (311 °F to 356 °F). Composed primarily of indene, indan and trimethylbenzenes.]
- FR résidu d'extrait alcalin (charbon), huile légère, fraction naphta-indène ; Résidu d'extraction d'huile légère, haut point d'ébullition  
[Destillat issu d'huiles carboliques lavées ou de résidus de colonne de préfractionnement riches en hydrocarbures aromatiques, en coumarone, en naphthalène et en indène, dont l'intervalle d'ébullition s'étend approximativement de 155 °C à 180 °C. Se compose principalement d'indene, d'indane et de triméthylbenzènes.]
- IT residui di estrazione (carbone), olio leggero alcalino, frazione indene nafta ; Olio leggero lavato, altobollente  
[Distillato di fondi da prefrazione ricchi di idrocarburi aromatici, cumarone, naftalene ed indene oppure olii carbolici lavati, con punto di ebollizione nell'intervallo 155 °C-180 °C ca. Costituito prevalentemente da indene, indano e trimetilbenzeni.]
- NL extract-residuen (kool), lichte olie alkalisch, indeennaftafractie ; Lichte teerolie, extractie-residu, hoogkokende fractie  
[Het destillaat van voorfractieneringbodemfracties, rijk aan aromatische koolwaterstoffen, coumaroon, naftaleen en indeen, of gespoelde carbolhoudende olien met een kooktraject van ongeveer 155 °C tot 180 °C. Voornamelijk samengesteld uit indeen, indan en trimethylbenzenen.]
- PT resíduos de extracção (carvão), alcalinos de óleo leve, fracção de indeno da nafta ; Extracto de resíduo de óleo leve, alta ebulição  
[O destilado de hidrocarbonetos aromáticos, cumarona, naftaleno e produtos de cauda do prefractionador ricos em indeno ou carboleínas lavadas, destilando no intervalo de aproximadamente 155 °C a 180 °C. É constituído principalmente por indeno, indano e trimetilbencenos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 45

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-79-4

EEC No 266-013-0

No 648-020-00-4

NOTA H

NOTA J


- ES : nafta disolvente (hulla) ; Extracto-residuo de aceite ligero, alto punto de ebullición  
[Destilado de alquitrán de hulla a elevada temperatura, aceite ligero del horno de coque o residuo del extracto alcalino del aceite de alquitrán de hulla con un intervalo de destilación aproximado de 130 °C a 210 °C. Compuesto principalmente de indeno y otros sistemas con anillos policíclicos, con un solo anillo aromático. Puede contener compuestos fenólicos y bases nitrogenadas aromáticas.]
- DA : solventnaphtha (kul) ; Syrefn letolie, højt kogende  
[Destillat, fra enten højtemperaturstenkultjære, koksovnletolie eller alkalisk ekstraktionsrest af stenkultjæreolie, med et omtrentligt destillationsinterval fra 130 °C til 210 °C. Sammensat primært af inden og andre polycykliske ringsystemer indeholdende en enkelt aromatisk ring. Kan indeholde phenolforbindelser og aromatiske nitrogenbaser.]
- DE : Lösungsmittelnaphtha (Kohle) ; Leichtölextrakt-Rückstand, hochsiedend  
[Destillat aus entweder Hochtemperaturkohleenteer, Koksofenleichtöl oder Rückstand aus alkalischem Extrakt von Kohleenteeröl mit einem ungefähren Destillationsbereich von 130 °C bis 210 °C. Besteht in erster Linie aus Inden und anderen polycyclischen Ringsystemen, die einen einzigen aromatischen Ring enthalten. Kann phenolhaltige Verbindungen und aromatische Stickstoffbasen enthalten.]
- EL : διαλύτης νάφθα (άνθρακα) : Ελαφρών ελαίων υπολείμματα εκχύλισης, υψηλού σημείου ζέσης  
[Το απόσταγμα είτε από λιθανθρακόπισσα υψηλής θερμοκρασίας, είτε από ελαφρό έλαιο κλιβάνου παραγωγής κοκ, είτε από υπολείμμα αλκαλικού εκχυλίσματος ελαίου λιθανθρακόπισσας που έχει περιοχή απόσταξης από 130 °C ως 210 °C περίπου. Αποτελείται κυρίως από ινδένιο και άλλα πολυκυκλικά δακτυλίων που περιέχουν ένα μόνον αρωματικό δακτύλιο. Μπορεί να περιέχει φαινολικές ενώσεις και αρωματικές αζωτούχες βάσεις.]
- EN : Solvent naphtha (coal) ; Light Oil Extract Residues, high boiling  
[The distillate from either high temperature coal tar, coke oven light oil, or coal tar oil alkaline extract residue having an approximate distillation range of 130 °C to 210 °C (266 °F to 410 °F) Composed primarily of indene and other polycyclic ring systems containing a single aromatic ring. May contain phenolic compounds and aromatic nitrogen bases.]
- FR : solvant naptha (charbon) ; Résidus d'extraction d'huile légère, haut point d'ébullition  
[Distillat obtenu à partir de goudron de houille à haute température, d'huile légère de four à coke ou du résidu de l'extraction alcaline d'huile de goudron de houille, et dont l'intervalle d'ébullition s'étage approximativement de 130 °C à 210 °C. Se compose principalement d'indène et d'autres systèmes polycycliques contenant un cycle aromatique. Peut contenir des composés phénoliques et des bases aromatiques azotées.]
- IT : nafta solvente (carbone) ; Olio leggero lavato, altobollente  
[Distillato di catrame di carbone ad alta temperatura, di olio leggero da forno a coke, o di residuo dell'estrazione alcalina di olio leggero di catrame con punto di ebollizione nell'intervallo 130-210 °C ca. E' costituito principalmente da indene ed altri composti policiclici contenenti un singolo anello aromatico. Può contenere composti fenolici e basi azotate aromatiche.]
- NL : soventnafta (kool) ; Lichte teerolie, extractie-residu, hoogkokende fractie  
[Het destillaat dat wordt verkregen uit het alkalische extractresidu van koolteer verkregen bij hoge temperatuur, lichte olie verkregen uit de cokesoven of koolteerolie, met een destillatietraject van 130 °C tot 210 °C. Voornamelijk samengesteld uit indeen en andere polycyclische ringsystemen die een enkele aromatische ring bevatten. Kan fenolische verbindingen en aromatische stikstofbasen bevatten.]
- PT : nafta (carvão) ; Extracto de resíduo de óleo leve, alta ebulição  
[O destilado quer do alcatrão de carvão de temperatura elevada, óleo leve do forno de coque, ou resíduo de extracção alcalina do óleo de alcatrão de carvão com um intervalo de destilação de aproximadamente 130 °C a 210 °C. Compõe-se principalmente de indeno e outros sistemas anulares policíclicos contendo um so anel aromático. Pode conter compostos fenólicos e bases azotadas aromáticas.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101794-90-5

EEC No 309-971-8

No 648-021-00-X

NOTA H


NOTA J

- ES : destilados (alquitrán de hulla), aceites ligeros, fracción neutra ; Extracto residuo de aceite ligero, alto punto de ebullición  
[Destilado de la destilación fraccionada de alquitrán de hulla a elevada temperatura. Compuesto principalmente de hidrocarburos aromaticos de un anillo alquil-sustituido con un intervalo de ebullición aproximado de 135 °C a 210 °C. Puede incluir también hidrocarburos insaturados como indeno y cumarona.]
- DA : destillater (stenkultsjære), letolier, neutral fraktion ; Syrefri letolie, højt kogende  
[Et destillat fra den fraktionerede destillation af højtemperaturstenkultsjære. Sammensat primært af alkylsubstituerede, monocycliske, aromatisk carbonhydrider, med koginterval omtrent fra 135 °C til 210 °C. Kan også indeholde umættede carbonhydrider såsom inden og coumaron.]
- DE : Destillate (Kohlenteer), Leichtöle, neutrale Fraktion ; Leichtölextrakt-Rückstand, hochsiedend  
[Destillat aus der fraktionierten Destillation von Hochtemperatur-Kohlenteer. Besteht in erster Linie aus alkylsubstituierten aromatischen Kohlenwasserstoffen mit einem Ring und siedet im Bereich von etwa 135 °C bis 210 °C. Kann auch ungesättigte Kohlenwasserstoffe wie Inden und Coumaron enthalten.]
- EL : αποσταγμάτα (λιθανθρακόπισσας), ελαφρών ελαίων, ουδέτερο κλάσμα· Ελαφρών ελαίων υπολείμματα εκχύλισης, υψηλού σημείου ζέσης  
[Αποστάγμα κλασματικής απόσταξης λιθανθρακόπισσας υψηλής θερμοκρασίας. Αποτελείται κυρίως από αλκυλοσποκατάστατα αρωματικών υδρογονανθράκων με ένα δακτύλιο, με περιοχή βρασμού από 135 °C ως 210 °C περίπου. Μπορεί επίσης να περιλαμβάνουν ακόρεστους υδρογονάνθρακες όπως ινδένιο και κουμαρόνη.]
- EN : Distillates (coal tar), light oils, neutral fraction ; Light Oil Extract Residues, high boiling  
[A distillate from the fractional distillation of high temperature coal tar. Composed primarily of alkyl-substituted one ring aromatic hydrocarbons boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F). May also include unsaturated hydrocarbons such as indene and coumarone.]
- FR : distillats (goudron de houille), huiles légères, fraction neutre : Résidus d'extraction d'huile légère, haut point d'ébullition  
[Distillat obtenu par distillation fractionnée de goudron de houille à haute température. Se compose principalement d'hydrocarbures aromatiques monocycliques alkyl-substitués dont le point d'ébullition est compris approximativement entre 135 °C et 210 °C. Est également constitué d'hydrocarbures insaturés tels que l'indène et la coumarone.]
- IT : distillati (catrame di carbone), olii leggeri, frazione neutra ; Olio leggero lavato, altobollente  
[Distillato della distillazione frazionata di catrame di carbone ad alta temperatura. E' costituito prevalentemente da idrocarburi aromatici moniciclici alchil-sostituiti con punto di ebollizione nell'intervallo 135 °C - 210 °C ca. Può anche contenere idrocarburi insaturi come indene e cumarone.]
- NL : destillaten (koolteer), lichte oliën, neutrale fractie ; Lichte teerolie, extractie-residu, hoogkokende fractie  
[Een destillaat dat afkomstig is uit de gefractioneerde destillatie van bij hoge temperatuur verkregen koolteer. Voornamelijk samengesteld uit alkylgesubstitueerde aromatische koolwaterstoffen met één ring, met een kooktraject van ongeveer 135 °C tot 210 °C. Kan bovendien onverzadigde koolwaterstoffen, zoals indeen en coumaroon, bevatten.]
- PT : destilados (alcatrão de carvão), óleos leves, fracção neutra ; Extracto de resíduo de óleo leve, alta ebulição  
[Um destilado da destilação fraccionada de alcatrão de carvão de temperatura elevada. É constituído principalmente por hidrocarbonetos aromaticos mononucleares com substituintes alquilo e destila no intervalo de aproximadamente 135 °C a 210 °C. Também pode incluir hidrocarbonetos insaturados tais como indeno e cumarona.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90640-87-2

EEC No 292-609-5

No 648-022-00-5

NOTA H

NOTA J

- ES destilados (alquitrán de hulla), aceites ligeros, extractos ácidos , Extracto residuo de aceite ligero, alto punto de ebullición  
[Este aceite es una mezcla compleja de hidrocarburos aromáticos, principalmente indeno, naftaleno, cumarona, fenol, y *o*-, *m*- y *p*-cresol y con un intervalo de ebullición de 140 °C a 215 °C.]
- DA destillater (stenkultsjære), lette olier, syreekstrakter , Syrefri letolie, højt kogende  
[Denne olie er en sammensat blanding af aromatiske carbonhydinder, primært inden, naphthalen, coumaron, phenol og *o*-, *m*- og *p*-cresol, med koginterval fra 140 °C til 215 °C.]
- DE Destillate (Kohlenteer), leichte Öle, saure Extrakte , Leichtölextrakt-Rückstand, hochsiedend  
[Dieses Öl ist ein komplexes Gemisch aus aromatischen Kohlenwasserstoffen, in erster Linie Inden, Naphthalin, Cumaron, Phenol und *o*-, *m*- und *p*-Kresol und siedet im Bereich von 140 °C bis 215 °C.]
- EL αποσταγμάτων (λιθανθρακόπισσα), ελαφρών ελαίων, όξινα εκχυλίσματα· Ελαφρών ελαίων υπολείμματα εκχύλισης, υψηλού σημείου ζέσης  
[Το έλαιο αυτό είναι πολύπλοκο μείγμα αρωματικών υδρογονανθράκων, πρωτίστως ινδενίου, ναφθαλίνης, κουμαρόνης, φαινόλης και *o*-, *m*- και *p*-κρεζόλης και δράζει στην περιοχή από 140 °C ως 215 °C.]
- EN Distillates (coal tar), light oils, acid exts , Light Oil Extract Residues, high boiling  
[This oil is a complex mixture of aromatic hydrocarbons, primarily indene, naphthalene, coumarone, phenol, and *o*-, *m*- and *p*-cresol and boiling in the range of 140 °C to 215 °C (284 °F to 419 °F)]
- FR distillats (goudron de houille), huiles légères, extraits acides , Résidus d'extraction d'huile légère, haut point d'ébullition  
[Huile constituée d'un mélange complexe d'hydrocarbures aromatiques, principalement de l'indène, du naphthalène, de la coumarone, du phénol, et du *o*-, du *m*- et du *p*-crésol. Son point d'ébullition est compris entre 140 °C et 215 °C.]
- IT distillati (catrame di carbone), olii leggeri, estratti con acido , Olio leggero lavato, altobollente  
[Quest'olio è una miscela complessa di idrocarburi aromatici, prevalentemente indene, naftalene, cumarone, fenolo e *o*-, *m*- e *p*-cresolo e con punto di ebollizione nell'intervallo 140 °C-215 °C.]
- NL destillaten (koolteer), lichte olien, zuurextracten , Lichte teerolie, extractie-residu, hoogkokende fractie  
[Deze olie is een complex mengsel van aromatische koolwaterstoffen, voornamelijk indeen, naftaleen, comaron, fenol en *o*-, *m*- en *p*-kresol, met een koktraject van 140 °C-215 °C.]
- PT destilados (alcatrão de carvão), oleos leves, extractos ácidos , Extracto de resíduo de óleo leve, alta ebulição  
[Este óleo é uma mistura complexa de hidrocarbonetos aromáticos, principalmente inteno, naftaleno, cumarona, fenol, e *o*-, *m*- e *p*-cresol e destilla no intervalo de 140 °C a 215 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas. No 84650-03-3

EEC No 283-483-2

No 648-023-00-0

NOTA 4

NOTA 5

- ES : destilados (alquitrán de hulla), aceites ligeros ; Aceite carbólico  
[Combinación compleja de hidrocarburos obtenida por destilación de alquitrán de hulla. Compuesta de productos aromáticos y otros hidrocarburos, compuestos fenólicos y compuestos aromáticos con nitrógeno y con un intervalo de destilación aproximado de 150 °C a 210 °C.]
- DA : destillater (stenkultstjære), lette olier ; Karbololie  
[En sammensat blanding af carbonhydrider opnået ved destillation af stenkultstjære. Den består af aromater og andre carbonhydrider, phenolforbindelser og aromatiske nitrogenforbindelser og med koginterval omtrent fra 150 °C til 210 °C.]
- DE : Destillate (Kohlenteer), leichte Öle ; Carbolöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Kohlenteer. Besteht aus aromatischen und anderen Kohlenwasserstoffen, phenolhaltigen Verbindungen und aromatischen Stickstoffverbindungen und destilliert im ungefähren Bereich von 150 °C bis 210 °C.]
- EL : Αποσταγμάτων (λιθανθρακόπισσας), ελαφρά έλαια· Φαινολικά έλαια  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη λιθανθρακόπισσας. Συνίσταται από αρωματικούς και άλλους υδρογονάνθρακες, φαινολικές ενώσεις και αζωτούχες αρωματικές ενώσεις και αποστάζει στην περιοχή από 150 °C ως 210 °C περίπου.]
- EN : Distillates (coal tar), light oils ; Carbolic Oil  
[A complex combination of hydrocarbons obtained by distillation of coal tar. It consists of aromatic and other hydrocarbons, phenolic compounds and aromatic nitrogen compounds and distills at the approximate range of 150 °C to 210 °C (302 °F to 410 °F).]
- FR : distillats de goudron de houille, huiles légères ; Huile phénolique  
[Combinaison complexe d'hydrocarbures obtenue par distillation du goudron de houille. Se compose d'hydrocarbures aromatiques et autres, de composés phénoliques et de composés azotés aromatiques, et distille approximativement entre 150 °C et 210 °C.]
- IT : distillati (catrame di carbone), olii leggeri ; Olio carbolico  
[Combinazione complessa di idrocarburi ottenuta per distillazione del catrame di carbone. E' costituita da idrocarburi aromatici e altri idrocarburi, composti fenolici e composti aromatici azotati e distilla nell'intervallo 150 °C - 210 °C ca.]
- NL : destillaten (koolteer), lichte oliën ; Fenol olie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van koolteer. Bestaat uit aromatische en andere koolwaterstoffen, fenolhoudende verbindingen en aromatische stikstofverbindingen en heeft een destillatietraject van ongeveer 150 °C tot 210 °C.]
- PT : destilados (alcatrão de carvão), óleos leves ; óleo carbólico  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação do alcatrão de carvão. É constituída por hidrocarbonetos aromáticos e outros, compostos fenólicos e compostos de azoto aromáticos e destila no intervalo de aproximadamente 150 °C a 210 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-82-9

EEC No 266-016-7

No 648-024-00-6

NOTA H

NOTA J

ES: aceites de alquitrán, hulla; Aceite carbólico

[Destilado del alquitrán de hulla a elevada temperatura con un intervalo de destilación aproximado de 130 °C a 250 °C. Compuesto principalmente de naftaleno, alquilnaftalenos, compuestos fenólicos y bases nitrogenadas aromáticas.]

DA: tjæreolier, stenkuls-; Karbololie

[Destillat fra højtemperaturstenkulsstjære med et omtrentligt destillationsinterval fra 130 °C til 250 °C. Sammensat primært af naphthalen, alkyl-naphthalener, phenolforbindelser og aromatiske nitrogenbaser.]

DE: Teeröle, Kohlen-; Carbolöl

[Destillat aus Hochtemperaturkohlenteer mit einem Destillationsbereich von etwa 130 °C bis 250 °C. Besteht in erster Linie aus Naphthalin, Alkyl-naphthalinen, phenolhaltigen Verbindungen und aromatischen Stickstoffbasen.]

EL: πισσέλαια, άνθρακα· Φαινολικά έλαια

[Το απόσταγμα από λιθανθρακόπισσα υψηλής θερμοκρασίας με περιοχή απόσταξης από 130 °C ως 250 °C περίπου. Αποτελείται κυρίως από ναφθαλίνη, αλκυλωναφθαλίνες, φαινολικές ενώσεις και αρωματικές αζωτούχες βάσεις.]

EN: Tar oils, coal; Carbolic Oil

[The distillate from high temperature coal tar having an approximate distillation range of 130 °C to 250 °C (266 °F to 410 °F). Composed primarily of naphthalene, alkyl-naphthalenes, phenolic compounds, and aromatic nitrogen bases.]

FR: huiles de goudron de houille (charbon); Huile phénolique

[Distillat issu du goudron de houille à haute température dont l'intervalle d'ébullition s'étage approximativement de 130 °C à 250 °C. Se compose principalement de naphthalène, d'alkyl-naphthalène, de composés phénoliques et de bases aromatiques azotées.]

IT: olii di catrame, carbone; Olio carbolic

[Distillato di catrame di carbone ad alta temperatura con punto di ebollizione nell'intervallo 130-250 °C ca. E' composto principalmente da naftalene, alchilnaftaleni, composti fenolici e basi azotate aromatiche.]

NL: teeroliën, kool; Fenol olie

[Het destillaat van bij hoge temperatuur verkregen koolteer, met een destillatietraject van ongeveer 130 °C tot 250 °C. Voornamelijk samengesteld uit naftaleen, alkyl-naftalenen, fenolhoudende verbindingen en aromatische stikstofbasen.]

PT: oleos de alcatrão, carvão; óleo carbólico

[O destilado do alcatrão de carvão de temperatura elevada com um intervalo de destilação de aproximadamente 130 °C a 250 °C. Compõe-se principalmente de naftaleno, alquilnaftalenos, compostos fenólicos, e bases azotadas aromáticas.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90641-01-3

EEC No 292-624-7

No 648-026-00-7

NOTA H


NOTA J

- ES residuos del extracto (hulla), producto alcalino del aceite ligero, extracto ácido ; Extracto residuo de aceite carbólico  
[Aceite que resulta del lavado ácido de aceite carbólico lavado con base para separar las cantidades minoritarias de compuestos básicos (bases de alquitrán). Compuesto principalmente de indeno, indano y alquilbencenos.]
- DA ekstraktionsrester (kul), letolie alkaliske, syreekstrakt ; Syrefri karbololie  
[Olien fremkommet ved syrevask, af alkalivasket carbololie, for at fjerne mindre mængder af basiske forbindelser (tjærebaser). Sammensat primært af inden, indan og alkylbenzener.]
- DE Extraktückstände (Kohle), Leichtöl alkalisch, saurer Extrakt ; Carbolölextrakt-Rückstand  
[Öl, das aus saurem Waschen von alkalisch gewaschenem Karbolöl zum Entfernen der unbedeutenden Mengen basischer Verbindungen (Teerbasen) anfällt. Besteht in erster Linie aus Inden, Indan und Alkylbenzolen.]
- EL υπολειμμάτων εκχύλισματος (άνθρακα), αλκαλικού ελαφρού ελαίου, όξινο εκχύλισμα· Υπόλειμμα εκχύλισης φαινο-  
λικών ελαίων  
[Το έλαιο που προκύπτει από την όξινη έκπλυση καρβολικού ελαίου το οποίο έχει εκπλυθεί με άλκαλι για την απομάκρυνση των μικρότερων ποσοτήτων βασικών ενώσεων (βάσεις πίσσας). Αποτελείται πρωτίστως από ινδένιο, ινδάνιο και αλκυλοβενζόλια.]
- EN Extract residues (coal), light oil alk., acid ext. ; Carbolic Oil Extract Residue  
[The oil resulting from the acid washing of alkali-washed carbolic oil to remove the minor amounts of basic compounds (tar bases). Composed primarily of indene, indan and alkylbenzenes.]
- FR résidus d'extrait alcalin (charbon), huile légère, extrait acide ; Résidus d'extraction d'huile phénolique  
[Huile obtenue à partir d'une huile carbolique ayant subi un lavage alcalin, puis un lavage acide destiné à éliminer les traces de composés basiques (bases de goudron). Se compose principalement d'indène, d'indane et d'alkylbenzènes.]
- IT residui di estrazione (carbone), olio leggero alcalino; estratto con acido ; Olio carbolicco lavato  
[Olio che risulta dal lavaggio con acido di olio carbolicco lavato con alcali per rimuovere le piccole quantità di composti basici (basi del catrame). Costituito prevalentemente da indene, indano ed alchilbenzeni.]
- NL extract-residuen (kool), lichte olie alkalisch, zuurextract ; Fenol olie, extractie-residu  
[De olie die wordt verkregen door een zure spoeling van alkalisch gewassen carbololie om de ondergeschikte hoeveelheden aan basische verbindingen (teerbasen) te verwijderen. Bestaat voornamelijk uit indeen, indan en alkylbenzenen.]
- PT resíduos de extracção (carvão), alcalinos de óleo leve, extracto ácido ; Extracto de residuo de óleo carbólico  
[O óleo resultante da lavagem ácida de carboleína lavada com álcali para remover as quantidades minoritárias de compostos básicos (bases do alcatrão). É constituído principalmente por indeno, indano e alquilbenzenos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-87-4

EEC No 266-021-4

No 648-027-00-2

NOTA H

NOTA I

- ES: residuos extracto (hulla), alcalinos del aceite de alquitrán; Extracto residuo de aceite carbólico  
[Residuo obtenido de aceite de alquitrán de hulla por un lavado alcalino como hidróxido de sodio acuoso después de la separación de los ácidos del alquitrán de hulla crudos. Compuesto principalmente de naftalenos y bases nitrogenadas aromáticas.]
- DA: ekstraktionsrester (kul), tjæreolie alkaliske; Syrefri karbololie  
[Rest opnået fra stenkulstjæreolie ved en alkalisk vask, såsom vandig natriumhydroxid, efter fjernelsen af råstenkulstjæresyrer. Sammensat primært af naphthalener og aromatiske nitrogenbaser.]
- DE: Extraktückstände (Kohle), alkalische Teeröl-; Carbolölextrakt-Rückstand  
[Rückstand aus Kohlenteeröl durch alkalische Wäsche, zum Beispiel mit wässrigem Natriumhydroxid, nach Entfernen von rohen Kohlenteersäuren. Besteht in erster Linie aus Naphthalinen und aromatischen Stickstoffbasen.]
- EL: υπολείμματα εκχύλισματος (άνθρακα), αλκαλικού πισσελαίου· Υπόλειμμα εκχύλισης φαινολικών ελαίων  
[Το υπόλειμμα που λαμβάνεται από έλαιο λιθανθρακόπισσας με έκχυση με αλκαλικό μέσο όπως υδατικό υδροξείδιο νατρίου μετά την απομακρυνση των ακατέργαστων οξέων λιθανθρακόπισσας. Αποτελείται κυρίως από ναφθαλίνες και αρωματικές αζωτούχες βάσεις.]
- EN: Extract residues (coal), tar oil alk.; Carbolic Oil Extract Residue  
[The residue obtained from coal tar oil by an alkaline wash such as aqueous sodium hydroxide after the removal of crude coal tar acids. Composed primarily of naphthalenes and aromatic nitrogen bases.]
- FR: résidu d'extrait alcalin d'huile de goudron (charbon); Résidu d'extraction d'huile phénolique  
[Résidu obtenu à partir de l'huile de goudron de houille par un lavage alcalin avec, par exemple, de l'hydroxyde de sodium aqueux, après élimination des huiles acides (brutes) de goudron de houille. Se compose principalement de naphthalènes et de bases aromatiques azotées.]
- IT: residui di estrazione (carbone), olio di catrame, alcalini; Olio carbolicco lavato  
[Residuo ottenuto da olio di catrame di carbone per lavaggio alcalino, ad es. idrato di sodio in soluzione acquosa, dopo separazione degli acidi di catrame grezzi. È costituito principalmente da naftaleni e basi azotate aromatiche.]
- NL: extract-residuen (kool), teerolie-alkalische; Fenol olie, extractie-residu  
[Het residu dat wordt verkregen uit koolteerolie door een alkalische spoeling, zoals waterig natriumhydroxide, na de verwijdering van ruwe koolteerzuren. Voornamelijk samengesteld uit naftalenen en aromatische stikstofbasen.]
- PT: resíduos de extracção (carvão), alcalina do óleo de alcatrão; Extracto de resíduo de óleo carbólico  
[O resíduo obtido de óleo de alcatrão de carvão por lavagem com um alcalina com uma solução aquosa de hidróxido de sódio após remoção dos ácidos brutos de alcatrão de carvão. Compõe-se principalmente de naftalenos e bases azotadas aromáticas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90640-99-6

EEC No 292-622-6

No 648-928-00-8

NOTA H

NOTA J

- ES : aceites del extracto (hulla), aceite ligero ; Extracto ácido  
[Extracto acuoso producido por un lavado ácido de aceite carbólico lavado con base. Compuesto principalmente de sales ácidas de diversas bases nitrogenadas aromáticas incluyendo piridina, quinolina y sus alquil derivados.]
- DA : ekstraktionsolier (stenkul), letolier ; Syreekstrakt  
[Det vandige ekstrakt fremstillet ved sur vask af alkaliskvasket carbololie. Sammensat primært af syresalte af forskellige aromatiske nitrogenbaser, inklusive pyridin, quinolin og deres alkylderivater.]
- DE : Extraktöle (Kohle), Leichtöl ; Säureextrakt  
[Wässriger Extrakt, den man durch saure Wäsche aus alkalisch gewaschenem Karbolöl erhält. Besteht in erster Linie aus sauren Salzen verschiedener aromatischer Stickstoffbasen einschließlich Pyridin, Chinolin und ihren Alkylderivaten.]
- EL : ελαίων εκχυλίσματος (άνθρακα), ελαφρό έλαιο· Όξινο εκχύλισμα  
[Το υδατικό εκχύλισμα που παράγεται με όξινη έκπλυση καρβολικού οξέος το οποίο έχει εκπλυθεί με άλκαλι. Αποτελείται πρωτίστως από όξινα άλατα διαφόρων αρωματικών αζωτούχων βάσεων συμπεριλαμβανομένων της πυριδίνης, κινολίνης και αλκυλοπαράγωγων τους.]
- EN : Extract oils (coal), light oil ; Acid Extract  
[The aqueous extract produced by an acidic wash of alkali-washed carbolic oil. Composed primarily of acid salts of various aromatic nitrogen bases including pyridine, quinoline and their alkyl derivatives.]
- FR : huiles d'extrait (charbon), huile légère ; Extrait acide  
[Extrait aqueux produit par un lavage acide d'huile carbolique lavée aux alcalis. Se compose principalement des sels acides de différentes bases aromatiques azotées telles que la pyridine, la quinoléine et leurs dérivés alkylés.]
- IT : olii di estrazione (carbone), olio leggero ; Estratto acido  
[Estratto acquoso prodotto mediante lavaggio acido di olio carbolicò lavato con alcali. Costituito prevalentemente da sali acidi di varie basi azotate aromatiche include piridina, chinolina e loro derivati alchilici.]
- NL : extract-oliën (kool), lichte olie ; Zuur extract  
[Het waterige extract dat wordt gevormd door een zure spoeling van alkalisch gewassen carbololie. Bestaat voornamelijk uit zure zouten van meerdere aromatische stikstofbasen met inbegrip van pyridine, chinoline en alkylderivaten daarvan.]
- PT : oleos de extração (carvão), óleo leve ; Extractos ácidos  
[O extracto aquoso produzido por uma lavagem ácida de carboleína lavada com álcali. É constituído principalmente por sais ácidos de várias bases azotadas aromáticas incluindo piridina, quinolina e seus derivados alquilo.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68391-11-7

EEC No 269-929-9

No 648-029-00-3

NOTA H

NOTA J

- ES : piridina, alquil derivados ; Bases pirídicas  
[Combinación compleja de piridinas polialquiladas derivadas de la destilación de alquitrán de hulla o como destilados de elevado punto de ebullición, aproximadamente por encima de 150 °C de la reacción de amoníaco con acetaldehído, formaldehído o paraformaldehído.]
- DA : pyridin, alkylderivater ; Råtjærebaser  
[Den sammensatte blanding af polyalkylerede pyridiner opnået ved stenkulstjæredestillation eller som højt kogende destillater, omtrent højere end 150 °C, fra reaktion mellem ammoniak og acetaldehyd, formaldehyd eller paraformaldehyd.]
- DE : Pyridin, Alkylderivate ; Roh-Teerbasen  
[Komplexe Kombination polyalkylierter Pyridine aus der Kohlenteerdestillation oder als hochsiedende Destillate etwa über 150 °C aus der Reaktion von Ammoniak mit Acetaldehyd, Formaldehyd oder Paraformaldehyd.]
- EL : πυριδίνης, αλκυλοπαράγωγα· Βάσεις ακατέργαστης πίσσας  
[Ο πολύπλοκος συνδυασμός πολυαλκυλιωμένων πυριδινών που προέρχεται από την απόσταξη λιθανθρακόπισσας ή ως αποστάγματα υψηλής θερμοκρασίας θρασμού πάνω από 150 °C περίπου από την αντίδραση αμμωνίας με ακεταλδεϋδη, φορμαλδεϋδη ή παραφορμαλδεϋδη.]
- EN : Pyridine, alkyl derivs. ; Crude Tar Bases  
[The complex combination of polyalkylated pyridines derived from coal tar distillation or as high-boiling distillates approximately above 150 °C (302 °F) from the reaction of ammonia with acetaldehyde, formaldehyde or paraformaldehyde.]
- FR : pyridine, dérivés alkyles ; Bases brutes de goudron  
[Combinaison complexe de pyridines polyalkylées issue de la distillation du goudron de houille ou obtenue, sous la forme de distillats à point d'ébullition élevé (au-dessus de 150 °C), par réaction de l'ammoniac avec l'acétaldéhyde, le formaldéhyde ou le paraformaldéhyde.]
- IT : piridina, alchil-derivati ; Basi di catrame grezze  
[Combinazione complessa di piridine polialchilate derivate dalla distillazione del catrame di carbone oppure come distillati altobolenti con punto di ebollizione superiore a 150 °C ca. dalla reazione di ammoniaca con acetaldeide, formaldeide o paraformaldeide.]
- NL : pyridine, alkylderivaten ; Ruwe teerbasen  
[De complexe verzameling polygealkyleerde pyridinen, verkregen uit de destillatie van koolteer of als hoogkokend destillaat (boven ongeveer 150 °C) uit de reactie van ammoniak met acetaldehyd, formaldehyd of paraformaldehyd.]
- PT : piridina, derivados alquilo ; Bases de alcatrão bruto  
[A combinação complexa de piridinas polialquiladas derivadas da destilação do alcatrão de carvão ou como destilados de ponto de ebulição elevado aproximadamente superior a 150 °C da reacção de amoníaco com acetaldeído, formaldeído ou paraformaldeído.]



*Classification Klassificering Einstufung, Ταξινόμηση, Classification Classification Classificazione To leiri: Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken Rotulagem*

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*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limit, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92062-33-4

EEC No 295-548-2

No 648-030-00-9

NOTA H

NOTA J

- ES : bases de alquitrán, hulla, fracción de picolina ; Bases destiladas  
[Bases de pindina con un intervalo de ebullición aproximado de 125 °C a 160 °C obtenidas por destilación del extracto ácido neutralizado de la fracción de alquitrán que contiene base obtenida por la destilación de alquitranes de hulla bituminosa. Compuestas principalmente de lutidinas y picolinas.]
- DA : tjærebaser, stenkul-, picolinfraktion ; Basedestillater  
[Pyridinbaser, med koginterval omtrent fra 125 °C til 160 °C, opnået ved destillation af et neutraliseret syreekstrakt fra den baseholdige tjærefraktion, opnået ved destillationen af bituminøse stenkulstjære. Sammensat hovedsageligt af lutidiner og picoliner.]
- DE : Teerbasen, Kohle-, Pikolin-Fraktion ; Destillat-Basen  
[Pyridinbasen, die im Bereich von etwa 125 °C bis 160 °C siedend, erhalten durch Destillation von neutralisiertem saurem Extrakt der Basis-enhaltenden Teer-Fraktion aus der Destillation von Steinkohlenteer. Besteht hauptsächlich aus Lutidinen und Pikolinen.]
- EL : βάσεων πίσσας, άνθρακα κλάσμα πικολίνης· Βάσεις αποστάγματος  
[Βάσεις πυριδίνης που βράζουν στην περιοχή από 125 °C έως 160 °C περίπου και λαμβάνονται με απόσταξη εξουδετερωμένου οξίνου εκχυλίσματος του περιέχοντος βάσεις κλάσματος πίσσας το οποίο λαμβάνεται με την απόσταξη διτουμενικών λιθανθρακοπισσών. Αποτελείται κυρίως από λουτιδίνες και πικολίνες.]
- EN : Tar bases, coal, picoline fraction ; Distillate Bases  
[Pyridine bases boiling in the range of approximately 125 °C to 160 °C (257 °F 320 °F) obtained by distillation of neutralized acid extract of the base-containing tar fraction obtained by the distillation of bituminous coal tars. Composed chiefly of lutidines and picolines.]
- FR : bases de goudron de houille, fraction picoline ; Bases distillées  
[Bases pyridiniques dont le point d'ébullition est compris approximativement entre 125 °C et 160 °C, et qui sont obtenus par distillation de l'extrait acide neutralisé de la fraction de goudron contenant des bases obtenue par distillation de goudrons de houille bitumineux. Se composent principalement de lutidines et de picolines.]
- IT : basi di catrame, carbone, frazione picolina ; Basi distillate  
[Basi piridiniche con intervallo di ebollizione 125 °C-160 °C ca. ottenute per distillazione dell'estratto acido neutralizzato della frazione di catrame contenente basi ottenuta dalla distillazione di catrami di carbone bituminoso. Costituita principalmente da lutidine e picoline.]
- NL : teerbasen, kool, picolinefractie ; Gedestilleerde teerbasen  
[Pyridinebasen met een kooktraject van ongeveer 125 °C tot 160 °C die worden verkregen door destillatie van geneutraliseerd zuurextract van de basebevattende teerfractie die wordt verkregen door de destillatie van bitumineuze koolterren. Voornamelijk samengesteld uit lutidinen en picolinen.]
- PT : bases do alcatrão, carvão, fracção de picolinas ; Bases destiladas  
[Bases pindínicas que destilam no intervalo de aproximadamente 125 °C a 160 °C obtidas por destilação de extracto ácido neutralizado da fracção do alcatrão contendo bases obtida pela destilação de alcatrões de carvão betuminoso. São constituídas sobretudo por lutidinas e picolinas.]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione Indelning, Classificasjon*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Case No 91082-52 9

FEC No 293 766-2

No 648-031-00-4

NOTA H

NOTA J

**FS.** Bases de alquitran, hulla fracción de lutidina, Bases destiladas

DA trykbriser, stenkul, lutidinfraction; Basedestillatør

DD: Teichsen, Kohle, Lutidinfraktion, Destillat Basen

Γ1    *Βάσις πυκνής α. θέρσκα κλίσμα λουτιδίνης Βάσις αποσταγματος*

**1-N** Tar bases, coal, lundine fraction, Distillate Bases

TF = 1 = de pyrolyse de houille, fraction lutidine, Bases distillées

II) Oli di catrame-carbone, frazione lundinica, Basi distillate

**N1**    teerbasen, kool, lutidinefractie, Gedestilleerde teerbasen

PT: bases do alcatrao e urvão, fração de lutidina, Bases destiladas

Classification or Classification Indefinition Classification Indefinition Indefinition, Classification

Card Cat 2, R 45

*Εγκυκλίου Πάσης ης Περιεχούσης Επισήμανση Labelling Etiquette Ιδιαιτέρως Περιεχόντων Ροτμαγές*



Limits de concentration Limits de concentration Concentrationgrenzen, Limites de concentraçao

[illegible]

Cas No 68937-63-3

EEC No 273-077-3

No 648-032-00-X

NOTA H


NOTA J

- ES : aceites del extracto (hulla), base de alquitrán, fracción de colidina ; Bases destiladas  
[Extracto producido por la extracción ácida de bases a partir de aceites aromáticos de alquitrán de hulla, neutralización y destilación de las bases. Compuesto principalmente de colidinas, anilina, toluidinas, lutidinas y xilidinas.]
- DA : ekstraktionsolier (kul), tjærebase-, collidinfraktion ; Basedestillater  
[Ekstraktet fremstillet ved den sure ekstraktion af baser fra aromatiske olier fra rå kultjære, neutralisation, og destillation af baserne. Sammensat primært af collidiner, anilin, toluidiner, lutidiner og xylidiner.]
- DE : Extraktöle (Kohle), Teerbase, Collidin-Fraktion ; Destillat-Base  
[Extrakt, hergestellt durch saure Extraktion von Basen aus Aromaten-enthaltende Öle von rohem Kohlenteer, Neutralisation und Destillation der Basen. Besteht in erster Linie aus Collidinen, Anilin, Toluidinen, Lutidinen, Xylidinen.]
- EL : εκχύλισμα ελαίων (άνθρακα), βάση πίσσας, κλάσμα κολλιδίνης· Βάσεις αποστάγματος  
[Το εκχύλισμα του παράγεται με όξινη εκχύλιση βάσεων από ακατέργαστα αρωματικά έλαια λιθανθρακόπισσας, εξουδετέρωση και αποστάξη των βάσεων. Αποτελείται πρωτίστως από κολλιδίνες, ανιλίνη, τολουιδίνες, λουτιδίνες, ξυλιδίνες.]
- EN : Extract oils (coal), tar base, collidine fraction ; Distillate Bases  
[The extract produced by the acidic extraction of bases from crude coal tar aromatic oils, neutralization, and distillation of the bases. Composed primarily of collidines, aniline, toluidines, lutidines, xylidines.]
- FR : huiles d'extraction (charbon), base de goudron, fraction collidine ; Bases distillées  
[Extrait obtenu par extraction à l'acide, neutralisation et distillation des bases issues d'huiles aromatiques de goudron de houille brut. Se compose essentiellement de collidines, d'aniline, de toluidines, de lutidines et de xylidines.]
- IT : olii di estrazione (carbone), basi del catrame, frazione collidina ; Basi distillate.  
[Estratto prodotto per estrazione acida di basi derivanti da olii aromatici grezzi di catrame di carbone, neutralizzazione e distillazione delle basi. È composto principalmente di collidine, anilina, toluidine, lutidine e xilidine.]
- NL : extractoliën (kool), teerbase, collidinefractie ; Gedestilleerde teerbasen  
[Het extract dat wordt gevormd door de zure extractie van basen uit aromatische oliën die afkomstig zijn uit ruwe koolteer, neutralisatie alsmede destillatie van de basen. Voornamelijk samengesteld uit collidinen, aniline, toluidinen, lutidinen en xylidinen.]
- PT : oleos de extracção (carvão), de bases do alcatrão, fracção de colidina ; Bases destiladas  
[O extracto produzido pela extracção ácida de bases de óleos aromáticos de alcatrão de carvão bruto, neutralização, e destilação das bases. Compõe-se principalmente de colidinas, anilina, toluidinas, lutidinas, xilidinas.]

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92062-28-7

EEC No 295-543-5

No 648-033-00-5

NOTA H


NOTA J

- ES:** bases de alquitrán, hulla, fracción de colidina ; Bases destiladas  
[Fracción de la destilación con un intervalo de ebullición aproximado de 181 °C a 186 °C de las bases de petróleo obtenida de las fracciones de alquitrán que contienen base extraídas con ácido neutralizadas, obtenidas por la destilación de alquitrán de hulla bituminosa. Contiene principalmente anilina y colidinas.]
- DA:** tjærebaser, stenkuls-, collidinfraktion ; Basedestillater  
[Destillationsfraktionen, med koginterval omtrent fra 181 °C til 186 °C, fra råbaseme, opnået fra den neutraliserede, syreekstraherede, baseholdige tjærefraktion, opnået ved destillationen af bituminøs stenkulstjære. Den indeholder hovedsageligt anilin og collidiner.]
- DE:** Teerbasen, Kohle-, Kollidin-Fraktion ; Destillat-Basen  
[Destillations-Fraktion, die im Bereich von etwa 181 °C bis 186 °C siedet und aus den rohen Basen aus den neutralisierten, durch Säure extrahierten, Basis-enhaltenden Teer-Fractionen aus der Destillation von Steinkohlenteer erhalten wird. Enthält hauptsächlich Anilin und Kollidine.]
- EL:** βάσεων πίσσας, άνθρακα, κλάσμα κολλιδίνης ; Βάσεις αποστάγματος  
[Το κλάσμα απόσταξης που θράζει στην περιοχή από 181 °C ως 186 °C περίπου και λαμβάνεται από τις ακατέργαστες βάσεις ή/ή οποιες λαμβάνονται από τα εξουδετερωμένα, εκχυλισμένα με οξύ και περιέχοντα βάσεις κλάσματα πίσσας που λαμβάνονται με την απόσταξη διτομμενικής λιθανθρακόπισσας. Περιέχει κυρίως ανιλίνη και κολλιδίνες.]
- EN:** Tar bases, coal, collidine fraction ; Distillate Bases  
[The distillation fraction boiling in the range of approximately 181 °C to 186 °C (356 °F to 367 °F) from the crude bases obtained from the neutralized, acid-extracted base-containing tar fractions obtained by the distillation of bituminous coal tar. It contains chiefly aniline and collidines.]
- FR:** bases de goudron de houille, fraction collidine ; Bases distillées  
[Fraction de distillation dont l'intervalle d'ébullition s'étend approximativement de 181 °C à 186 °C et qui est issue des bases brutes obtenues à partir des fractions de goudron contenant des bases obtenues par distillation de goudron de houille bitumineux, et soumises à une extraction acide et neutralisées. Contient principalement de l'aniline et des collidines.]
- IT:** basi di catrame, carbone, frazione collidina ; Basi distillate  
[La frazione di distillazione con intervallo di ebollizione 181 °C-186 °C ca. dalle basi grezze da frazioni di catrame neutralizzate, estratte con acido, contenenti basi, ottenute da distillazione di catrame di carbone bituminoso. Contiene principalmente anilina e collidine.]
- NL:** teerbasen, kool, collidinefractie ; Gedestilleerde teerbasen  
[De destillatiefractie met een kooktraject van ongeveer 181 °C tot 186 °C die afkomstig is uit de ruwe basen die worden verkregen uit de geneutraliseerde zuurgeëxtraheerde basebevattende teerfracties die worden gevormd door de destillatie van bitumineuze koolteer. Bevat voornamelijk aniline en collidinen.]
- PT:** bases do alcatrão, carvão, fracção de colidinas ; Bases destiladas  
[A fracção da destilação que destila no intervalo de aproximadamente 181 °C a 186 °C das bases brutas obtidas das fracções de alcatrão contendo bases extraídas com ácido e neutralizadas obtidas a partir da destilação de carvão betuminoso. É constituída sobretudo por anilina e colidinas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 9202-27-6

EEC No 295-541-4

No 648-034-00-0

NOTA H

NOTA I

ES: bases de alquitrán, hulla, fracción de anilina; Bases destiladas

[Fracción de la destilación con un intervalo de ebullición aproximado de 180 °C a 200 °C de las bases de petróleo obtenida desfenolizando y degradando el aceite fenicado de la destilación de alquitrán de hulla. Contiene principalmente anilina, colidinas, lutidinas y toluidinas.]

DA: tjærebaser, stenkuls-, anilinfraction; Basedestillater

[Destillationsfraktionen, med kogesinterval omtrent fra 180 °C til 200 °C, fra råbaser opnået ved at afphenolere og afbase den carbolerede olie fra destillationen af stenkulstjære. Den indeholder hovedsageligt anilin, collidiner, lutidiner og toluidiner.]

DE: Teerbasen, Kohle-, Anilin-Fraktion; Destillat-Basen

[Destillations-Fraktion, die im Bereich von etwa 180 °C bis 200 °C siedet und aus den rohen Basen erhalten wird, indem karbonisiertes Öl aus der Destillation von Kohlentee dephenoliert und die Basis entfernt wird. Enthält hauptsächlich Anilin, Kollidine, Lutidine und Toluidine.]

EL: βάσεων πίσσας, άνθρακα, κλάσμα ανιλίνης· Βάσεις αποστάγματος

[Το κλάσμα απόσταξης που βράζει στην περιοχή από 180 °C ως 200 °C περίπου και λαμβάνεται από τις ακατέργαστες βάσεις οι οποίες λαμβάνονται με απομάκρυνση των φαινολών και των βάσεων από το καρβολωμένο έλαιο που προέρχεται από την αποσταξη λιθανθρακόπισσας. Περιέχει κυρίως ανιλίνη, κολλιδίνες, λουτιδίνες και τολιδίνες.]

EN: Tar bases, coal, aniline fraction; Distillate Bases

[The distillation fraction boiling in the range of approximately 180 °C to 200 °C (356 °F to 392 °F) from the crude bases obtained by dephenolating and debasing the carbolated oil from the distillation of coal tar. It contains chiefly aniline, collidines, lutidines and toluidines.]

FR: bases de goudron de houille, fraction aniline; Bases distillées

[Fraction de distillation dont l'intervalle d'ébullition s'étend approximativement de 180 °C à 200 °C et qui est issue des bases brutes obtenues par élimination des phénols et des bases de l'huile phénolée issue de la distillation du goudron de houille. Se compose principalement d'aniline, de collidines, de lutidines et de toluidines.]

IT: basi di catrame, carbone, frazione anilina; Basi distillate

[La frazione di distillazione con intervallo di ebollizione 180 °C-200 °C ca. da basi grezze ottenute per eliminazione dei fenoli e delle basi dall'olio carbolato da distillazione di catrame di carbone. Contiene principalmente anilina, collidine, lutidine e toluidine.]

NL: teerbasen, kool, anilinefractie; Gedestilleerde teerbasen

[De destillatiefractie met een kooktraject van ongeveer 180 °C tot 200 °C die afkomstig is uit de ruwe basen die worden verkregen door de verwijdering van fenolen en basen uit de gecarboliseerde olie die afkomstig is uit de destillatie van koolteer. Bevat voornamelijk aniline, collidinen, lutidinen en toluidinen.]

PT: bases do alcatrão, carvão, fracção de anilinas; Bases destiladas

[A fracção da destilação que destila no intervalo de aproximadamente 180 °C a 200 °C das bases brutas obtidas por remoção de fenóis e desbasificação de carboleína da destilação de alcatrão de carvão. É construída sobretudo por anilina, colidinas, lutidinas e toluidinas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91082-53-0

EEC No 293-767-8

No 648-035-00-6

NOTA H

NOTA I

ES: bases de alquitrán, hulla, fracción de toluidina ; Bases destiladas

DA: tjærebaser, stenkuls-, toluidinfraktion ; Basedestillater

DE: Teerbasen, Kohle, Toluidinfraktion ; Destillat-Basen

EL: βάσεις, πίσσας άνθρακα, κλάσμα τολουιδίνης· δάσεις αποστάγματος

EN: Tar bases, coal, toluidine fraction ; Distillate Bases

FR: bases de goudron de houille, fraction toluidine ; Bases distillées

IT: basi di catrame, carbone, frazione toluidinica ; Basi distillate


NL: teerbasen, kool, toluidinefractie ; Gedestilleerde teerbasen

PT: bases do alcatrão, hulha, fracção de toluidina ; Bases destiladas

Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2 ; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

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Límite de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 91995-31-2

EEC No 295-292-1

No 648-036-00-1

NOTA 1


NOTA 2

- ES : destilados (petróleo), aceite de pirólisis de la fabricación de alqueno-alquino, mezclado con alquitrán de hulla a elevada temperatura, fracción de indeno ; Redestilados  
[Combinación compleja de hidrocarburos obtenida como un redestilado de la destilación fraccionada de alquitrán de hulla bituminosa a elevada temperatura y aceites residuales que se obtienen por producción pirólítica de alquenos y alquinos de los productos del petróleo o gas natural. Compuesta en su mayor parte de indeno y con un intervalo de ebullición aproximado de 160 °C a 190 °C.]
- DA : destillater (råolie), alken-alkyn-fabrikations-pyrolyseolie, blandet med højtemperatursstenkultsjære, indenfraktion ; Redestillater  
[En sammensat blanding af carbonhydrider opnået som et redestillat fra den fraktionerede destillation af højtemperatursjære fra bituminøse kul, og restolier, der er opnået fra den pyrolytiske fremstilling af alkenier og alkyner ud fra råolieprodukter eller naturgas. Den består overvejende af inden, og har koginterval omtrent fra 160 °C til 190 °C.]
- DE : Destillate (Erdöl), Alken-Alkinherstellung Pyrolyseöl, gemischt mit Hochtemperatur-Kohlenteer, Inden-Fraktion ; Redestillate  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus der Redestillation der fraktionierten Destillation von Steinkohlen-Hochtemperatur-Teer und Rückstandsölen, die aus der pyrolytischen Herstellung von Alkenen und Alkinen aus Erdölprodukten oder Erdgas stammen, erhält. Besteht vorherrschend aus Inden und siedet im Bereich von ungefähr 160 °C bis 190 °C.]
- EL : αποσταγμάτων (πετρελαίου), ελαίου πυρόλυσης παρασκευής αλκενίου-αλκυνίου, μείγματος με υψηλής θερμοκρασίας λιθάνθρακόπισσα, κλάσμα ινδενίου· Επαναπόσταγμα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται ως επαναπόσταγμα από την κλασματικής απόσταξη υψηλής θερμοκρασίας πίσσας λιθάνθρακα και υπολειμματικών ελαίων τα οποία λαμβάνονται με την πυρολυτική παραγωγή αλκενίων και αλκυνίων από προϊόντα πετρελαίου ή φυσικό αέριο. Συνίσταται κυρίως από ινδένιο και βράζει στην περιοχή από 160 °C ως 190 °C περίπου.]
- EN : Distillates (petroleum), alkene-alkyne manuf. pyrolysis oil, mixed with high-temp. coal tar, indene fraction ; Redistillates  
[A complex combination of hydrocarbons obtained as a redistillate from the fractional distillation of bituminous coal high temperature tar and residual oils that are obtained by the pyrolytic production of alkenes and alkynes from petroleum products or natural gas. It consists predominantly of indene and boils in a range of approximately 160 °C to 190 °C (320 °F to 374 °F).]
- FR : distillats (pétrole), huile de pyrolyse de fabrication d'alcènes et d'alcynes, mélangée à du goudron de houille à haute température, fraction indène ; Fractions secondaires  
[Combinaison complexe d'hydrocarbures obtenue comme redistillat dans la distillation fractionnée de goudron à haute température de charbon bitumineux et d'huiles résiduelles issues de la production par pyrolyse d'alcènes et d'alcynes à partir de produits pétroliers ou de gaz naturel. Se compose principalement d'indène ; son point d'ébullition est compris approximativement entre 160 °C et 190 °C.]
- IT : distillati (petrolio) olio di pirólisi della produzione di alchene-alchino, miscelato con catrame di carbone ad alta temperatura, frazione indene ; Ridistillati  
[Combinazione complessa di idrocarburi ottenuta quale ridistillato dalla distillazione frazionata di catrame ad alta temperatura da carbone bituminoso ed olii residui ottenuti dalla produzione pirolitica di alcheni ed alchini da prodotti petroliferi o gas naturale. È costituita prevalentemente da indene ed ha un punto di ebollizione nell'intervallo 160 °C-190 °C ca.]
- NL : Destillaten (aardolie), alkeen-alkynvervaardigings-pyrolyse-olie, gemengd met hoge temperatuur koolteer, indeenfractie ; Geherdestilleerde fracties  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een herdestillaat uit de fractionele destillatie van hoge temperatuur teer uit bitumineuze kool en residuoliën die zijn verkregen bij de pyrolytische productie van alkenen en alkyenen uit aardolieprodukten of aardgas. Bestaat voornamelijk uit indeen en heeft een kooktraject van ongeveer 160 °C tot 190 °C.]
- PT : destilados (petróleo), óleo de pirólise da produção de alcenos-alcinos, misturado com alcatrão de carvão de temperatura elevada, fracção de indeno ; Redestilados  
[Uma combinação complexa de hidrocarbonetos obtida como o redestilado da destilação fraccionada de alcatrão de carvão betuminoso de temperatura elevada e de óleos residuais que são obtidos pela produção de alcenos e alcinos por pirólise de produtos petrolíferos ou gás natural. É constituída predominantemente por indeno e destila no intervalo de aproximadamente 160 °C a 190 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãu*


Cas No 91995-35-6

EEC No 295-295-8

No 648-037-00-7

NOTA H


NOTA J

- ES : destilados (hulla), aceites residuales de la pirólisis de alquitrán de hulla, aceites de naftaleno ; Redestilados  
[Redestilado obtenido de la destilación fraccionada de alquitrán de hulla bituminosa a elevada temperatura y aceites residuales de pirólisis y con un intervalo de ebullición aproximado de 190 °C a 270 °C. Compuesto principalmente de aromáticos dinucleares sustituidos.]
- DA : destillater (kul), stenkulstjære-restpyrolyseolier, naphthalenolier ; Redestillater  
[Redestillater, opnået fra den fraktionerede destillation af højtemperaturstjære fra bituminøse kul og pyrolyserestolier, med koginterval omtrent fra 190° C til 270° C. Sammensat primært af substituerede, bicycliske aromater.]
- DE : Destillate (Kohle), Kohlenteerrückstand Pyrolyseöle, Naphthalinöle ; Redestillate  
[Das Redestillat, das man aus fraktionierter Destillation von Steinkohlen-Hochtemperatur-Teer und Pyrolyse-Rückstandsölen erhält. Siedet im Bereich von etwa 190° C bis 270° C. Besteht in erster Linie aus substituierten dinuklearen Aromaten.]
- EL : αποσταγματα (πετρελαίου), υπολειμματικών ελαίων πυρόλυσης λιθανθρακόπισσας, έλαια ναφθαλίνης;  
Επαναπόσταγμα  
[Το επαναπόσταγμα που λαμβάνεται από την κλασματική απόσταξη υψηλής θερμοκρασίας πίσσας διτουμενικού άνθρακα και υπολειμματικών ελαίων πυρόλυσης που δράζει στην περιοχή από 190 °C ως 270 °C περίπου. Αποτελείται πρωτίστως από υποκα-  
τεστημένα διπύρρηνα αρωματικά.]
- EN : Distillates (coal), coal tar-residual pyrolysis oils, naphthalene oils ; Redistillates  
[The redistillate obtained from the fractional distillation of bituminous coal high temperature tar and pyrolysis residual oils and boiling in the range of approximately 190 °C to 270 °C (374 °F to 518 °F). Composed primarily of substituted dinuclear aromatics.]
- FR : distillats (charbon), goudron de houille, huiles résiduelles de pyrolyse, huiles de naphthalène ; Fractions secondaires  
[Redistillat obtenu par distillation fractionnée du mélange de goudron de charbon bitumineux à haute température et d'huiles résiduelles de pyrolyse, et dont le point d'ébullition est approximativement compris entre 190 °C et 270 °C. Se compose principa-  
lement d'hydrocarbures aromatiques bicycliques substitués.]
- IT : distillati (carbone), olii residui di pirolisi di catrame di carbone, olii naftalenici ; Ridistillati  
[Ridistillato ottenuto dalla distillazione frazionata di catrame ad alta temperatura di carbone bituminoso ed olii residui di pirolisi, con punto di ebollizione nell'intervallo 190 °C-270 °C ca. Costituito prevalentemente da aromatici diciclici sostituiti.]
- NL : destillaten (kool), residuele pyrolyse-oliën uit koolteer, naftaleenoliën ; Geherdestilleerde fracties  
[Het herdestillaat dat wordt verkregen uit de gefractioneerde destillatie van bij hoge temperatuur uit bitumineuze kool verkregen teer en residuele pyrolyse-oliën, met een kooktraject van ongeveer 190 °C tot 270 °C. Voornamelijk samengesteld uit gesubstitueerde dinucleaire aromaten.]
- PT : destilados (carvão), óleos residuais de pirólise-alcatrão de carvão, óleos de naftaleno ; Redestilados  
[O redestilado obtido da destilação fraccionada de alcatrão de carvão betuminoso de temperatura elevada e óleos residuais de pirólise e que destila no intervalo de aproximadamente 190 °C a 270 °C. É constituído principalmente por aromáticos dinucleares substituídos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995-66-3

EEC No 295-329-1

No 648-038-00-2

NOTA H

NOTA J

- ES aceites del extracto (hulla), aceites residuales de pirólisis del alquitrán de hulla, aceite de naftaleno, redestilado ; Redestilados  
[Redestilado de la destilación fraccionada del aceite de metilnaftaleno degradado y desfenolado obtenido de un alquitrán de hulla bituminosa a elevada temperatura y aceites residuales de pirólisis con un intervalo de ebullición de 220 °C a 230 °C. Compuesto en su mayor parte de hidrocarburos aromáticos dinucleares sustituidos y no sustituidos.]
- DA ekstraktionsrester (kul), stenkulstjære og restpyrolyseolier, naphthalenolie, restdestillater ; Redestillater  
[Redestillatet fra den fraktionerede destillation af alphenoleret og afbaset methylnaphthalenolie opnået fra højtemperaturstjære fra bituminøse kul og restpyrolyseolier, med koginterval omtrent fra 220 °C til 230 °C. Det består overvejende af usubstituerede og substituerede, bicycliske, aromatiske carbonhydrider.]
- DE Extraktöle (Kohle), Kohlenteerrückstand Pyrolyseöle, Naphthalinöl, Redestillat ; Redestillate  
[Redestillat aus der fraktionierten Destillation von dephcnolierem und von der Basis befreitem Methylnaphthalinöl, erhalten aus Steinkohlen-Hochtemperatur-Teer und Pyrolyserückstandsölen, siedet im ungefähren Bereich von 220 °C bis 230 °C. Besteht vorherrschend aus unsubstituierten und substituierten dinuklearen aromatischen Kohlenwasserstoffen.]
- EL ελαία εκχύλισης (άνθρακα), ελαίων πυρόλυσης υπολειμμάτων λιθανθρακόπισσας, ελαίου ψαφθαλίνης, επαναπόσταγμα: Επαναπόσταγμα  
[Το επαναπόσταγμα από την κλασματική απόσταξη ελαίου μεθυλοναφθαλίνης από το οποίο έχουν απομακρυνθεί οι φαινόλες και οι βάσεις, που λαμβάνεται από υψηλής θερμοκρασίας πίσσα διτομμενικού άνθρακα και υπολειμματικά έλαια πυρόλυσης, που βράζει στην περιοχή από 220 °C ως 230 °C περίπου. Συνίσταται κυρίως από μη υποκαταστημένους και υποκαταστημένους διπύρηνους αρωματικούς υδρογονάνθρακες.]
- EN Extract oils (coal), coal tar-residual pyrolysis oils, naphthalene oil, redistillate ; Redistillates  
[The redistillate from the fractional distillation of dephenolized and debased methylnaphthalene oil obtained from bituminous coal high temperature tar and pyrolysis residual oils boiling in the approximate range of 220 °C to 230 °C (428 °F to 446 °F). It consists predominantly of unsubstituted and substituted dinuclear aromatic hydrocarbons.]
- FR huiles d'extraction (charbon), goudron de houille, huiles résiduelles de pyrolyse, huile de naphthalène, redistillat ; Fractions secondaires  
[Redistillat issu de la distillation fractionnée d'un mélange d'huiles résiduelles de pyrolyse et d'huile de naphthalène, débarrassée des bases et de phénols, issue du goudron à haute température de charbon bitumineux, et dont le point d'ébullition est approximativement compris entre 220 °C et 230 °C. Se compose principalement d'hydrocarbures aromatiques bicycliques substitués et non substitués.]
- IT Olii estratti (carbone) olii residui di pirolisi di catrame di carbone, olio naftalenico, ridistillato ; Ridistillati  
[Ridistillato dalla distillazione frazionata di olio metilnaftalenico defenolato e liberato dalle basi ottenuto da catrame ad alta temperatura da carbone bituminoso e da olii residui di pirolisi con punto di ebollizione nell'intervallo 220 °C-230 °C ca. È costituito prevalentemente da idrocarburi aromatici diciclici sostituiti e non sostituiti.]
- NL extract-oliën (kool), residuele pyrolyse-oliën uit koolteer, naftaleenolie, herdestillaat ; Geherdestilleerde fracties  
[Het herdestillaat dat afkomstig is uit de gefractioneerde destillatie van, van basen en fenolen ontdane, methylnaftaleenolie die wordt verkregen uit bij hoge temperatuur uit bitumineuze kool verkregen teer en residuele pyrolyse-oliën en dat een kooktraject heeft van ongeveer 220 °C tot 230 °C. Bestaat voornamelijk uit ongesubstitueerde en gesubstitueerde dinucleaire aromatische koolwaterstoffen.]
- PT resíduos de extracção (carvão), óleos residuais de alcatrão de carvão, óleo de naftaleno, redestilado ; Redestilados  
[O redestilado da destilação fraccionada de óleo de metilnaftaleno sem fenóis e sem bases obtido de alcatrão de carvão betuminoso de temperatura elevada e óleos residuais de pirólise e que destila no intervalo de aproximadamente 220 °C a 230 °C. É constituído predominantemente por hidrocarbonetos aromáticos dinucleares substituídos e não substituídos.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 122070-79-5

EEC No 310-170-0

No 648-039-00-8

NOTA H

NOTA J

- ES : aceites del extracto (hulla), aceites residuales de pirólisis de alquitrán de hulla, aceites de naftaleno ; Redestilados  
[Aceite neutro obtenido degradando y desfenolizando el aceite obtenido de la destilación de alquitrán a elevada temperatura y de aceites residuales de pirólisis con un intervalo de ebullición de 225 °C a 255 °C. Compuesto principalmente de hidrocarburos aromáticos dinucleares sustituidos.]
- DA : ekstraktionsolier (stenkul), stenkultstjære rest-pyrolyseolier, naphthalenolier ; Redestillater  
[En neutral olie opnået ved fjernelse af base og phenol fra olien opnået ved destillationen af højtemperaturstjære og pyrolyserestolier, der koger i områder fra 225 °C til 255 °C. Sammensat primært af substituerede, toleddede, aromatiske carbonhydrider.]
- DE : Extraktöle (Kohle), Kohleteerrückstand Pyrolyseöle, Naphthalinöle ; Redestillate  
[Neutrales Öl erhalten durch Dealkylierung und Dephenolierung des Öles erhalten aus der Destillation von Hochtemperaturteer und Pyrolyserückstandsölen mit einem Siedebereich von 225 °C bis 255 °C. Besteht vorherrschend aus substituierten dinuklearen aromatischen Kohlenwasserstoffen.]
- EL : έλαια εκχύλισης (άνθρακα), υπολειμματικά έλαια πυρόλυσης λιθανθρακόπισσας, ναφθαλινέλαια· Επαναπόσταγμα [Ουδέτερο έλαιο, που λαμβάνεται με απομάκρυνση βάσεων και φαινόλης από έλαιο, που έχει ληφθεί από την απόσταξη πίσσας υψηλής θερμοκρασίας και υπολειμματικών ελαίων πυρόλυσης με περιοχή βρασμού από 225 °C ως 255 °C. Αποτελείται κυρίως από υποκατεστημένους διπύρηνους αρωματικούς υδρογονάνθρακες.]
- EN : Extract oils (coal), coal tar-residual pyrolysis oils, naphthalene oils ; Redistillates  
[A neutral oil obtained by debasing and dephenolating the oil obtained from the distillation of high temperature tar and pyrolysis residual oils which has a boiling range of 225 °C to 255 °C (437 °F to 491 °F). Composed primarily of substituted dinuclear aromatic hydrocarbons.]
- FR : huiles d'extraction (charbon), huiles résiduelles de pyrolyse de goudron de houille, huiles de naphthalène ; Fractions secondaires  
[Huile neutre obtenue par débasage et déphénolation de l'huile résultant de la distillation à haute température d'huiles résiduelles de pyrolyse de goudron, dont le point d'ébullition se situe approximativement entre 225 °C et 255 °C. Se compose principalement d'hydrocarbures aromatiques bicycliques substitués.]
- IT : olii estratti (carbone), olii residui da pirólisi di catrame di carbone, olii di naftalene ; Ridistillati  
[Olio neutro ottenuto per eliminazione di basi e fenoli nell'olio ottenuto dalla distillazione di catrame ad alta temperatura e pirólisi degli olii residui che ha punto di ebollizione nell'intervallo 225 °C-255 °C. Composto prevalentemente da idrocarburi aromatici sostituiti a due anelli.]
- NL : extractie-oliën (kool), kolenteer en pyrolyse-residuoliën, naftaleenoliën ; Geherdestilleerde fracties  
[Een neutrale olie, die wordt verkregen door het van basen en fenolen ontdoen van de olie afkomstig uit de destillatie van hoge-temperatuur-teer en pyrolyse-residuoliën, met een kooktraject van 225 °C tot 255 °C. Voornamelijk samengesteld uit gesubstitueerde dinucleaire aromatische koolwaterstoffen.]
- PT : óleos de extracção (carvão), alcatrão de carvão e óleos residuais de pirólise, óleos de naftaleno ; Redestilados  
[Um óleo neutro obtido por desbasificação e desfenolização do óleo obtido da destilação de alcatrão de temperatura elevada e óleos residuais de pirólise que tem um intervalo de destilação de 225 °C a 255 °C. É constituído principalmente por hidro-carbonetos aromaticos dinucleares substituidos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 122070 80-8

EEC No 310-171-6

No 648 040 00-3

NOTA H

NOTA J

- ES** aceites del extracto (hulla), aceites residuales de pirólisis de alquitrán de hulla, aceite de naftaleno, residuos de destilación, **Redestilados**  
[Residuo de la destilación de aceite de metilnaftaleno desfenolado y degradado (de alquitrán de hulla bituminosa y aceites residuales de pirólisis) con un intervalo de ebullición de 240 °C a 260 °C. Compuesto principalmente de hidrocarburos aromáticos y heterocíclicos dinucleares sustituidos]
- DA** ekstraktionsolier (stenkul), stenkulstjære rest-pyrolyseolier, naphthalenolie, destillationsrester; **Redestillater**  
[Rest fra destillation af methylnaphthalenolie (fra bituminøs stenkulstjære og pyrolyseolier), der er befnet for phenol og base, med et koginterval fra 240 °C til 260 °C. Sammensat primært af substituerede toleddede, aromatiske og heterocycliske carbonhydroider]
- DE** Extraktöle (Kohle), Kohleteerrückstand Pyrolyseöle, Naphthalinöl, Destillationsrückstände, **Redestillate**  
[Rückstand aus der Destillation von dephenolisiertem und dealkyliertem Methylnaphthalinöl (aus bituminösem Kohleteer und pyrolyseolien) mit einem Siedebereich von 240 °C bis 260 °C. Besteht vorwiegend aus substituierten dinuklearen aromatischen und heterocyclischen Kohlenwasserstoffen]
- EL** έλαια εκχύλισης (άνθρακα), λιθανθρακόπισσας υπολειμματικά έλαια πυρόλυσης, ναφθαλινέλαια, υπολειμματικά αποστάξης **Επαναποστάγμα**  
[Υπολείμμα από την απόσταξη επαλλαγμένου από φαινόλες και βάσεις μεθυλωναφθαλινέλαιου (από βιτωμινώδη πίσσα, και υπολειμματικά έλαια πυρόλυσης) με περιοχή βρασμού από 240 °C ως 260 °C. Αποτελούνται κυρίως από υποκατεστημένους αρωματικούς και ετεροκυκλικούς υδρογονάνθρακες]
- EN** Extract oils (coal), coal tar residual pyrolysis oils, naphthalene oil, distn. residues, **Redistillates**  
[Residue from the distillation of dephenolized and debased methylnaphthalene oil (from bituminous coal tar and pyrolysis residual oils) with a boiling range of 240 °C to 260 °C (464 °F to 500 °F). Composed primarily of substituted dinuclear aromatic and heterocyclic hydrocarbons]
- FR** huiles d'extraction (charbon), huiles résiduelles de pyrolyse de goudron de houille, huile de naphthalène, résidus de distillation, **Fractions secondaires**  
[Résidu obtenu par distillation d'huile de methylnaphthalène débasée et déphénolée (des huiles résiduelles de pyrolyse de goudron de houille bitumineux) dont le point d'ébullition se situe approximativement entre 240 °C et 260 °C. Se compose principalement d'hydrocarbures aromatiques bicycliques et hétérocycliques substitués]
- IT** olii estratti (carbone), olii residui di pirólisi di catrame di carbone, olio di naftalene, residui della distillazione, **Redistillati**  
[Residuo proveniente dalla distillazione di olio metilnaftalenico privo di fenoli e basi (proveniente da carbone bituminoso e olii residui di pirólisi) con intervallo d'ebollizione 240 °C-260 °C. Composto prevalentemente da idrocarburi aromatici biciclici ed eterociclici sostituiti]
- NI** extractie olien (kool), koolteer en pyrolyse residuolien, naftaleenolie, destillatieresiduen, **Geherdestilleerde fracties**  
[Residu van de destillatie van, van fenolen en basen ontdane, methylnaftaleenolie (afkomstig uit bitumineuze koolteer en pyrolyse residuolien) met een kooktraject van 240 °C tot 260 °C. Voornamelijk samengesteld uit gesubstitueerde dinucleaire aromatische en heterocyclische koolwaterstoffen]
- PT** óleos de extração (carvão), alcatrão de carvão e óleos residuais de pirólise, óleo de naftaleno, resíduos da destilação, **Redestilados**  
[Resíduos da destilação de óleo de metilnaftaleno (de alcatrão de carvão betuminoso e óleos residuais de pirólise) desfenolizado e desbasificado, com um intervalo de destilação de 240 °C a 260 °C. É constituído principalmente por hidrocarbonetos aromáticos dinucleares substituídos e heterocíclicos]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101316-45-4

EEC No 309-851-5

No 648-041-00-9

NOTA H


NOTA M

- ES aceites de absorción, fracción hidrocarbonada heterocíclica y biciclo aromática ; Redestilado aceite lavaje  
[Combinación compleja de hidrocarburos obtenida como un redestilado de la destilación de aceite de absorción. Compuesta en su mayor parte de hidrocarburos heterocíclicos y aromáticos de 2 anillos con un intervalo de ebullición aproximado de 260 °C a 290 °C]
- DA absorptionsolier, bicycliske aromater og heterocyclisk carbonhydridfraktion ; Redestilleret vaskeolie  
[En sammensat blanding af carbonhydrider opnået som et redestillat fra destillationen af vaskeolie. Den består overvejende af 2-ringede aromatiske og heterocycliske carbonhydrider, med kogesinterval omtrent fra 260 °C til 290 °C.]
- DE Absorptionsöle, bicycloaromatische und heterocyclische Kohlenwasserstoff-Fraktion ; Waschöl-Redestillat  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Redestillat aus der Destillation von Waschöl erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit 2 Ringen und heterocyclischen Kohlenwasserstoffen und siedet im Bereich von etwa 260 °C bis 290 °C.]
- EL ελαια απορρόφησης, κλάσμα δικυκλο αρωματικού και ετεροκυκλικού υδρογονάνθρακα· Επαναπόσταγμα ελαίων εκπλύσης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν επαναπόσταγμα από την απόσταξη ελαίου εκπλύσης. Συνίσταται κυρίως από αρωματικούς και ετεροκυκλικούς υδρογονάνθρακες με δύο δακτύλιους με περιοχή βρασμού από 260 °C ως 290 °C περίπου.]
- EN Absorption oils, bicyclo arom. and heterocyclic hydrocarbon fraction ; Wash Oil Redistillate  
[A complex combination of hydrocarbons obtained as a redistillate from the distillation of wash oil. It consists predominantly of 2-ringed aromatic and heterocyclic hydrocarbons boiling in the range of approximately 260 °C to 290 °C (500 °F to 554 °F).]
- FR huiles d'absorption, fraction hydrocarbures bicycliques aromatiques et hétérocycliques ; Distillat d'huile de lavage  
[Combinaison complexe d'hydrocarbures obtenue comme redistillat après distillation d'huile d'absorption. Se compose principalement d'hydrocarbures aromatiques bicycliques et d'hydrocarbures hétérocycliques, avec un point d'ébullition compris approximativement entre 260 °C et 290 °C.]
- IT olii di assorbimento, frazione idrocarbureica aromatica biciclica ed eterociclica ; Olio lavaggio gas ridistillato  
[Combinazione complessa di idrocarburi ottenuta come ridistillato dalla distillazione di olio di lavaggio. È costituita prevalentemente da idrocarburi aromatici a due anelli ed idrocarburi eterociclici con punto di ebollizione nell'intervallo 260 °C-290 °C ca.]
- NL absorptieoliën, bicyclo-aromatische en heterocyclische koolwaterstofffractie ; Benzol-wasolie, destillaat  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een herdestillaat uit de destillatie van spoelolie. Bestaat voornamelijk uit aromatische en heterocyclische koolwaterstoffen met twee ringen en heeft een kooktraject van ongeveer 260 °C tot 290 °C.]
- PT óleos de absorção, fracção de hidrocarbonetos aromáticos biciclicos e heterocíclicos ; óleo de lavagem redestilado  
[Uma combinação complexa de hidrocarbonetos obtida como um redestilado da destilação de um óleo de absorção. É constituída predominantemente por hidrocarbonetos aromáticos com 2 anéis e compostos heterocíclicos, e destila no intervalo de aproximadamente 260 °C a 290 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 84989-11-7

EEC No 284-900-0

No 648-042-00-4

NOTA H

NOTA M


- ES : destilados (alquitrán de hulla), superiores, ricos en fluoreno ; Redestilado aceite lavaje  
[Combinación compleja de hidrocarburos obtenida por la cristalización de aceite de alquitrán. Compuesta de hidrocarburos policíclicos y aromáticos principalmente fluoreno y algo de acenafteño.]
- DA : destillater (stenkultstjære), øvre, fluorene-ige ; Redestilleret vaskeolie  
[En sammensat blanding af carbonhydrider opnået ved krystallisationen af tjæreolie. Den består af aromatiske og polycykliske carbonhydrider, primært fluoren og noget acenaphthen.]
- DE : Destillate (Kohlenteer), obere, Fluoren-reich ; Waschöl-Redestillat  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Kristallisation von Teeröl. Besteht aus aromatischen und polycyclischen Kohlenwasserstoffen, in erster Linie aus Fluoren und einigen Acenaphthenen.]
- EL : αποστάγματα (λιθανθρακόνισσας), ανώτερα, πλούσια σε φλουορένιο· Επαναπόσταγμα ελαίων έκπλυσης  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με την κρυστάλλωση πίσσελαίου. Συνίσταται από αρωματικούς και πολυκυκλικούς υδρογονάνθρακες κυρίως φλουορένιο και λίγο ακεναφθένιο.]
- EN : Distillates (coal tar), upper, fluorene-rich ; Wash Oil Redistillate  
[A complex combination of hydrocarbons obtained by the crystallization of tar oil. It consists of aromatic and polycyclic hydrocarbons primarily fluorene and some acenaphthene.]
- FR : distillats supérieurs (goudron de houille), riches en fluorène ; Distillat d'huile de lavage  
[Combinaison complexe d'hydrocarbures obtenue par cristallisation de l'huile de goudron de houille. Se compose d'hydrocarbures polycycliques et aromatiques — principalement, du fluorène, avec un peu d'acénaphthène.]
- IT : distillati (catrame da catrame), di testa, ricchi di fluorene ; Olio lavaggio gas ridistillato  
[Combinazione complessa di idrocarburi ottenuta dalla cristallizzazione di olio di catrame. È costituita da idrocarburi aromatici e policiclici, prevalentemente fluorene e acenafteño.]
- NL : destillaten (koolteer), lichte fractie, rijk aan fluoreen ; Benzol- asolie, destillaat  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door kristallisatie van teerolie. Bestaat uit aromatische en polycyclische koolwaterstoffen, voornamelijk fluoreen en enig acenafteen.]
- PT : destilados (alcatrão de carvão), de topo, ricos em fluoreno ; óleo de lavagem redestilado  
[Uma combinação complexa de hidrocarbonetos obtida pela cristalização de óleo de alcatrão. É constituída por hidrocarbonetos aromaticos e policiclicos principalmente fluoreno e algun acenafteño.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90640-85-0

EEC No 292-606-9

No 648-043-00-X

NOTA H


NOTA M

- ES : aceite de creosota, fracción de acenafteno, libre de acenafteno ; Redestilado aceite lavaje  
[Aceite que queda después de la separación por un proceso de cristalización de acenafteno a partir de aceite de acenafteno del alquitrán de hulla. Compuesto principalmente de naftaleno y alquilnaftalenos.]
- DA : creosotolie, acenaphthenfraktion, acenaphthenfri ; Redestilleret vaskeolie  
[Den tiloversblevne olie efter fjernelse, ved en krystallisationsproces, af acenaphthen fra acenaphthenolie fra stenkulstjære. Sammensat primært af naphthalen og alkyl-naphthalener.]
- DE : Kreosotöl, Acenaphthen-Fraktion, Acenaphthen-frei ; Waschöl-Redestillat  
[Öl, das nach Entfernen von Acenaphthen aus Acenaphthenöl aus Kohlenteer durch ein Kristallisationsverfahren zurückbleibt. Besteht in erster Linie aus Naphthalin und Alkyl-naphthalinen.]
- EL : κρεοζωτέλαιου, κλάσμα ακεναφθενίου, απαλλαγμένο ακεναφθενίου· Επαναπόσταγμα ελαίων έκπλυσης  
[Το έλαιο το οποίο παραμένει μετά την απομάκρυνση με κρυστάλλωση του ακεναφθενίου από έλαιο ακεναφθενίου προερχόμενο από λιθάνθρακικό πίσσα. Συνίσταται πρωτίστως από ναφθαλίνη και αλκυλο ναφθαλίνες.]
- EN : Creosote oil, acenaphthene fraction, acenaphthene-free ; Wash Oil Redistillate  
[The oil remaining after removal by a crystallization process of acenaphthene from acenaphthene oil from coal tar. Composed primarily of naphthalene and alkyl-naphthalenes.]
- FR : huile de créosote, fraction acénaphtène, exempte d'acénaphtène ; Distillat d'huile de lavage  
[Huile restant après l'élimination de l'huile acénaphténique du goudron de houille, par cristallisation, de l'acénaphtène. Se compose principalement de naphthalène et d'alkyl-naphthalènes.]
- IT : olio di creosoto, frazione acenaftene, privo di acenaftene ; Olio lavaggio gas ridistillato  
[Olio che rimane dopo la rimozione dell'acenaftene per mezzo di un processo di cristallizzazione dall'olio di acenaftene dal catrame di carbone. Costituito prevalentemente da naftalene ed alchilnaftaleni.]
- NL : creosootolie, acenaftenfractie, acenaftenvrij ; Benzol-wasolie, destillaat  
[De olie die resteert na verwijdering door een kristallisatieproces van acenaften uit acenaftenolie uit koolteer. Voornamelijk samengesteld uit naftaleen en alkyl-naftalenen.]
- PT : óleo de creosote, fracção de acenafteno, sem acenafteno ; óleo de lavagem redestilado  
[O óleo remanescente após remoção, por um processo de cristalização de acenafteno de óleo de acenafteno de alcatrão de carvão. É constituído principalmente por naftaleno e alquilnaftalenos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 90640-86-1

EEC No 292-607-4

No 648-044-00-5

## NOTA H

- ES : destilados, (alquitrán de hulla), aceites pesados ; Aceite de antraceno fracción pesada  
[Destilado de la destilación fraccionada de alquitrán de hulla bituminosa, con un intervalo de ebullición de 240 °C a 400 °C.  
Compuesto principalmente de hidrocarburos tri- y polinucleares y compuestos heterocíclicos.]
- DA : destillater (stenkultsjære), tunge olier ; Tung antracenolie  
[Destillater, fra fraktioneret destillation af stenkultsjære fra bituminøse kul, med kogesinterval omtrent fra 240 °C til 400 °C.  
Sammensat primært af tri- og polycykliske, carbonhydrider og heterocycliske forbindelser.]
- DE : Destillate (Kohlenteer), schwere Öle ; schweres Anthracenöl (Anthracenöl II)  
[Destillat aus der fraktionierten Destillation von Kohlenteer aus Steinkohle mit einem Siedebereich von 240 °C bis 400 °C. Besteht in erster Linie aus tri- und polynuklearen Kohlenwasserstoffen und heterocyclischen Verbindungen.]
- EL : αποσταγμάτων (λιθανθρακόπισσας), βαρέα έλαια· Βαρέα έλαια ανθρακενίου  
[Αποστάγματα από την κλασματική απόσταξη λιθανθρακόπισσας βιτουμενικού άνθρακα με περιοχή βρασμού από 240 °C έως 400 °C. Αποτελείται πρωτίστως από tri- και πολυ-πυρηνικούς υδρογονάνθρακες και ετεροκυκλικές ενώσεις.]
- EN : Distillates (coal tar), heavy oils ; Heavy Anthracene Oil  
[Distillate from the fractional distillation of coal tar of bituminous coal, with boiling range of 240 °C to 400 °C (464 °F to 752 °F).  
Composed primarily of tri- and polynuclear hydrocarbons and heterocyclic compounds.]
- FR : distillats (goudron de houille), huiles lourdes ; Huile anthracénique lourde  
[Distillat issu de la distillation fractionnée de goudron de houille de charbon bitumineux et dont le point d'ébullition est compris entre 240 °C et 400 °C. Se compose principalement d'hydrocarbures tri- et polycycliques et de composés hétérocycliques.]
- IT : distillati (catrame di carbone), olii pesanti ; Olio di antracene II  
[Distillato della distillazione frazionata del catrame di carbone di carbone bituminoso, con punto di ebollizione nell'intervallo 240 °C-400 °C. Costituito prevalentemente da idrocarburi tri- e policiclici e da composti eterociclici.]
- NL : destillaten (koolteer), zware oliën ; Zware anthraceen olie  
[Destillaten die worden verkregen uit de gefractioneerde destillatie van koolteer uit bitumineuze kool, met een kooktraject van 240 °C tot 400 °C. Voornamelijk samengesteld uit tri- en polynucleaire koolwaterstoffen en heterocyclische verbindingen.]
- PT : destilados (alcatrão de carvão), óleos pesados ; óleo antracénico pesado  
[Destilado da destilação fraccionada do alcatrão de carvão betuminoso, com um intervalo de destilação de 240 °C a 400 °C. É constituído principalmente por hidrocarbonetos tri- e polinucleares e compostos heterocíclicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-91-0

EEC No 266-026-1

No 648-045-00-0

NOTA H


NOTA M

- ES destilados (alquitrán de hulla), superiores ; Aceite de antraceno fracción pesada  
[Destilado del alquitrán de hulla con un intervalo de destilación aproximado de 220 °C a 450 °C. Compuesto principalmente de hidrocarburos aromáticos con anillos condensados de tres a cuatro miembros y otros hidrocarburos.]
- DA destillatet (stenkulstjære), øvre ; Tung antracenieolie  
[Destillatet fra stenkulstjære med et omtrentligt destillationsinterval fra 220 °C til 450 °C. Sammensat primært af aromatiske carbonhydrider, bestående af tre- til fireleddede kondenserede ringe og andre carbonhydrider.]
- DE Destillate (Kohlenteer), obere ; schweres Anthracenöl (Anthracenöl II)  
[Destillat aus Kohlenteer mit einem ungefähren Destillationsbereich von 220 °C bis 450 °C. Besteht in erster Linie aus drei- bis viergliedrigen kondensierten ringaromatischen Kohlenwasserstoffen und anderen Kohlenwasserstoffen.]
- EL αποσταγματα (λιθανθρακόπισσας), ανώτερα· Βαρέα έλαια ανθρακενίου  
[Το απόσταγμα από λιθανθρακόπισσα υψηλής θερμοκρασίας με περιοχή απόσταξης από 220 °C ως 450 °C περίπου. Αποτελείται πρωτίστως από αρωματικούς υδρογονάνθρακες με τριμελείς και τετραμελείς συμπυκνωμένους δακτύλιους και άλλους υδρογονάνθρακες.]
- EN Distillates (coal tar), upper ; Heavy Anthracene Oil  
[The distillate from coal tar having an approximate distillation range of 220 °C to 450 °C (428 °F to 842 °F). Composed primarily of three to four membered condensed ring aromatic hydrocarbons and other hydrocarbons.]
- FR distillats supérieurs de goudron de houille (charbon) ; Huile anthracénique lourde  
[Distillat issu du goudron de houille dont l'intervalle de distillation s'étage approximativement de 220 °C à 450 °C. Se compose principalement d'hydrocarbures aromatiques à noyaux condensés comportant trois ou quatre cycles et d'autres hydrocarbures.]
- IT distillati (catrame di carbone), tagli di testa ; Olio di antracene II  
[Distillato di catrame di carbone con punto di distillazione nell'intervallo 220 °C -450 °C ca. È composto principalmente da idrocarburi a nuclei aromatici condensati di 3-4 elementi ed altri idrocarburi.]
- NL destillaten (koolteer), bovenste ; Zware anthraceen olie  
[Het destillaat van koolteer met een destillatietraject van ongeveer 220 °C tot 450 °C. Voornamelijk samengesteld uit aromatische koolwaterstoffen met drie- tot viervoudig gecondenseerde ringen en andere koolwaterstoffen.]
- PT destilados (alcatrão de carvão), de topo ; óleo antracénico pesado  
[O destilado de alcatrão de carvão com um intervalo de destilação de aproximadamente 220 °C a 450 °C. É constituído principalmente por hidrocarbonetos aromáticos polinucleares com três a quatro membros e outros hidrocarbonetos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995-14-1

EEC No 295-274-3

No 648-046-00-6

NOTA H

NOTA M

- ES: aceite de antraceno, extracto ácido; Extracto residuo de aceite de antraceno  
[Combinación compleja de hidrocarburos de la fracción libre de bases obtenida de la destilación del alquitrán de hulla y con un intervalo de ebullición aproximado de 325 °C a 365 °C. Contiene en su mayor parte antraceno y fenantreno y sus alquil derivados.]
- DA: anthracenolie, syreekstrakt; Basefri antracenolie  
[En sammensat blanding af carbonhydrider, fra den basebefriede fraktion opnået fra destillationen af stenkulstjære, med kogeinterval omtrunt fra 325 °C til 365 °C. Den indeholder overvejende anthracen og phenanthren og deres alkylderivater.]
- DE: Anthracenöl, saurer Extrakt; Anthracenölextrakt-Rückstand  
[Komplexe Kombination von Kohlenwasserstoffen aus von der Basis befreiten Fraktion, die man aus der Destillation von Kohlentee erhält. Siedet im Bereich von etwa 325 °C bis 365 °C. Enthält vorherrschend Anthracen und Phenanthren und ihre Alkylderivate.]
- EL: ελαίου ανθρακενίου, όξινο εκχύλισμα· Υπόλειμμα εκχύλισης ελαίων ανθρακενίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από το απαλλαγμένο βάσεων κλάσμα που λαμβάνεται από την απόσταξη λιθανθρακόπισσας και δράζει στην περιοχή από 325 °C ως 365 °C περίπου. Περιέχει κυρίως ανθρακένιο και φαινανθρένιο και αλκυλο παραγωγά τους.]
- EN: Anthracene oil, acid ext.; Anthracene Oil Extract Residue  
[A complex combination of hydrocarbons from the base-free fraction obtained from the distillation of coal tar and boiling in the range of approximately 325 °C to 365 °C (617 °F to 689 °F). It contains predominantly anthracene and phenanthrene and their alkyl derivatives.]
- FR: huile anthracénique, extrait acide; Résidu d'extraction d'huile anthracénique  
[Combinaison complexe d'hydrocarbures issue de la fraction débarrassée des bases obtenue par distillation du goudron de houille et dont le point d'ébullition est compris approximativement entre 325 °C et 365 °C. Contient principalement de l'anthracène, du phénanthrène et leurs dérivés alkylés.]
- IT: olio di antracene, estratto acido; Olio di antracene lavato  
[Combinazione complessa di idrocarburi dalla frazione priva di basi ottenuta mediante la distillazione di catrame di carbone e con punto di ebollizione nell'intervallo 325 °C-365 °C ca. Contiene prevalentemente antracene e fenantrene e loro alchil derivati.]
- NL: antracenenolie, zuur extract; Anthracen olie, extractie-residu  
[Een complexe verzameling koolwaterstoffen uit de van base ontdane fractie verkregen door de destillatie van koolteer, met een kooktraject van ongeveer 325 °C tot 365 °C. Bevat voornamelijk antracenen, fenantreen en alkylderivaten daarvan.]
- PT: oleo de antraceno, extracto ácido; Extracto de residuo de óleo antracénico  
[Uma combinação complexa de hidrocarbonetos de fracção sem bases obtida da destilação de alcatrão de carvão e que destila no intervalo de aproximadamente 325 °C a 365 °C. Contém predominantemente antraceno e fenantreno e os seus derivados alquilo.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="347 499 368 521" data-label="Text">T</div> <div data-bbox="309 546 405 638" data-label="Image"> </div> <div data-bbox="914 548 994 575" data-label="Text">R : 45</div> <div data-bbox="914 600 1026 627" data-label="Text">S : 53-45</div>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçã*


Cas No 65996-92-1

EEC No 266-027-7

No 648-047-00-1

NOTA H

NOTA M

- ES: destilados (alquitrán de hulla); Aceite de antraceno fracción pesada  
[Destilado del alquitrán de hulla con un intervalo de destilación aproximado de 100 °C a 450 °C. Compuesto principalmente de hidrocarburos aromáticos con anillos condensados de dos a cuatro miembros, compuestos fenólicos y bases nitrogenadas aromáticas.]
- DA: destillater (stenkultstjære); Tung antracenolie  
[Destillatet fra stenkultstjære med et omtrentligt destillationsinterval fra 100 °C til 450 °C. Sammensat primært af aromatiske carbonhydrider, bestående af to- til fireledede kondenserede ringe, phenolforbindelser og aromatiske nitrogenbaser.]
- DE: Destillate (Kohlenteer); schweres Anthracenöl (Anthracenöl II)  
[Destillat aus Kohlenteer mit einem ungefähren Destillationsbereich von 100 °C bis 450 °C. Besteht in erster Linie aus zwei- bis viergliedrigen kondensierten ringaromatischen Kohlenwasserstoffen, phenolhaltigen Verbindungen und aromatischen Stickstoffbasen.]
- EL: αποστάγματα (λιθανθρακόπισσα) βαρέα έλαια ανθρακενίου  
[Το απόσταγμα από λιθανθρακόπισσα με περιοχή απόσταξης από 100 °C ως 450 °C περίπου. Αποτελείται πρωτίστως από αρωματικούς υδρογονάνθρακες με διμελείς ως συμπτυκνυμένους δακτύλιους, φαινολικές ενώσεις και αρωματικές αζωτούχες βάσεις.]
- EN: Distillates (coal tar); Heavy Anthracene Oil  
[The distillate from coal tar having an approximate distillation range of 100 °C to 450 °C (212 °F to 842 °F). Composed primarily of two to four membered condensed ring aromatic hydrocarbons, phenolic compounds, and aromatic nitrogen bases.]
- FR: distillats de goudron de houille; Huile anthracénique lourde  
[Distillat issu du goudron de houille dont l'intervalle d'ébullition s'étage approximativement de 100 °C à 450 °C. Se compose principalement d'hydrocarbures aromatiques à noyaux condensés comportant de deux à quatre cycles, de composés phénoliques et de bases aromatiques azotées.]
- IT: distillati (catrame di carbone); Olio di antracene II  
[Distillato di catrame di carbone con punto di distillazione nell'intervallo 100 °C-450 °C ca. È composto principalmente da idrocarburi a nuclei aromatici condensati di 2-4 elementi, composti fenolici e basi azotate aromatiche.]
- NL: destillaten (koolteer); Zware anthraceen olie  
[Het destillaat van koolteer met een destillatietraject van ongeveer 100 °C tot 450 °C. Voornamelijk samengesteld uit aromatische koolwaterstoffen met twee- tot viervoudig condenseerde ringen, fenolhoudende verbindingen en aromatische stikstofbasen.]
- PT: destilados (alcatrão de carvão); óleo antracénico pesado  
[O destilado de alcatrão de carvão com um intervalo de destilação de aproximadamente 100 °C a 450 °C. É constituído principalmente por hidrocarbonetos aromáticos polinucleares com dois a quatro membros, compostos fenólicos, e bases azotadas aromáticas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="422 501 443 524" data-label="Text">T</div> <div data-bbox="384 548 480 642" data-label="Image"> </div> <div data-bbox="995 553 1064 577" data-label="Text">R : 45</div> <div data-bbox="995 604 1096 629" data-label="Text">S : 53-45</div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995-51-6

EEC No 295-312-9

No 648-048-00-7

NOTA H

NOTA M

- ES : destilados (alquitrán de hulla), brea, aceites pesados ; Aceite de antraceno fracción pesada  
[Destilado de la destilación de la brea obtenido del alquitrán bituminoso a elevada temperatura. Compuesto principalmente de hidrocarburos aromáticos tri- y polinucleares y con un intervalo de ebullición aproximado de 300 °C a 470 °C. Producto que puede contener también heteroátomos.]
- DA : destillater (stenkultstjære), bæg-, tunge olier ; Tung antracenolie  
[Destillatet fra destillationen af begen opnået fra bituminøs højtemperaturstjære. Sammensat primært af tri- og polycykliske aromatiske carbonhydrider, med kogesinterval omtrent fra 300 °C til 470 °C. Produktet kan også indeholde heteroatomer.]
- DE : Destillate (Kohlenteer), Pech, schwere Öle ; schweres Anthracenöl (Anthracenöl II)  
[Destillat aus der Destillation des Peches von bituminösem Hochtemperatur-Teer. Setzt sich in erster Linie aus tri- und polynuklearen aromatischen Kohlenwasserstoffen zusammen und siedet im Bereich von etwa 300 °C bis 470 °C. Das Produkt kann auch Heteroatome enthalten.]
- EL : αποσταγμάτων (λιθανθρακόπισσας), πίσσας, βαρέα έλαια· Βαρέα έλαια ανθρακενίου  
[Το απόσταγμα από την απόσταξη της πίσσας που λαμβάνεται από διτουμενική πίσσα υψηλής θερμοκρασίας. Αποτελείται πρωτίστως από tri- και πολυκυρηνικούς αρωματικούς υδρογονάνθρακες και με περιοχή βρασμού από 300 °C έως 470 °C περίπου. Το προϊόν μπορεί επίσης να περιέχει ετεροάτομα.]
- EN : Distillates (coal tar), pitch, heavy oils ; Heavy Anthracene Oil  
[The distillate from the distillation of the pitch obtained from bituminous high temperature tar. Composed primarily of tri- and polynuclear aromatic hydrocarbons and boiling in the range of approximately 300 °C to 470 °C (572 °F to 878 °F). The product may also contain heteroatoms.]
- FR : distillats (goudron de houille), brai, huiles lourdes ; Huile anthracénique lourde  
[Distillat obtenu par distillation du brai du goudron bitumineux à haute température. Se compose principalement d'hydrocarbures aromatiques tri- et polycycliques dont le point d'ébullition est approximativement compris entre 300 °C et 470 °C. Peut également contenir des hétéroatomes.]
- IT : distillati (catrame di carbone), pece, olii pesanti ; Olio di antracene II  
[Distillato dalla distillazione della pece ottenuta da carbone bituminoso ad alta temperatura. Costituito prevalentemente da idrocarburi aromatici tri e policiclici e con punto di ebollizione nell'intervallo 300 °C-470 °C ca. Il prodotto può contenere inoltre eteroatomi.]
- NL : destillaten (koolteer), pek, zware oliën ; Zware anthraceen olie  
[Het destillaat dat afkomstig is uit de destillatie van de pek die wordt verkregen uit bitumineuze hoge temperatuur teer. Voornamelijk samengesteld uit tri- en polynucleaire aromatische koolwaterstoffen, met een kooktraject van ongeveer 300 °C tot 470 °C. Het produkt kan tevens hetero-atomen bevatten.]
- PT : destilados (alcatrão de carvão), breu, óleos pesados ; óleo antracénico pesado  
[O destilado da destilação de breu obtido de alcatrão de carvão betuminoso de temperatura elevada. É constituído principalmente por hidrocarbonetos aromáticos tri- e polinucleares e destila no intervalo de aproximadamente 300 °C a 470 °C. O produto também pode conter compostos contendo heteroátomos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rozulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101316-49-8

EEC No 309-855-7

No 648-049-00-2

NOTA H


NOTA M

- ES : destilados (alquitrán de hulla), brea ; Aceite de antraceno fracción pesada  
[Aceite obtenido de la condensación de los vapores del tratamiento térmico de brea. Compuesto principalmente de compuestos aromáticos de dos a cuatro anillos con un intervalo de ebullición de 200 °C a más de 400 °C.]
- DA : destillater (kultjære), beg ; Tung antracénolie  
[Olien opnået ved kondensering af dampene fra varmebehandlingen af beg. Sammensat primært af to- til firringede aromatiske forbindelser, med koginterval omtrent fra 200 °C til mere end 400 °C.]
- DE : Destillate (Kohlenteer), Pech ; schweres Anthracenöl (Anthracenöl II)  
[Öl, das man aus der Kondensation der Dämpfe aus der Wärmebehandlung von Pech erhält. Besteht in erster Linie aus aromatischen Verbindungen mit zwei bis vier Ringen und siedet im Bereich von 200 °C bis höher als 400 °C.]
- EL : αποστάγματα (λιθανθρακόπισσας), πίσσας· Βαρέα έλαια ανθρακενίου  
[Το έλαιο που λαμβάνεται από τη συμπύκνωση των ατμών της θερμικής κατεργασίας της πίσσας. Αποτελείται κυρίως από αρωματικές ενώσεις με δύο ως τέσσερις δακτύλιους και με περιοχή βρασμού από 200 °C ως πάνω από 400 °C.]
- EN : Distillates (coal tar), pitch ; Heavy Anthracene Oil  
[The oil obtained from condensation of the vapors from the heat treatment of pitch. Composed primarily of two- to four-ring aromatic compounds boiling in the range of 200 °C to greater than 400 °C (392 °F to greater than 752 °F).]
- FR : distillats (goudron de houille), brai ; Huile anthracénique lourde  
[Huile obtenue par condensation des vapeurs dégagées par le traitement thermique de brai. Est principalement constituée de composés aromatiques comportant deux à quatre cycles et dont l'intervalle d'ébullition s'étend de 200 °C à 400 °C, et au-delà.]
- IT : distillati (catrame di carbone), pece ; Olio di antracene II  
[L'olio ottenuto dalla condensazione dei vapori dal trattamento a caldo di pece. Costituito prevalentemente da composti aromatici con numero di anelli da due a quattro e con punto di ebollizione nell'intervallo da 200 °C a più di 400 °C.]
- NL : destillaten (koolteer), pek ; Zware anthraceen olie  
[De olie die wordt verkregen uit de condensatie van de dampen uit de warmtebehandeling van pek. Voornamelijk samengesteld uit aromatische verbindingen met twee tot vier ringen en heeft een kooktraject van ongeveer 200 °C tot meer dan 400 °C.]
- PT : destilados (alcatrão de carvão), breu ; óleo antracénico pesado  
[O óleo obtido da condensação de vapores do tratamento térmico de breu. É constituído principalmente por hidrocarbonetos aromáticos com dois a quatro anéis e destila no intervalo de aproximadamente 200 °C até mais de 400 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 91995-42-5

EEC No 295-304-5

No 648-050-00-8

NOTA H

NOTA M

- ES : destilados (alquitrán de hulla), aceites pesados, fracción de pireno ; Redestilado de aceite de antraceno fracción pesada  
[Redestilado obtenido de la destilación fraccionada del destilado de brea con un intervalo de ebullición aproximado de 350 °C a 400 °C. Compuesto en su mayor parte de aromáticos tri- y polinucleares e hidrocarburos heterocíclicos.]
- DA : destillater (stenkultstjære), tunge olier, pyrenfraktion ; Redestilleret tung antracenolie  
[Redestillatet, opnået fra fraktioneret destillation af begdestillat, med koginterval omtrent fra 350 °C til 400 °C. Består overvejende af tri- og polycykliske aromater og heterocycliske carbonhydrider.]
- DE : Destillate (Kohlenteer), schwere Öle, Pyren-Fraktion ; schweres Anthracenöl-Redestillat  
[Redestillat aus fraktionierter Destillation von Pechdestillat. Siedet im Bereich von etwa 350 °C bis 400 °C. Besteht vorherrschend aus tri- und polynuklearen aromatischen und heterocyclischen Kohlenwasserstoffen.]
- EL : αποσταγμάτα (Ανθρακένιος), βαρέων ελαίων, κλάσμα πυρενίου· Επαναπόσταγμα βαρέων ελαίων ανθρακενίου  
[Το επαναπόσταγμα που λαμβάνεται από την κλασματική απόσταξη αποστάγματος κίσας που βράζει στην περιοχή από 350 °C ως 400 °C. Συνίσταται κυρίως από tri- και πολυκύκλους αρωματικούς και στεροκυκλικούς υδρογονάνθρακες.]
- EN : Distillates (coal tar), heavy oils, pyrene fraction ; Heavy Anthracene Oil Redistillate  
[The redistillate obtained from the fractional distillation of pitch distillate boiling in the range of approximately 350 °C to 400 °C (662 °F to 752 °F). Consists predominantly of tri- and polynuclear aromatics and heterocyclic hydrocarbons.]
- FR : distillats (goudron de houille), huiles lourdes, fraction pyrène ; Distillat d'huile anthracénique lourde  
[Redestillat obtenu par distillation fractionnée du distillat de brai dont le point d'ébullition est approximativement compris entre 350 °C et 400 °C. Se compose principalement d'aromatiques tri- et polycycliques et d'hydrocarbures hétérocycliques.]
- IT : distillati (catrame di carbone), olii pesanti, frazione pirene ; Ridistillati di olio di antracene II  
[Ridistillato ottenuto dalla distillazione frazionata di distillato di pece con punto di ebollizione nell'intervallo 350 °C-400 °C ca. E' costituita prevalentemente da aromatici tri e policiclici e da idrocarburi eterociclici.]
- NL : destillaten (koolteer), zware oliën, pyreenfractie ; Zware anthraceen olie, destillaat  
[Het herdestillaat dat wordt verkregen uit de gefractioneerde destillatie van pekdestillaat met een kooktraject van ongeveer 350 °C tot 400 °C. Bestaat voornamelijk uit tri- en polynucleaire aromaten en heterocyclische koolwaterstoffen.]
- PT : destilados (alcatrão de carvão), óleos pesados, fracção de pireno ; óleo antracénico pesado redestilado  
[O redestilado obtido de destilação fraccionada de destilado de breu que destila no intervalo de aproximadamente 350 °C a 400 °C. É constituído predominantemente por hidrocarbonetos aromáticos tri- e polinucleares e compostos heterocíclicos.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificație*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995-52-7

EEC No 295-313-4

No 648-051-00-3

NOTA H

NOTA M

- ES : destilados (alquitrán de hulla), brea, fracción de pireno ; Redestilado de aceite de antraceno fracción pesada  
[Redestilado obtenido de la destilación fraccionada de un destilado de brea y con un intervalo de ebullición aproximado de 380 °C a 410 °C. Compuesto principalmente de hidrocarburos aromáticos tri- y polinucleares y compuestos heterocíclicos.]
- DA : destillater (stenkultstjære), beg-, pyrenfraktion ; Redestilleret tung antracenolie  
[Redestillatet, opnået fra fraktioneret destillation af begdestillat, med kogesinterval omtrent fra 380 °C til 410 °C. Sammensat primært af tri- og polycykliske aromatiske carbonhydrider og heteocycliske forbindelser.]
- DE : Destillate (Kohlenteer), Pech, Pyren-Fraktion ; schweres Anthracenöl-Redestillat  
[Redestillat aus fraktionierter Destillation des Pechdestillates. Siedet im Bereich von etwa 380 °C bis 410 °C. Setzt sich in erster Linie aus tri- und polynuklearen aromatischen Kohlenwasserstoffen und heteocyclischen Verbindungen zusammen.]
- EL : αποσταγμάτων (λιθανθρακόπισσας), πίσσας, κλάσμα πυρενίου· Επαναπόσταγμα βαρέων ελαίων ανθρακενίου  
[Το επαναπόσταγμα που λαμβάνεται από την κλασματική απόσταξη αποστάγματος πίσσας και που βράζει στην περιοχή από 380 °C έως 410 °C περίπου. Αποτελείται πρωτίστως από tri- και πολυπύρηνους αρωματικούς υδρογονάνθρακες και ετεροκυκλικές ενώσεις.]
- EN : Distillates (coal tar), pitch, pyrene fraction ; Heavy Anthracene Oil Redistillate  
[The redistillate obtained from the fractional distillation of pitch distillate and boiling in the range of approximately 380 °C to 410 °C (716 ° to 770 °F). Composed primarily of tri- and polynuclear aromatic hydrocarbons and heterocyclic compounds.]
- FR : distillats (goudron de houille), brai, fraction pyrène ; Distillat d'huile anthracénique lourde  
[Redestillat obtenu par distillation fractionnée du distillat de brai et dont le point d'ébullition est approximativement compris entre 380°C et 410 °C. Se compose principalement d'hydrocarbures aromatiques tri- et polycycliques, et de composés hétérocycliques.]
- IT : distillati (catrame di carbone), pece, frazione pirene ; Ridistillati di olio di antracene II  
[Ridistillato ottenuto dalla distillazione frazionata di distillato di pece e con punto di ebollizione nell'intervallo 380 °C-410 °C ca. Costituito prevalentemente da idrocarburi aromatici tri e policiclici e da composti eterociclici.]
- NL : destillaten (koolteer), pek, pyreenfractie ; Zware anthracen olie, destillaat  
[Het herdestillaat dat wordt verkregen uit de gefractioneerde destillatie van pekdestillaat en een kooktraject heeft van ongeveer 380 °C tot 410 °C. Voornamelijk samengesteld uit tri- en polynucleaire aromatische koolwaterstoffen en heterocyclische verbindingen.]
- PT : destilados (alcatrão de carvão), breu, fracção de pireno ; óleo antracénico pesado redestilado  
[O redestilado obtido da destilação fraccionada de destilado de breu e que destila no intervalo de aproximadamente 380 °C a 410 °C. É constituído principalmente por hidrocarbonatos aromáticos tri- e polinucleares e compostos heterocíclicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97926-76-6

EEC No 308-296-6

No 648-052-00-9

NOTA H


NOTA M

- ES ceras de parafina (hulla), alquitrán de lignito a elevada temperatura, tratado con carbono ; Extracto de alquitrán  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de alquitrán de carbonización de lignito con carbón activado para la separación de constituyentes en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada y lineal con un número de carbonos en su mayor part superior a  $C_{12}$ .]
- DA paraffinvokser (kul), brunkulhøjtemperaturstjære, carbonbehandlet ; Syre- og basetri kultjære  
[En sammensat blanding af carbonhydrider opnået ved behandlingen af brunkul-forkulningstjære med aktivt kul for at fjerne sporbestanddele og urenheder. Den består overvejende af mættede ligekædede og forgrenede carbonhydrider, overvejende større end  $C_{12}$ .]
- DE Paraffinwachse (Kohle), Braunkohle Hochtemperatur-Teer, mit Kohlenstoff behandelt ; Steinkohlenteer-Extrakt  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Teer aus der Braunkohlenverkokung mit Aktivkohle erhält, um Spurenbestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ .]
- EL κηροι παραφινής (άνθρακα), πίσσας υψηλής θερμοκρασίας λιγνίτη, κατεργασμένοι με άνθρακα· Εκχύλισμα λιθανθρακόπισσας  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία πίσσας εξανθράκωσης λιγνίτη με ενεργό άνθρακα για να απομακρυνθούν ίχνη συστατικών και προσμίξεις. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες ευθείας και διακλαδισμένης αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{12}$ .]
- EN Paraffin waxes (coal), brown-coal high-temp. tar, carbon-treated ; Coal Tar Extract  
[A complete combination of hydrocarbons obtained by the treatment of lignite carbonization tar with activated carbon for removal of trace constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ .]
- FR cires de paraffine (charbon), goudron de lignite à haute température traité au charbon ; Extraits de goudron de charbon  
[Combinaison complexe d'hydrocarbures obtenue par traitement au charbon actif du goudron de carbonisation du lignite en vue d'éliminer les oligo-éléments et les impuretés. Se compose principalement d'hydrocarbures saturés à chaîne droite ou ramifiée, dont le nombre de carbones est en majorité supérieur à  $C_{12}$ .]
- IT cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura, trattate con carbone ; Catrame di carbone fossile lavato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di catrame da carbonizzazione di lignite con carbone attivo per eliminare costituenti in tracce ed impurezze. È costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente superiore a  $C_{12}$ .]
- NL paraffinewassen (kool), bruinkool hoge temperatuur teer, behandeld met kool ; Steenkoolteer extract  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van lignietcarbonisatie teer met geactiveerde kool om sporenbestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit verzadigde vertakte en niet-vertakte koolwaterstoffen, overwegend groter dan  $C_{12}$ .]
- PT ceras parafínicas (carvão), de alcatrão de lenhite de temperatura elevada, tratadas com carvão activado ; Extracto de alcatrão de hulha  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de alcatrão de carbonização de lenhite com carvão activado para remoção de constituintes vestigiais e impurezas. É constituída predominantemente por hidrocarbonetos saturados lineares e ramificados com números de átomos de carbono predominantemente superiores a  $C_{12}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97926-77-7

EEC No 308-297-1

No 648-053-00-4

NOTA H

NOTA M

- ES ceras de parafina (hulla), alquitrán de lignito a elevada temperatura, tratado con arcilla ; Extracto de alquitrán  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de alquitrán de carbonización de lignito con bentonita para la separación de constituyentes en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada y lineal con un número de carbonos en su mayor parte superior a  $C_{12}$ .]
- DA paraffinvokser (kul), brunkulhøjtemperaturstjære, lerbehandlet ; Syre- og basefri kultjære  
[En sammensat blanding af carbonhydrider opnået ved behandlingen af brunkul-forkulningstjære med bentonit for at fjerne sporbestanddele og urenheder. Den består overvejende af mættede ligekædede og forgrenede carbonhydrider, overvejende større end  $C_{12}$ .]
- DE Paraffinwachse (Kohle), Braunkohle Hochtemperatur-Teer, mit Ton behandelt ; Steinkohlenteer-Extrakt  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Teer aus der Braunkohlenverkokung mit Bentonit erhält, um Spurenbestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ .]
- EL κηροι παραφινής (άνθρακα), πίσσας υψηλής θερμοκρασίας λιγνίτη, κατεργασμένοι με άργιλο· Εκχύλισμα λιθανθρακόπισσας  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία πίσσας εξανθράκωσης λιγνίτη με μπεντονίτη, για να απομακρυνθούν ίχνη συστατικών και προσμίξεις. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες ευθείας και διακλαδισμένης αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{12}$ .]
- EN Paraffin waxes (coal), brown-coal high-temp tar, clay-treated ; Coal Tar Extract  
[A complex combination of hydrocarbons obtained by the treatment of lignite carbonization tar with bentonite for removal of trace constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ .]
- FR cires de paraffine (charbon), goudron de lignite à haute température traité à l'argile ; Extraits de goudron de charbon  
[Combinaison complexe d'hydrocarbures obtenue par traitement à la bentonite du goudron de carbonisation du lignite en vue d'éliminer les oligo-éléments et les impuretés. Se compose principalement d'hydrocarbures saturés à chaîne droite ou ramifiée, dont le nombre de carbone est en majorité supérieur à  $C_{12}$ .]
- IT cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura, trattate con argilla ; Catrame di carbone fossile lavato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di catrame da carbonizzazione di lignite con bentonite per eliminare costituenti in tracce ed impurezze. È costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente superiore a  $C_{12}$ .]
- NL paraffinewassen (kool), bruinkool hoge temperatuur teer, behandeld met klei ; Steenkoolteer extract  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van lignietcarbonisatie teer met bentoniet om sporenbestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit verzadigde vertakte en niet-vertakte koolwaterstoffen, overwegend groter dan  $C_{12}$ .]
- PT ceras parafínicas (carvão), alcatrão de lenhite de temperatura elevada, tratadas com argila ; Extracto de alcatrão de hulha  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de alcatrão da carbonização de lenhite com bentonite para remoção de constituintes vestigiais e impurezas. É constituída predominantemente por hidrocarbonetos saturados lineares e ramificados com números de átomos de carbono predominantemente superiores a  $C_{12}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 61789-60-4

EEC No 263-072-4

No 648-054-00-X

NOTA H

NOTA M

ES brea , Brea

DA : beg ; Tjærebe

DE : Pech ; Pech

EL πισσα· Κατράμι

EN : Pitch ; Pitch

FR : poix , Brai

IT : pece ; Pece

NL : pek ; Pek

PT : breu ; Piche

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 45

S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 65996-93-2

EEC No 266-028-2

No 648-055-00-5

NOTA H

- ES: brea, alquitrán de hulla, elevada temperatura ; Brea  
[Residuo de la destilación del alquitrán de hulla a elevada temperatura. Sólido negro con un punto de reblandecimiento de 30 °C a 180 °C. Compuesto principalmente de una mezcla compleja de hidrocarburos aromáticos con anillos condensados de tres o más miembros.]
- DA: beg, kultjære-, højtemperaturs- ; Tjærebeg  
[Resten fra destillationen af højtemperatursstenkultjære. Et sort, fast stof med et blødgøringspunkt omtrent fra 30 °C til 180 °C. Består primært af en sammensat blanding af aromatiske carbonhydrider, bestående af tre- eller flerleddede kondenserede ringe.]
- DE: Pech, Kohlenteer, Hochtemperatur ; Pech  
[Rückstand aus der Destillation von Hochtemperaturkohlenteer. Schwarzer Feststoff mit einem ungefähren Erweichungspunkt von 30 °C bis 180 °C. Besteht in erster Linie aus einem komplexen Gemisch von drei- oder mehrgliedrigen kondensierten ringaromatischen Kohlenwasserstoffen.]
- EL: πισσα, λιθανθρακόπισσας υψηλής θερμοκρασίας; Κατράμι  
[Το υπόλειμμα της απόσταξης λιθανθρακόπισσας υψηλής θερμοκρασίας. Μαύρο στερεό υλικό με σημείο μαλακώματος από 30 °C ως 180 °C περίπου. Αποτελείται πρωτίστως από ένα πολύπλοκο μείγμα αρωματικών υδρογονανθράκων με τρεις ή και περισσότερους συμπυκνωμένους δακτύλιους.]
- EN: Pitch, coal tar, high-temp. ; Pitch  
[The residue from the distillation of high temperature coal tar. A black solid with an approximate softening point from 30 °C to 180 °C (86 °F to 356 °F) Composed primarily of a complex mixture of three or more membered condensed ring aromatic hydrocarbons.]
- FR: brai de goudron de houille à haute température ; Brai  
[Résidu de la distillation du goudron de houille à haute température. Solide de couleur noire dont le point de ramollissement se situe approximativement entre 30 °C et 180 °C. Se compose principalement d'un mélange complexe d'hydrocarbures aromatiques à noyaux condensés comportant trois cycles ou plus.]
- IT: pece, catrame di carbone, alta temperatura ; Pece  
[Il residuo della distillazione di catrame di carbone ad alta temperatura. Sostanza solida nera con punto di rammollimento da 30 °C a 180 °C. E' composto principalmente da una combinazione complessa di idrocarburi aromatici a nuclei condensati di tre o più membri.]
- NL: pek, koolteer, hoge temperatuur ; Pek  
[Het residu dat wordt verkregen bij de destillatie van bij hoge temperatuur verkregen koolteer. Een zwarte vaste stof met een verwekingstraject van bij benadering 30 °C tot 180 °C. Voornamelijk samengesteld uit een complexe verzameling van aromatische koolwaterstoffen met drie- of meervoudig gecondenseerde ringen.]
- PT: breu, alcatrão de carvão, de temperatura elevada ; Piche  
[O residuo da destilação de alcatrão de carvão de temperatura elevada. Um sólido negro com um ponto de amolecimento de aproximadamente 30 °C a 180 °C. É constituído principalmente por uma combinação complexa de hidrocarbonetos aromáticos polinucleares com três ou mais membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 121575-60-8

EEC No 310-162-7

No 648-056-00-0

NOTA H


NOTA M

- ES : brea, alquitrán de hulla, elevada temperatura, tratada térmicamente ; Brea  
[Residuo tratado térmicamente procedente de la destilación de alquitrán de hulla a elevada temperatura. Sólido negro con un punto de reblandecimiento aproximado de 80 °C a 180 °C. Compuesto principalmente de una mezcla compleja de hidrocarburos aromáticos con anillos condensados de tres o más miembros.]
- DA : beg, kultjære, højtemperatur, varmebehandlet ; Tjærebeg  
[Den varmebehandlede rest fra destillationen af højtemperaturstenkultjære. Et sort, fast stof med et blødgøringspunkt omtrent fra 80 °C til 180 °C. Sammensat primært af en kompleks blanding af tre- eller flerleddede, kondenserede, aromatiske carbonhydrider.]
- DE : Pech, Kohleteer, Hochtemperatur, hitzebehandelt ; Pech  
[Hitzebehandelter Rückstand aus der Destillation von Hochtemperaturkohleteer. Schwarzer Festkörper mit ungefährem Erweichungspunkt von 80 °C bis 180 °C. Besteht vorrangig aus einem komplexen Gemisch von drei oder mehrgliedrigen kondensierten aromatischen Kohlenwasserstoffringen.]
- EL : πίσσα, λιθανθρακόπισσας, υψηλής θερμοκρασίας, θερμικά κατεργασμένη· Κατράμι  
[Το θερμικά κατεργασμένο υπόλειμμα από την απόσταξη λιθανθρακόπισσας υψηλής θερμοκρασίας. Μαύρο στερεό υλικό με σημείο μαλακώματος από 80 °C έως 180 °C περίπου. Αποτελείται κυρίως από πολύπλοκο μίγμα αρωματικών υδρογονανθράκων τριών ή τεσσάρων συμπυκνωμένων δακτυλίων.]
- EN : Pitch, coal tar, high-temp., heat-treated ; Pitch  
[The heat treated residue from the distillation of high temperature coal tar. A black solid with an approximate softening point from 80 °C to 180 °C (176 °F to 356 °F). Composed primarily of a complex mixture of three or more membered condensed ring aromatic hydrocarbons.]
- FR : brai de goudron de houille à haute température, traité thermiquement ; Brai  
[Résidu traité thermiquement obtenu par distillation à haute température du goudron de houille. Solide de couleur noire dont le point de ramollissement se situe approximativement entre 80 °C et 180 °C. Se compose principalement d'un mélange complexe d'hydrocarbures aromatiques à noyaux condensés comportant trois cycles ou plus.]
- IT : pece, catrame di carbone, alta temperatura, trattata termicamente ; Pece  
[Residuo trattato termicamente proveniente dalla distillazione ad alta temperatura di catrame di carbone. Un solido nero con punto di rammolimento da 80 a 180 °C. Composto prevalentemente da una complessa miscela di idrocarburi a tre o più anelli condensati.]
- NL : pek, koolteer, hoge temperatuur, warmte-behandeld ; Pek  
[Het met warmte behandelde residu van de destillatie van hoge-temperatuur-koolteer. Het is een zwarte vaste stof met een verwerkingstraject van ongeveer 80 °C tot 180 °C. Voornamelijk samengesteld uit een complex mengsel van aromatische koolwaterstoffen met drie of meer gecondenseerde ringen.]
- PT : breu, alcatrão de carvão, temperatura elevada, tratado pelo calor ; Piche  
[O residuo tratado pelo calor da destilação de alcatrão de carvão de temperatura elevada. Um sólido negro com um ponto de amolecimento de aproximadamente 80 °C a 180 °C. É constituído principalmente por uma mistura complexa de hidrocarbonetos aromáticos polinucleares de três ou mais anéis condensados.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-13-3

EEC No 302-650-3

No 648-057-00-6


NOTA H  
NOTA M

- ES: brea, alquitrán de hulla, alta temperatura, secundaria; Redestilado de brea  
[Residuo obtenido durante la destilación de fracciones de elevado punto de ebullición de alquitrán a alta temperatura de hulla bituminosa y/o aceite de coque de brea, con un punto de reblandecimiento de 140 °C a 170 °C según DIN 52025. Compuesto principalmente de compuestos aromáticos polinucleares que también contienen heteroátomos.]
- DA: beg, kultjære-, højtemperaturs, sekundær; Redestilleret tjærebeg  
[Resten opnået under destillationen af højt kogende fraktioner fra højtemperaturs tjære fra bituminøse kul og/eller begkoksolie, med et blødgøringspunkt fra 140 °C til 170 °C ifølge DIN 52025. Sammensat primært af tri- og polycykliske, aromatiske forbindelser, som også indeholder heteroatomer.]
- DE: Pech, Kohlenteer, Hochtemperatur, sekundär; Pech-Redestillat  
[Rückstand, den man während der Destillation von hochsiedenden Fraktionen aus Steinkohlen-Hochtemperatur-Teer und/oder Pechkoksöl erhält, mit einem Erweichungspunkt von 140 °C bis 170 °C nach DIN 52025. Besteht in erster Linie aus tri- und polynuklearen aromatischen Verbindungen, die auch Heteroatome enthalten können.]
- EL: πίσσα, απο λιθανθρακόπισσα, υψηλής θερμοκρασίας, δευτεροταγής; Επαναπόσταγμα κατραμιού  
[Το υπόλειμμα που λαμβάνεται κατά την απόσταξη κλασμάτων υψηλής περιοχής βρασμού από πίσσα υψηλής θερμοκρασίας, διτουμενικού άνθρακα ή και έλαιο πίσσας κοκ, με σημείο μαλακώματος από 140 °C έως 170 °C σύμφωνα με το DIN 52025. Αποτελείται πρώτιστως από τριπύρηνες και πολυπύρηνες με αρωματικές ενώσεις που μπορεί επίσης να περιέχουν ετεροάτομα.]
- EN: Pitch, coal tar, high-temp., secondary; Pitch Redistillate  
[The residue obtained during the distillation of high boiling fractions from bituminous coal high temperature tar and/or pitch coke oil, with a softening point of 140 °C to 170 °C (284 °F to 392 °F) according to DIN 52025. Composed primarily of tri- and polynuclear aromatic compounds which also contain heteroatoms.]
- FR: brai de goudron de houille à haute température, secondaire; Distillat de brai  
[Résidu obtenu au cours de la distillation des fractions lourdes de goudron à haute température issu de charbon bitumineux et/ou d'huile de coke de brai, dont le point de ramollissement est compris entre 140 °C et 170 °C selon la norme DIN 52025. Se compose principalement de composés aromatiques à tri- ou polycycliques. Peut également contenir des hétéroatomes.]
- IT: pece, catrame di carbone, alta temperatura, secondaria; Ridistillati di pece  
[Il residuo ottenuto durante la distillazione di frazioni ad alto punto di ebollizione da catrame di carbone bituminoso ad alta temperatura e/o olio di pece di coke, con un punto di rammollimento da 140 °C a 170 °C secondo DIN 52025. Costituito principalmente da composti aromatici tri- e policiclici che contengono anche eteroatomi.]
- NL: Pek, koolteer, hoge temperatuur, secundair; Pek destillaat  
[Het residu, verkregen tijdens de destillatie van hoogkokende fracties uit hoge temperatuur teer uit bitumineuze kool en/of pek-cokes-olie, met een verwekingspunt van 140 °C tot 170 °C volgens DIN 52025. Bestaat voornamelijk uit tri- en meerkernige aromatische verbindingen die ook heteroatomen bevatten.]
- PT: breu, alcatrão de carvão, de temperatura elevada, secundário; Piche redestilado  
[O residuo obtido durante a destilação de fracções de ponto de ebulição elevado de alcatrão de carvão betuminoso de temperatura elevada e/ou óleo de coque de breu, com um ponto de amolecimento de 140 °C a 170 °C segundo DIN 52025. É constituído principalmente por compostos aromáticos tri-e polinucleares que também contem heteroátomos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificaçãe*

Carc. Cat 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãe*


Cas No 92061-94-4

EEC No 295-507-9

No 648-058-00-1

NOTA H

NOTA M

- ES : residuos (alquitrán de hulla), destilación de brea ; Redestilado de brea  
[Residuo de la destilación fraccionada del destilado de brea con un intervalo de ebullición aproximado de 400 °C a 470 °C. Compuesto principalmente de hidrocarburos aromáticos polinucleares y compuestos heterocíclicos.]
- DA : rester (stenkultsjære), begdestillations- ; Redestilleret tjærebeg  
[Rest, fra den fraktionerede destillation af begdestillat, med kogesinterval omtrent fra 400 °C til 470 °C. Sammensat primært af polycykliske, aromatiske carbonhydrider og heterocycliske forbindelser.]
- DE : Rückstände (Kohlenteer), Pechdestillation ; Pech-Redestillat  
[Rückstand aus der fraktionierten Destillation von Pechdestillat, siedet im Bereich von etwa 400 °C bis 470 °C. Setzt sich in erster Linie aus polynuklearen aromatischen Kohlenwasserstoffen und heterocyclischen Verbindungen zusammen.]
- EL : υπολείμματα (λιθανθρακόπισσας), απόσταξης πίσσας· Επαναπόσταγμα κατραμιού  
[Υπόλειμμα από την κλασματική απόσταξη αποστάγματος πίσσας που δράζει στην περιοχή από 400 °C ως 470 °C περίπου. Αποτελείται κυρίως από πολυκυρηνικούς αρωματικούς υδρογονάνθρακες και ετεροκυκλικές ενώσεις.]
- EN : Residues (coal tar), pitch distn. ; Pitch Redistillate  
[Residue from the fractional distillation of pitch distillate boiling in the range of approximately 400 °C to 470 °C (752 °F to 846 °F). Composed primarily of polynuclear aromatic hydrocarbons, and heterocyclic compounds.]
- FR : résidus (goudron de houille), distillation de brai ; Distillat de brai  
[Résidu de la distillation fractionnée de distillat de brai dont le point d'ébullition est compris entre 400 °C et 470 °C. Se compose principalement d'hydrocarbures aromatiques polycycliques et de composés hétérocycliques.]
- IT : residui (catrame di carbone), distillazione della pece ; Ridistillati di pece  
[Residuo dalla distillazione frazionata di distillato di pece con punto di ebollizione nell'intervallo 400 °C-470 °C ca. È costituito prevalentemente da idrocarburi aromatici policiclici e composti eterociclici.]
- NL : residuen (koolteer), pekdestillatie- ; Pek destillaat  
[Residu van de gefractioneerde destillatie van pekdestillaat, met een kooktraject van ongeveer 400 °C tot 470 °C. Bestaat voornamelijk uit polynucleaire aromatische koolwaterstoffen en heterocyclische verbindingen.]
- PT : residuos (alcatrão de carvão), da destilação de breu ; Piche redestilado  
[Residuo da destilação fraccionada de destilado de breu que destila no intervalo de aproximadamente 400 °C a 470 °C. É constituído principalmente por hidrocarbonetos aromáticos polinucleares, e compostos heterocíclicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Roetulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 92062-20-9

EEC No 295-535-1

No 648-059-00-7

NOTA H

NOTA M

- ES:** alquitrán, hulla, elevada temperatura, residuos de destilación y almacenaje; Residuos sólidos de alquitran (carbónilla)  
[Residuos sólidos que contienen coque y ceniza que se separan en la destilación y tratamiento térmico de alquitrán de hulla bituminosa a elevada temperatura en las instalaciones de destilación y recipientes de almacenaje. Compuesto en su mayor parte de carbono y contiene una pequeña cantidad de heterocompuestos así como componentes en cenizas.]
- DA:** tjære, stenkuls-, højtemperatur, destillations- og oplageringsrester; Kultjæresediment  
[Koks- og askeholdige, faste rester, der adskilles ved destillation og termisk behandling af højtemperaturstjære fra bituminøse kul i destillationsinstallationer og oplageringsbeholdere. Består overvejende af carbon, og indeholder små mængder af heteroforbindelser, så vel som askekomponenter.]
- DE:** Teer, Kohlen-, Hochtemperatur, Destillations- und Lagerungsrückstände; Steinkohlenteerrückstand, fest  
[Koks- und Asche-enhaltende feste Rückstände, die sich bei der Destillation und der thermischen Behandlung von Steinkohlen-Hochtemperatur-Teer in Destillationsanlagen und Lagerhaltungsgefäßen abtrennen. Bestehen vorherrschend aus Kohlenstoff und enthalten eine kleine Menge Heteroverbindungen wie auch Aschenkomponenten.]
- EL:** πίσσα ανθρακα, υψηλής θερμοκρασίας, υπολείμματα απόσταξης και εναποθήκευσης;  
Υπόλειμμα στερεών λιθανθρακόπισσας  
[Στερεά υπολείμματα, περιέχοντα κοκ και τέφρα, τα οποία διαχωρίζονται κατά την απόσταξη και θερμική κατεργασία υψηλής θερμοκρασίας πίσσας διτουμινικού άνθρακα σε εγκαταστάσεις απόσταξης και δοχεία εναποθήκευσης. Συνίσταται κυρίως από άνθρακα και περιέχει μικρή ποσότητα ετερο-ενώσεων καθώς και ανιστατικά τέφρας.]
- EN:** Tar, coal, high-temp., distn. and storage residues; Coal Tar Solids Residue  
[Coke- and ash-containing solid residues that separate on distillation and thermal treatment of bituminous coal high temperature tar in distillation installations and storage vessels. Consists predominantly of carbon and contains a small quantity of hetero compounds as well as ash components.]
- FR:** goudron de houille haute température, résidus de distillation et de stockage; Résidus solides de goudron de charbon  
[Résidus solides contenant des cendres et du coke séparés au cours de la distillation et du traitement thermique du goudron a haute température de charbon bitumineux dans les unités de distillation et dans les réservoirs de stockage. Se composent principalement de carbone et contiennent de petites quantités d'hétérocycles et de constituants des cendres.]
- IT:** catrame, carbone, alta temperatura, residui della distillazione e stoccaggio; Residui solidi di catrame di carbone fossile  
[Residui solidi contenenti coke e cenere che si separano per distillazione e trattamento termico di catrame ad alta temperatura da carbone bituminoso in impianti di distillazione e recipienti di stoccaggio. Costituiti principalmente da carbone, contengono una piccola quantità di eterocomposti come pure componenti della cenere.]
- NL:** teer, kool, hoge temperatuur, destillatie- en opslagresiduen; Steenkoolteer, vaste behandelde  
[Cokes- en as-bevattende vaste residuen die worden afgescheiden bij destillatie en thermische behandeling van uit bitumeneuze kool afkomstige hoge-temperatuur-teer in destillatie-installaties en opslagtanks. Bestaat voornamelijk uit koolstof en bevat een kleine hoeveelheid heteroverbindingen alsmede asbestanddelen.]
- PT:** alcatrão, carvão, de temperatura elevada, resíduos da destilação e armazenagem; Resíduos sólidos de alcatrão de hulha  
[Resíduos sólidos contendo coque e cinza que são separados por destilação e tratamento térmico de alcatrão de carvão bituminoso de temperatura elevada em unidades de destilação e tanques de armazenagem. São constituídos predominantemente por carbono e contem uma pequena quantidade de compostos contendo heteroátomos bem como componentes de cinza.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Eiskettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91082-50-7

EEC No 293-764-1

No 648-060-00-2

NOTA H

NOTA M

- ES : alquitrán, hulla, residuos de almacenaje ; Residuos sólidos de alquitrán (carbonilla)  
[Depósito separado de almacenajes de alquitrán de hulla crudo. Compuesto principalmente de alquitrán de hulla y material carbonoso en partículas.]
- DA : tjære, stenkuls-, lagerrester ; Kultjæresediment  
[Aflejringer, fjernet fra lagre af rå stenkulstjære. Består primært af stenkulstjære og kulholdigt, findelt stof.]
- DE : Teer, Kohlen-, Lagerungsrückstände ; Steinkohlenteerrückstand, fest  
[Niederschlag, der von Aufbewahrungsstätten von rohem Kohlenteer entfernt wird. Besteht in erster Linie aus Kohlenteer und kohlenstoffhaltigen besonderen Stoffen.]
- EL : λιθανθρακόπισσας, υπολείμματα αποθήκευσης· Υπόλειμμα στερεών λιθανθρακόπισσας  
[Το κατακάθι που απομακρύνεται από αποθήκες ακατέργαστης λιθανθρακόπισσας. Αποτελείται πρωτίστως από λιθανθρακόπισσα και ανθρακούχα σωματίδια.]
- EN : Tar, coal, storage residues ; Coal Tar Solids Residue  
[The deposit removed from crude coal tar storages. Composed primarily of coal tar and carbonaceous particulate matter.]
- FR : goudron de houille, résidus de stockage ; Résidus solides de goudron de charbon  
[Dépôt recueilli dans les installations de stockage de goudron de houille brut. Se compose principalement de goudron de houille et de substance carbonée particulaire.]
- IT : catrame, carbone, residui di stoccaggio ; Residui solidi di catrame di carbone fossile  
[Deposito rimosso dallo stoccaggio di catrame di carbone grezzo. Costituito prevalentemente da catrame di carbone e materiale carbonioso particellare particolato.]
- NL : teer, kool, opslagresiduen ; Steenkoolteer, vaste bestanddelen  
[Het bezinsel dat wordt verwijderd uit ruwe koolteeropslag. Voornamelijk samengesteld uit koolteer en koolstofhoudend deeltjesmateriaal.]
- PT : alcatrão, carvão, resíduos de armazenagem ; Resíduos sólidos de alcatrão de hulha  
[O depósito retirado de armazéns de alcatrão de carvão bruto. É constituído principalmente por alcatrão de carvão e partículas de matéria carbonácea.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 100684-51-3

EEC No 309-726-5

No 648-061-00-8

NOTA H

NOTA M

- ES : alquitrán, hulla, elevada temperatura, residuos ; Residuos sólidos de alquitrán (carbonilla)  
[Sólidos formados durante la coquización de hulla bituminosa para producir alquitrán de hulla bituminosa bruta a elevada temperatura. Compuestos principalmente de coque y partículas de hulla, compuestos muy aromatizados y sustancias minerales.]
- DA : tjære, stenkuls-, højtemperaturs-, rester ; Kultjæresediment  
[Faste stoffer dannet under forkoksningen af bituminøse kul for at fremstille rå højtemperaturstjære. Sammensat primært af koks- og kulparkler, højt aromatiserede forbindelser og mineralske stoffer.]
- DE : Teer, Kohle, Hochtemperatur, Rückstände ; Steinkohlenteerrückstand, fest  
[Feststoffe, die während der Verkokung von Steinkohle zur Herstellung von rohem Steinkohlen-Hochtemperatur-Teer gebildet wird. Besteht in erster Linie aus Koks und Kohleteilchen, hoch aromatisierten Verbindungen und mineralischen Substanzen.]
- EL : πίσσα άνθρακα, υψηλής θερμοκρασίας, υπολείμματα· Υπόλειμμα στερεών λιθανθρακόπισσας  
[Στερεά που σχηματίζονται κατά την εξανθράκωση διτουμενικού άνθρακα για να παραχθεί ακατέργαστη πίσσα υψηλής θερμοκρασίας διτουμενικού άνθρακα. Αποτελείται πρωτίστως από σωματίδια κοκ και άνθρακα, ενώσεις αρωματισμένες σε μεγάλη εκταση και ανόργανες ουσίες.]
- EN : Tar, coal, high-temp., residues ; Coal Tar Solids Residue  
[Solids formed during the coking of bituminous coal to produce crude bituminous coal high temperature tar. Composed primarily of coke and coal particles, highly aromatized compounds and mineral substances.]
- FR : goudron de houille à haute température, résidus ; Résidus solides de goudron de charbon  
[Sólides formés au cours de la cokéfaction du charbon bitumineux en vue de la production de goudron de houille bitumineux brut a haute température. Contiennent principalement des particules de coke et de charbon, des composés hautement aromatisés et des substances minérales.]
- IT : catrame, carbone, alta temperatura, residui ; Residui solidi di catrame di carbone fossile  
[Solidi formati durante il coking di carbone bituminoso per produrre catrame ad alta temperatura da carbone bituminoso grezzo. Costituiti principalmente da coke e particelle di carbone, composti aromatici ad alto grado di condensazione e sostanze minerali.]
- NL : teer, kool, hoge temperatuur, residuen ; Steenkoolteer, vaste bestanddelen  
[Vaste stoffen die worden gevormd tijdens de verkooksing van bitumineuze kool om ruwe bitumineuze bij hoge temperatuur verkregen koolteer te vormen. Bestaat voornamelijk uit cokes en kooldeeltjes, in hoge mate gearomatiseerde verbindingen en minerale stoffen.]
- PT : alcatrão, carvão, de temperatura elevada, resíduos ; Resíduos sólidos de alcatrão de hulha  
[Sólidos formados durante o coking de carvão betuminoso para produzir alcatrão bruto de carvão betuminoso de temperatura elevada. São constituídos principalmente por partículas de coque e de carvão, compostos com grau elevado de aromatização e substâncias minerais.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68990-61-4

EEC No 273-615-7

No 648-062-00-3

NOTA H


NOTA M

- ES: alquitrán, hulla, elevada temperatura, gran proporción de sólidos; Residuos sólidos de alquitrán (carbonilla)  
[Producto de condensación obtenido por enfriamiento, aproximadamente hasta temperatura ambiente, del gas desprendido en la destilación destructiva de hulla a elevada temperatura (superior a 700 °C). Compuesto principalmente de una mezcla compleja de hidrocarburos aromáticos con anillos condensados con un elevado contenido de materiales sólidos de hulla y de tipo coque.]
- DA: tjære, stenkuls-, højtemperatur, højt indhold af faste stoffer; Kultjæresediment  
[Kondensationsproduktet opnået ved køling, omtrent til omgivende temperatur, af gassen udviklet ved højtemperaturstørdestillationen (højere end 700 °C) af kul. Består primært af en sammensat blanding af kondenserede aromatiske carbonhydrider med et højt faststof indhold af kul-og koks-lignende materialer.]
- DE: Teer, Kohle-, Hochtemperatur, hohe Feststoffanteile; Steinkohlenteerrückstand, fest  
[Kondensationsprodukt, erhalten durch Kühlen, auf etwa Umgebungstemperatur, des bei der Hochtemperatur-Entgasung (größer als 700 °C) von Kohle sich entwickelnden Gases. Besteht in erster Linie aus einem komplexen Gemisch aromatischer Kohlenwasserstoffe mit kondensierten Ringen mit hohem festen Bestandteil an Kohle- und Koks-ähnlichen Stoffen.]
- EL: πίσσα ανθρακα, υψηλής θερμοκρασίας, υψηλής περιεκτικότητας σε στερεά· Υπόλειμμα στερεών λιθανθρακόπισσας  
[Το προϊόν συμπύκνωσης που λαμβάνεται με ψύξη, περίπου σε θερμοκρασία περιβάλλοντος, του αερίου που εκλύεται κατά την ξηρή απόσταξη άνθρακα σε υψηλή θερμοκρασία (πάνω από 700 °C). Συνίσταται κυρίως από πολύπλοκο μείγμα αρωματικών υδρογονανθράκων με συμπυκνωμένους δακτυλίους και με υψηλή περιεκτικότητα σε στερεές ύλες τύπου άνθρακα και κοκ.]
- EN: Tar, coal, high-temp., high-solids; Coal Tar Solids Residue  
[The condensation product obtained by cooling, to approximately ambient temperature, the gas evolved in the high temperature (greater than 700 °C (1 292 °F)) destructive distillation of coal. Composed primarily of a complex mixture of condensed ring aromatic hydrocarbons with a high solid content of coal-type materials.]
- FR: goudron de houille à haute température, à haute teneur en matières solides; Résidus solides de goudron de charbon  
[Produit de condensation obtenu par refroidissement, à température ambiante, du gaz dégagé par la distillation destructive de la houille à haute température (au-dessus de 700 °C). Se compose principalement d'un mélange complexe d'hydrocarbures aromatiques à noyaux condensés et d'une quantité élevée de matières solides du type de la houille et du coke.]
- IT: catrame, carbone, alta temperatura, alto contenuto in solidi; Residui solidi di catrame di carbone fossile  
[Prodotto di condensazione ottenuto raffreddando, circa a temperatura ambiente, il gas che si sviluppa nella distillazione distruttiva del carbone ad alta temperatura (superiore a 700 °C). È costituito principalmente da una miscela complessa di idrocarburi aromatici ad anelli condensati con un alto contenuto in sostanze solide tipo carbone e coke.]
- NL: teer, kool-, hoge temperatuur, hoge gehaltes aan vaste stof; Steenkoolteer, vaste bestanddelen  
[Het condensatieproduct dat wordt verkregen door koelen, tot ongeveer omgevingstemperatuur, van het gas dat vrijkomt bij de destructieve destillatie bij hoge temperatuur (boven 700 °C) van kool. Voornamelijk samengesteld uit een complex mengsel van aromatische koolwaterstoffen met gecondenseerde ringen en heeft een hoog gehalte aan vaste kool- en cokesachtige materialen.]
- PT: alcatrão, carvão, de temperatura elevada, teor elevado em sólidos; Resíduos sólidos de alcatrão de hulha  
[O produto de condensação obtido arrefecendo, até próximo da temperatura ambiente, o gás libertado na destilação destrutiva do carvão a temperatura elevada (superior a 700 °C). É constituído principalmente por uma mistura complexa de hidrocarbonetos aromáticos polinucleares com teor elevado em sólidos do tipo do carvão e do coque.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Roetulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*




Cas No 92062-34-5

EEC No 295-549-8

No 648-063-00-9

NOTA H

NOTA M

- ES sólidos residuales, coquización de brea de alquitrán de hulla ; Residuos sólidos de alquitrán (carbonilla)  
[Combinación de residuos formados por la coquización de brea de alquitrán de hulla bituminosa. Compuesta en su mayor parte de carbono]
- DA affaldsstoffer, faste, kultjærebegsforkoknings-, Kultjæresediment  
[Det samlede affald dannet ved forkokningen af bituminøs kultjærebeg. Der består overvejende af carbon.]
- DE Feste Abfallstoffe, Kohlenteer Pech Verkokung , Steinkohlenteerrückstand, fest  
[Kombination von Abfällen, die durch Verkokung von Steinkohlenteerpech entstehen. Besteht vorherrschend aus Kohlenstoff]
- EL αχρηστα στερεά, όπτησης πίσσας λιθανθρακόπισσας. Υπόλειμμα στερεών λιθανθρακόπισσας  
[Ο συνδυασμός των αποβλήτων που σχηματίζονται με την όπτηση πίσσας διτουμενικής λιθανθρακόπισσας. Συνίσταται κυρίως από άνθρακα]
- EN Waste solids, coal-tar pitch coking , Coal Tar Solids Residue  
[The combination of wastes formed by the coking of bituminous coal tar pitch. It consists predominantly of carbon.]
- FR déchets solides, cokéfaction de brai de goudron de houille ; Résidus solides de goudron de charbon  
[Combinaison de déchets formée par cokéfaction de brai de goudron de houille bitumineux. Se compose principalement de carbone]
- IT solidi di scarto, coking della pece di catrame di carbone ; Residui solidi di catrame di carbone fossile  
[La combinazione di scarti ottenuta mediante 'coking' di pece di catrame di carbone bituminoso. È costituita principalmente da carbonio]
- NL vaste afvalstoffen, verkooksing van koolteerpek , Steenkoolteer, vaste bestanddelen  
[De combinatie van afvalstoffen die wordt gevormd door de verkooksing van bitumineuze koolteerpek. Bestaat voornamelijk uit koolstof]
- PT desperdícios sólidos, do coking de breu de alcatrão de carvão , Resíduo sólidos de alcatrão de hulha  
[A combinação de desperdícios formada pelo coking de breu de alcatrão de carvão betuminoso. É constituída predominantemente por carbono]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Car. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91697-23-3

EEC No 294-285-0

No 648-064-00-4

NOTA H  
NOTA M

- ES: residuos del extracto (hulla), lignito; Extracto de alquitrán  
[Residuo de la extracción con tolueno de lignito deshidratado.]
- DA: ekstraktrester (kul), brunkul, Syre- og basefri kultjære  
[Resten fra toluenekstraktion af tørret brunkul.]
- DE: Extraktückstände (Kohle), braun; Steinkohlenteer-Extrakt  
[Rückstand aus der Toluolextraktion von getrockneter Braunkohle]
- EL: υπολείμματα εκχύλισματος (άνθρακα), καφέ: Εκχύλισμα λιθανθρακόπισσας  
[Το υπόλειμμα από την εκχύλιση με τολουόλιο λιγνίτη που έχει ξηρανθεί.]
- EN: Extract residues (coal), brown, Coal Tar Extract  
[The residue from extraction of dried coal.]
- FR: résidu d'extrait de lignite; Extraits de goudron de charbon  
[Résidu issu de l'extraction du toluène du lignite desséché]
- IT: residui di estrazione (carbone), bruno, Catrame di carbone fossile lavato  
[Residuo dall'estrazione con toluene di carbone bruno secco]
- NL: extractresiduen (kool), bruin, Steenkoolteer extract  
[Het residu dat afkomstig is van de toluenextractie van gedroogde bruinkool]
- PT: resíduos de extracção, lenhite, Extracto de alcatrão de hulha  
[O resíduo da extracção com tolueno de lenhite seca]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R: 45
	S: 53-45

Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, concentration limits  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 92045-71-1

EEC No 295-454-1

No 648 065 00-X

NOTA H

NOTA M

- ES** ceras de parafina (hulla), alquitran de lignito a elevada temperatura, Extracto de alquitran  
[Combinación compleja de hidrocarburos obtenida de alquitran de carbonización del lignito por cristalización en disolvente (deslu-  
brificado con disolvente), por condensación o en procesos de aducción. Compuesta fundamentalmente de hidrocarburos saturados  
de cadena ramificada y lineal con un número de carbonos en su mayor parte superior a  $C_{12}$ ]
- DA** paraffinvokser (kul), brunkulshøjtemperaturstjære, Syre -og basefri kultjære  
[En sammensat blanding af carbonhydrier, opnået fra brunkulforkulningstjære ved solventkrystallisation (solventafoliering) ved  
vedvning eller en adduktionsproces. Den består overvejende af lige-kædede og forgrenede, mættede carbonhydrider, overvejende  
-tørre end  $C_{12}$ ]
- DE** Paraffinwachs (Kohle), Braunkohlen Hochtemperatur-Teer, Steinkohlenteer-Extrakt  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus Teer aus der Braunkohle Entgasung durch Lösungsmittelkristalli-  
sation (Lösungsmittelentzug), durch Ausschwitzen oder durch ein Adduktionsverfahren erhält. Besteht vorherrschend aus gesat-  
tigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ ]
- EL** παραφινικοί κηροι (άνθρακα), υψηλής θερμοκρασίας πίσσας λιγνίτη. Εκχύλισμα λιθανθρακοπισσας  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται από πίσσα εξάνθρακωσης λιγνίτη με κρυστάλλωση με διαλύτη  
(αποελαίωση με διάλυση), με μέθοδο εξιδρώσης ή σχηματισμού εγκλεισμάτων. Συνίσταται πρωτίστως από κορεσμένους ευθύ και  
μικτά και κλάσματους υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{12}$ ]
- EN** Paraffin waxes (coal), brown-coal high-temp tar, Coal Tar Extract  
[A complex combination of hydrocarbons obtained from lignite carbonization tar by solvent crystallisation (solvent deoiling), by  
sweating or an adducting process. It consists predominantly of straight and branched chain saturated hydrocarbons having carbon  
numbers predominantly greater than  $C_{12}$ ]
- FR** paraffines (charbon), goudron de lignite a haute temperature, Extraits de goudron de charbon  
[Combinaison complexe d'hydrocarbures obtenue a partir du goudron de carbonisation du lignite par cristallisation au solvant  
(leaching au solvant), par ressuage ou par addition. Elle compose principalement d'hydrocarbures satures a chaines droites ou ram-  
ifiees en majorite superieurs a  $C_{12}$ ]
- IT** cere paraffiniche (carboni), catrame di carbone (lignite) ad alta temperatura, Catrame di carbone (fossile) lavato  
[Combinazione complessa di idrocarburi ottenuta da catrame di carbonizzazione della lignite con cristallizzazione e da colatura  
tecnica con solvente) per mezzo di un processo di trattamento o di adduzione. E' costituita prevalentemente da idrocarburi  
saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente maggiore di  $C_{12}$ ]
- NL** paraffinwas en (kool) bruinkool hoge temperatuur teer, Steenkoolteer extract  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit lignietcarbonisatieteer door solventkristallisatie  
(solvent ontolien) door uitzweling of een adductieproces. Bestaat voornamelijk uit vertakte en niet vertakte verzadigde koolwater-  
stoffen overwegend groter dan  $C_{12}$ ]
- PT** ceras parafinicas (carvão), alcatrão de lenhite de temperatura elevada, Extracto de alcatrão de hulha  
[Uma combinação complexa de hidrocarbonetos obtida do alcatrão da carbonização de lenhite por cristalização com  
(deparafinação com solvente) por um processo de separação ou de formação de adutos. É constituída predominantemente por  
hidrocarbonetos saturados com número de átomos de carbono predominantemente superiores a  $C_{12}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cis No 92045-72-2

EEC No 295-455-7

No 92045-72-2-3

92045-72-2  
92045-72-2-3

- ES ceras de parafina (hulla), alquitrán de lignito a elevada temperatura ; Extracto de alquitrán  
[Combinación compleja de hidrocarburos obtenida de alquitrán de carbonización del lignito por cristalización en disolvente (destilado con disolvente), por condensación o en procesos de aducción tratado con hidrógeno en presencia de un catalizador. Está compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada y lineal con un número de carbonos en su parte superior a  $C_{12}$ ]
- DA paraffinvokser (kul), brunkulshøjtemperaturstjære, hydrogenbehandlede ; Syre -og basefri kultjære  
[En sammensat blanding af carbonhydrider, opnået fra brunkulsforkulningstjære ved solventkrystallisation (solventaføiering), ved svedning eller en adduktionsproces, behandlet med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af lige-kædede og forgrenede, mættede carbonhydrider, overvejende større end  $C_{12}$ ]
- DE Paraffinwachse (Kohle), Braunkohlen-Hochtemperatur-Teer, mit Wasserstoff behandelt ; Steinkohlenteer-Extrakt  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus Teer aus der Braunkohle-Entgasung durch Lösungsmittelkristallisation (Lösungsmitteltölung), durch Ausschwitzen oder durch ein Adduktionsverfahren mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ ]
- παράφινικοί κηροι (άνθρακα), υψηλής θερμοκρασίας πίσσας λιγνίτη, υδρογονοκατεργασμένοι. Εκχύλισμα λιθανθρακόπισσας  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από πίσσα εξανθράκωσης λιγνίτη με κρυστάλλωση με διαλύτη (αποποίηση με διαλύτη), με μέθοδο εφίδρωσης ή σχηματισμού εγκλεισμάτων και κατεργασία με υδρογόνο παρουσία καταλύτη. Συνίσταται πρωτίστως από κορεσμένους γραμμικούς και διακλαδισμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{12}$ ]
- EN paraffin waxes (coal), brown-coal-high-temp. tar, hydrotreated ; Coal Tar Extract  
[A complex combination of hydrocarbons obtained from lignite carbonization tar by solvent crystallisation (solvent deoiling), by treating or an adducting process treated with hydrogen in the presence of a catalyst. It consists predominantly of straight and branched chain saturated hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ ]
- FR paraffines (charbon), goudron de lignite à haute température, hydrotraitées ; Extraits de goudron de charbon  
[Combinaison complexe d'hydrocarbures obtenue à partir du goudron de carbonisation du lignite par cristallisation (déshuilage au solvant), par ressuage ou par addition, puis traitée à l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures saturés à chaîne droite ou ramifiée, en majorité supérieurs à  $C_{12}$ ]
- IT cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura, idrotrattate ; Catrame di carbone fossile lavato  
[Combinazione complessa di idrocarburi ottenuta da catrame di carbonizzazione della lignite mediante cristallizzazione da solvente (deoliatura con solvente) per mezzo di un processo di trasudamento o di adduzione trattato con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente maggiore di  $C_{12}$ ]
- NL paraffinewassen (kool), bruinkool hoge temperatuur teer, waterstofbehandeld ; Steenkoolteer extract  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit lignietcarbonisatie-teer door solventkristallisatie (solvent-ontolien), door uitzwetting of een adductieproces behandeld met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit vertakte en niet vertakte verzadigde koolwaterstoffen, overwegend groter dan  $C_{12}$ ]
- PT ceras parafínicas (carvão), alcatrão de lenhite de temperatura elevada, tratadas com hidrogénio ; Extracto de alcatrão de hulha  
[Uma combinação complexa de hidrocarbonetos obtida de alcatrão da carbonização de lenhite por cristalização com solvente (desparafinação com solvente), por um processo de segregação ou de formação de adutos tratada com hidrogénio na presença d um catalisador. É constituída predominantemente por hidrocarbonetos saturados lineares e ramificados com números de átomos de carbono predominantemente superiores a  $C_{12}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 97926-78-8

EEC No 308-298-7

No 648-067-00-0

NOTA H

NOTA M

- ES** ceras de parafina (hulla), alquitrán de lignito a elevada temperatura, tratado con ácido silícico, Extracto de alquitrán  
[Combinación compleja de hidrocarburos obtenida por el alquitrán de carbonización de lignito con ácido silícico para la separación de constituyentes en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada y lineal con un número de carbonos en su mayor parte superior a  $C_{12}$ ]
- DA** paraffinvokser (kul), brunkulhøjtemperaturstjære, kiselsyrebehandlet, Syre- og basefri kultjære  
[En sammensat blanding af carbonhydrider opnået ved behandlingen af brunkul-forkulningstjære med kiselsyre for at fjerne sporbestanddele og urenheder. Den består overvejende af mættede ligekædede og forgrenede carbonhydrider, overvejende større end  $C_{12}$ ]
- DE** Paraffinwachse (Kohle), Braunkohle, Hochtemperatur-Teer, mit Kieselsäure behandelt, Steinkohlenteer-Extrakt  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Teer aus der Braunkohlenverkokung mit Kieselsäure erhält, um Spurenbestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ ]
- EL** κηροι παραφίνης (άνθρακα), πίσσας λιγνίτη υψηλής θερμοκρασίας, κατεργασμένοι με πυριτικό οξύ. Εκχύλισμα λιθανθρακόπισσας  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία πίσσας εξανθράκωσης λιγνίτη με πυριτικό οξύ για να απομακρυνθούν ίχνη συστατικών και προσμίξεις. Συνίσταται κυρίως από υδρογονάνθρακες ευθείας και διακλαδισμένης αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{12}$ ]
- EN** Paraffin waxes (coal), brown-coal high-temp tar, silicic acid-treated, Coal Tar Extract  
[A complex combination of hydrocarbons obtained by the treatment of lignite carbonization tar with silicic acid for removal of trace constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ ]
- FR** cires de paraffine (charbon), goudron de lignite a haute température traité à l'acide silicique, Extraits de goudron de charbon  
[Combinaison complexe d'hydrocarbures obtenue par traitement à l'acide silicique du goudron de carbonisation du lignite en vue d'éliminer les oligo éléments et les impuretés. Se compose principalement d'hydrocarbures saturés à chaîne droite ou ramifiée dont le nombre de carbones est en majorité supérieur à  $C_{12}$ ]
- IT** cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura, trattate con acido silicico, Catrame di carbone fossile lavato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di catrame di carbonizzazione di lignite con acido silicico per eliminare costituenti in tracce ed impurezze. È costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente superiore a  $C_{12}$ ]
- NL** paraffinewassen (kool), bruinkool hoge temperatuur teer, behandeld met kiezelzuur, Steenkoolteer extract  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van lignietcarbonisatie teer met kiezelzuur om sporenbestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit verzadigde vertakte en niet vertakte koolwaterstoffen, overwegend groter dan  $C_{12}$ ]
- PT** ceras parafínicas (carvão), alcatrão de lenhite de temperatura elevada, tratadas com ácido silícico, Extracto de alcatrão de hulha  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de alcatrão de carbonização de lenhite com ácido silícico para remoção de constituintes vestigiais e impurezas. É constituída predominantemente por hidrocarbonetos saturados lineares e ramificados com números de átomos de carbono predominantemente superiores a  $C_{12}$ ]



*Clasificación, Klassificering, Einstufung, .ξινόμηση, Classification, Classification, Classificazione, Indeling Classificacão*

**Carc. Cat. 2, R 45**

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	<b>R : 45</b> <b>S : S3-45</b>

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101316-85-2

EEC No 309-887-1

No 648-068-00-6

NOTA H

NOTA M

- ES : alquitrán, hulla, baja temperatura, residuos de destilación ; Aceite de alquitrán, medio punto de ebullición  
[Residuos de destilación fraccionada del alquitrán de hulla a baja temperatura para separar aceites que tienen un intervalo de ebullición aproximado por encima de 300 °C. Compuesto principalmente de compuestos aromáticos.]
- DA : tjære, stenkuls-, lavtemperatur, destillationsrester ; Kultjæreolie, mellemdestillat  
[Rester fra fraktioneret destillation af lavtemperaturstenkultsjære for at fjerne olier, der koger i området op til omtrent 300 °C. Sammensat primært af aromatiske forbindelser.]
- DE : Teer, Kohle, Niedrigtemperatur, Destillationsrückstände ; Teeröl, mittelsiedend  
[Rückstände aus der fraktionierten Destillation von Niedrigtemperatur-Kohlenteer zur Beseitigung von Ölen, die in einem Bereich bis zu ungefähr 300 °C sieden. Besteht in erster Linie aus aromatischen Verbindungen.]
- EL : πίσσα άνθρακα, χαμηλής θερμοκρασίας, υπολείμματα απόσταξης· Πισσέλαιο, μέσου σημείου ζέσης  
[Υπολείμματα από την κλασματική απόσταξη λιθανθρακόπισσας χαμηλής θερμοκρασίας, για να απομακρυνθούν έλαια με περιοχή βρασμού μέχρι 300 °C περίπου. Αποτελούνται κυρίως από αρωματικούς υδρογονάνθρακες.]
- EN : Tar, coal, low-temp., distn residues ; Tar Oil, intermediate boiling  
[Residues from fractional distillation of low temperature coal tar to remove oils that boil in a range up to approximately 300 °C (572 °F). Composed primarily of aromatic compounds.]
- FR : goudron de houille à basse température, résidus de distillation ; Huile de goudron, point d'ébullition intermédiaire  
[Résidus d'une distillation fractionnée à basse température de goudron de houille destinée à éliminer les huiles dont le point d'ébullition est approximativement inférieur à 300 °C. Sont principalement constitués de composés aromatiques.]
- IT : catrame, carbone, bassa temperatura, residui della distillazione ; Olio di catrame, mediobollente  
[Residui della distillazione frazionata di catrame di carbone a bassa temperatura per rimuovere gli oli con punto di ebollizione nell'intervallo fino a 300 °C ca. Costituiti prevalentemente da composti aromatici.]
- NL : teer, kool, lage temperatuur, destillatieresiduen ; Teerolie, tussenfractie  
[Residuen die worden verkregen uit de fractionele destillatie van bij lage temperatuur verkregen koolteer, waarbij olien met een kookpunt tot ongeveer 300 °C worden verwijderd. Voornamelijk samengesteld uit aromatische verbindingen.]
- PT : alcatrão, carvão, de temperatura baixa, resíduos da destilação ; óleos de alcatrão médio ponto de ebulição  
[Resíduos da destilação fraccionada de alcatrão de carvão de temperatura baixa para remover óleos que destilam num intervalo até aproximadamente 300 °C São constituídos principalmente por compostos aromáticos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90669-57-1

EEC No 292-651 4

No 648-069-00-1

NOTA H


NOTA M

- ES** brea, alquitrán de hulla, baja temperatura ; Residuos de brea  
[Sólido o semisólido complejo negro obtenido de la destilación de alquitran de hulla a baja temperatura. Tiene un punto de reblandecimiento dentro del intervalo aproximado de 40 °C a 180 °C. Compuesto principalmente de una mezcla compleja de hidrocarburos.]
- DA** : beg, kultjære, lavtemperatur ; Tjærebeg  
[Et sammensat sort, fast, eller halvfast stof opnået ved destillation af en lavtemperaturstenkultjære. Det har et blødgøringspunkt mellem omtrent 40 °C og 180 °C. Sammensat primært af en kompleks blanding af carbonhydrier.]
- DE** Pech, Kohlenteer, Niedrigtemperatur , Pechrückstand  
[Komplexer schwarzer Feststoff oder Semifeststoff, erhalten aus der Destillation von Niedrigtemperatur-Kohlenteer. Hat einen Erweichungspunkt in einem Bereich von etwa 40 °C bis 180 °C. Besteht in erster Linie aus einem komplexen Gemisch von Kohlenwasserstoffen.]
- FI** πισσα, λιθανθρακόπισσας, χαμηλής θερμοκρασίας Υπόλειμμα κατραμιού  
[Πολύπλοκο μαύρο στερεό ή ημι στερεό που λαμβάνεται από την απόσταξη λιθανθρακόπισσας χαμηλής θερμοκρασίας. Έχει σημείο μαλακώματος στην περιοχή από 40 °C ως 180 °C περίπου. Αποτελείται κυρίως από πολύπλοκο μείγμα υδρογονανθράκων.]
- EN** Pitch, coal tar, low-temp , Pitch Residue  
[A complex black solid or semi solid obtained from the distillation of a low temperature coal tar. It has a softening point within the approximate range of 40 °C to 180 °C (104 °F to 356 °F). Composed primarily of a complex mixture of hydrocarbons.]
- FR** brai de houille à basse température , Résidu de brai  
[Solide ou semi solide complexe de couleur noire obtenu par distillation d'un goudron de houille à basse température. Son point de ramollissement est compris approximativement entre 40 °C et 180 °C. Se compose principalement d'un mélange complexe d'hydrocarbures.]
- IT** pece, catrame di carbone, bassa temperatura , Residui pecciosi  
[Solido o semi solido complesso nero ottenuto dalla distillazione di catrame di carbone a bassa temperatura. Ha un punto di ramollimento nell'intervallo 40 °C-180 °C ca. Costituito prevalentemente da una miscela complessa di idrocarburi.]
- NL** pek, koolteer, lage temperatuur , Pek residu  
[Een complexe zwarte vaste of halfvaste stof die wordt verkregen uit de destillatie van een lage temperatuur-koolteer. Verweekt in het traject van 40 °C tot 180 °C. Voornamelijk samengesteld uit een complex mengsel van koolwaterstoffen.]
- PT** breu, alcatrão de carvão, de temperatura baixa , Resíduo de piche  
[Um sólido ou semi sólido complexo negro obtido da destilação de um alcatrão de carvão de temperatura baixa. Tem um ponto de amolecimento no intervalo de aproximadamente 40 °C a 180 °C. É constituído principalmente por uma mistura complexa de hidrocarbonetos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90669-59-3

EEC No 292-654-0

No 648-070-00-7

NOTA H


NOTA M

- ES: brea, alquitrán de hulla, baja temperatura, oxidada; Residuos de brea, oxidado  
[Producto obtenido por inyección de aire, a elevada temperatura, a la brea de alquitrán de hulla a baja temperatura. Tiene un punto de reblandecimiento dentro del intervalo aproximado de 70 °C a 180 °C. Compuesto principalmente de una mezcla compleja de hidrocarburos.]
- DA: beg, kultjære, lavtemperatur, oxideret; Tjærebeg, oxideret  
[Produktet opnået ved at luftgennemblæse lavtemperaturkultjærebeg ved forhøjet temperatur. Det har et blødgøringspunkt mellem omtrent 70 °C og 180 °C. Sammensat primært af en kompleks blanding af carbonhydrider.]
- DE: Pech, Kohlenteer, Niedrigtemperatur, oxidiert; Pechrückstand, oxidiert  
[Produkt, das man durch Blasen von Luft durch Niedrigtemperatur-Kohlenteerpech bei erhöhter Temperatur erhält. Hat einen Erweichungspunkt in einem Bereich von etwa 70 °C bis 180 °C. Besteht in erster Linie aus einem komplexen Gemisch von Kohlenwasserstoffen.]
- EL: πίσσα λιθανθρακόπισσας χαμηλής θερμοκρασίας, οξειδωμένη; Υπόλειμμα κατραμιού, οξειδωμένο  
[Το προϊόν που λαμβάνεται με εμφύσηση αέρα, σε ανυψωμένη θερμοκρασία, σε πίσσα λιθανθρακόπισσας χαμηλής θερμοκρασίας. Έχει σημείο μαλακώματος στην περιοχή από 70 °C ως 180 °C περίπου. Αποτελείται κυρίως από πολύπλοκο μείγμα υδρογονανθράκων.]
- EN: Pitch, coal tar, low-temp., oxidized; Pitch Residue, oxidised  
[The product obtained by air-blowing, at elevated temperature, low-temperature coal tar pitch. It has a softening-point within the approximate range of 70 °C to 180 °C (158 °F to 356 °F). Composed primarily of a complex mixture of hydrocarbons.]
- FR: brai de houille à basse température, oxydé; Résidu de brai, oxydé  
[Produit obtenu par soufflage d'air, à température élevée, sur un brai de houille à basse température. Son point de ramollissement est compris approximativement entre 70 °C et 180 °C. Se compose principalement d'un mélange complexe d'hydrocarbures.]
- IT: pece, catrame di carbone, bassa temperatura, ossidata; Pece ossidata  
[Prodotto ottenuto da soffiaggio di aria, a temperatura elevata, su catrame di carbone a bassa temperatura. Ha un punto di rammolimento nell'intervallo 70 °C-180 °C ca. Costituito prevalentemente da una miscela complessa di idrocarburi.]
- NL: pek, koolteer, lage temperatuur, geoxideerd; Pek residu, geoxydeerd  
[Het produkt dat wordt verkregen door het doorblazen met lucht, bij verhoogde temperatuur, van lage temperatuur-koolteerpek. Heeft een verwekingstraject van ongeveer 70 °C tot 180 °C. Voornamelijk samengesteld uit een complex mengsel van koolwaterstoffen.]
- PT: breu, alcatrão de carvão, de temperatura baixa, oxidado; Resíduo de piche oxidado  
[O produto obtido pela insuflação de ar, a temperatura elevada, em breu de alcatrão de carvão de temperatura baixa. Tem um ponto de amolecimento no intervalo de aproximadamente 70 °C a 180 °C. É constituído principalmente por uma mistura complexa de hidrocarbonetos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90669-58-2

EEC No 292-653-5

No 648-071-00-2

NOTA H

NOTA M

- ES : brea, alquitrán de hulla, baja temperatura, tratado térmicamente ; Residuos de brea, oxidado ; Residuos de brea, tratamiento térmico  
[Sólido complejo negro obtenido por el tratamiento térmico de brea de alquitrán de hulla a baja temperatura. Tiene un punto de reblandecimiento dentro del intervalo aproximado de 50 °C a 140 °C. Compuesto principalmente de una mezcla compleja de compuestos aromáticos.]
- DA : beg, kultjære-, lavtemperatur, varmebehandlet ; Tjærebeg, oxideret ; Tjærebeg, varmebehandlet  
[Et sammensat sort, fast, stof opnået ved varmebehandling af lavtemperaturkultjærebeg. Det har et blødgøringspunkt mellem omtrent 50 °C og 140 °C. Sammensat primært af en kompleks blanding af aromatiske forbindelser.]
- DE : Pech, Kohlenteer, Niedrigtemperatur, Wärme-behandelt ; Pechrückstand, oxidiert ; Pechrückstand, wärmebehandelt  
[Komplexer schwarzer Feststoff oder Semifeststoff, erhalten durch Wärmebehandlung von Niedrigtemperatur-Kohlenteer. Hat einen Erweichungspunkt in einem Bereich von etwa 50 °C bis 140 °C. Besteht in erster Linie aus einem komplexen Gemisch von aromatischen Verbindungen.]
- EL : πίσσα, λιθανθρακόπισσας, χαμηλής θερμοκρασίας, κατεργασμένη θερμικώς· Υπόλειμμα κατραμιού, οξειδωμένο· Υπόλειμμα κατραμιού, θερμικής επεξεργασίας  
[Πολύπλοκο μαύρο στερεό που λαμβάνεται με τη θερμική κατεργασία πίσσας λιθανθρακόπισσας χαμηλής θερμοκρασίας. Έχει σημείο μαλακώματος στην περιοχή από 50 °C ως 140 °C περίπου. Αποτελείται κυρίως από πολύπλοκο μείγμα αρωματικών ενώσεων.]
- EN : Pitch, coal tar, low-temp., heat-treated ; Pitch Residue, oxidised ; Pitch Residue, heat-treated  
[A complex black solid obtained by the heat treatment of low temperature coal tar pitch. It has a softening point within the approximate range of 50 °C to 140 °C (122 °F to 284 °F). Composed primarily of a complex mixture of aromatic compounds.]
- FR : brai de houille à basse température, traitement thermique ; Résidu de brai, oxydé ; Résidu de brai, traité thermique-ment  
[Solide complexe de couleur noire obtenu par traitement thermique d'un brai de houille à basse température. Son point de ramollissement est compris approximativement entre 50 °C et 140 °C. Se compose principalement d'un mélange complexe de composés aromatiques.]
- IT : pece, catrame di carbone, bassa temperatura, trattata termicamente ; Pece ossidata ; Pece termotrattata  
[Solido complesso nero ottenuto dal trattamento termico di catrame di carbone a bassa temperatura. Ha un punto di rammolimento nell'intervallo 50 °C-140 °C ca. Costituito prevalentemente da una miscela complessa di composti aromatici.]
- NL : pek, koolteer, lage temperatuur, met warmte behandeld ; Pek residu, geoxydeerd ; Pek residu, thermisch behandeld  
[Een complexe zwarte vaste stof die wordt verkregen door de warmte-behandeling van lage temperatuur-koolteerpek. Heeft een verwekingstraject van ongeveer 50 °C tot 140 °C. Voornamelijk samengesteld uit een complex mengsel van aromatische verbindingen.]
- PT : breu, alcatrão de carvão, de temperatura baixa, tratado termicamente ; Resíduo de piche oxidado ; Resíduo de piche tratado termicamente  
[Um sólido complexo negro obtido pelo tratamento térmico de breu de alcatrão de carvão de temperatura baixa. Tem um ponto de amolecimento no intervalo de aproximadamente 50 °C a 140 °C. É constituído principalmente por uma mistura complexa de compostos aromáticos.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68188-48-7

EEC No 269-159-3

No 648-072-00-8

NOTA H

NOTA M

- ES : destilados (petróleo-hulla), fracción aromática con anillos condensados ; Destilados  
[Destilado de una mezcla de alquitrán de hulla y corrientes de petróleo aromáticas con un intervalo de destilación aproximado de 220 °C a 450 °C. Compuesto principalmente de hidrocarburos aromáticos con anillos condensados de 3 a 4 miembros.]
- DA : destillater (kul og råolie), kondenserede aromat- ; Destillater  
[Destillatet fra en blanding af stenkulstjære og aromatiske råoliestrømme med destillationsområde omtrent fra 220 °C til 450 °C. Sammensat primært af aromatiske carbonhydrider, bestående af 3- til 4-ledede kondenserede ringe.]
- DE : Destillate (Kohle-Erdöl), kondensierte Ringe aromatisch ; Destillate  
[Destillat aus einem Gemisch von Kohlenteer- und aromatischen Erdöläufen mit einem Destillationsbereich von etwa 220 °C bis 450 °C. Besteht in erster Linie aus aromatischen Kohlenwasserstoffe mit 3- oder 4-gliedrigen kondensierten Ringen.]
- EL : αποστάγματα (άνθρακα-πετρελαίου), αρωματικά συμπυκνωμένων δακτυλίων· Αποστάγματα  
[Το απόσταγμα από μείγμα λιθάνθρακόςκουσας και ρευμάτων αρωματικού πετρελαίου με περιοχή απόσταξης από 220 °C ως 450 °C περίπου. Αποτελείται κυρίως από αρωματικούς υδρογονάνθρακες με τριμελείς έως τετραμελείς συμπυκνωμένους δακτύλιους.]
- EN : Distillates (coal-petroleum), condensed-ring arom ; Distillates  
[The distillate from a mixture of coal and tar and aromatic petroleum streams having an approximate distillation range of 220 °C to 450 °C (428 °F to 842 °F). Composed primarily of 3- to 4-membered condensed ring aromatic hydrocarbons.]
- FR : distillats aromatiques à noyaux condensés (charbon-pétrole) ; Distillats  
[Distillat d'un mélange de goudron de houille et de charges pétrolières aromatiques dont l'intervalle de distillation s'étend approximativement de 220 °C à 450 °C. Se compose principalement d'une combinaison complexe d'hydrocarbures aromatiques à noyaux condensés comportant 3 ou 4 cycles.]
- IT : distillati (carbone-petrolio), aromatici a nuclei condensati ; Distillati  
[distillato ottenuto da una miscela di catrame di carbone e correnti aromatiche di petrolio con punto di ebollizione nell'intervallo 220 °C-450 °C ca. È composto principalmente da idrocarburi a nuclei condensati di 3-4 elementi.]
- NL : destillaten (kool-aardolie), gecondenseerde ringen-aromatisch ; Destillaten  
[Het destillaat van een mengsel van koolteer en aromatische aardoliestromen, met een destillatietraject van ongeveer 220 °C tot 450 °C. Voornamelijk samengesteld uit aromatische koolwaterstoffen met drie of vier gecondenseerde ringen.]
- PT : destilados (carvão-petróleo), aromáticos polinucleares ; Destilados  
[O destilado de uma mistura de alcatrão de carvão e frações petrolíferas aromáticas tendo um intervalo de destilação de aproximadamente 220 °C a 450 °C. Compõe-se principalmente de hidrocarbonetos aromáticos polinucleares com 3 a 4 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101794-74-5

EEC No 309-956-6

No 646-073-00-3

NOTA H

NOTA M

- ES** hidrocarburos aromáticos,  $C_{20-28}$ , policíclicos, mezcla derivada de la pirólisis de polipropileno-polietileno-brea de alquitrán de hulla, Productos de pirólisis  
[Combinación compleja de hidrocarburos obtenida de la mezcla de la pirólisis de polipropileno-polietileno brea de alquitran de hulla. Compuesta principalmente de hidrocarburos aromáticos policíclicos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{28}$  y con un punto de reblandecimiento de 100 °C a 220 °C según DIN 52025]
- DA** aromatiske carbonhydrider,  $C_{20-28}$ , polycycliske, blandet kultjærebeg, polyethylen og polypropylen, pyrolyse-afledte, Pyrolyseprodukter  
[En sammensat blanding af carbonhydrider opnået ved pyrolyse af blandet kultjærebeg, polyethylen og polypropylen. Sammensat primært af polycycliske aromatiske carbonhydrider, overvejende  $C_{20}$  til og med  $C_{28}$ , med et blødgøringspunkt fra 100 °C til 220 °C ifølge DIN 52025]
- DE** Aromatische Kohlenwasserstoffe,  $C_{20-28}$ , polycyclisch, gemischte Kohlenteerpech-Polyethylen-Polypropylen durch Pyrolyse erhalten, Pyrolyseprodukte  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus gemischter Kohlenteerpech-Polyethylen-Polypropylen Pyrolyse erhält. Besteht in erster Linie aus polycyclischen aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{28}$  und hat einen Erweichungspunkt von 100 °C bis 220 °C nach Din 52025]
- EL** αρωματικοί υδρογονάνθρακες,  $C_{20-28}$ , πολυκυκλικοί, από μείγμα λιθανθρακόπισσας και πίσσας προερχομένης από πυρόλυση πολιαιθυλίου και πολυπροπυλίου. Προϊοντα πυρόλυσης  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από μείγμα λιθανθρακόπισσας και πίσσας από πυρόλυση πολιαιθίου και πολυπροπυλίου. Αποτελείται κυρίως από πολυκυκλικούς αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{28}$  και με σημείο μαλακώματος από 100 °C ως 220 °C σύμφωνα με το DIN 52025]
- EN** Aromatic hydrocarbons,  $C_{20-28}$ , polycyclic, mixed coal-tar pitch-polyethylene-polypropylene pyrolysis derived Pyrolysis Products  
[A complex combination hydrocarbons obtained from mixed coal tar pitch-polyethylene-polypropylene pyrolysis. Composed primarily of polycyclic aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{28}$  and having a softening point of 100 °C to 220 °C (212 °F to 428 °F) according to DIN 52025]
- FK** hydrocarbures aromatiques polycycliques en  $C_{20-28}$ , dérivés par pyrolyse d'un mélange brai de goudron-polyéthylène-polypropylène, Produits de pyrolyse  
[Combinaison complexe d'hydrocarbures obtenue par pyrolyse d'un mélange brai de goudron-polyéthylène-polypropylène. Se compose principalement d'hydrocarbures aromatiques polycycliques dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$  à  $C_{28}$  et dont le point de ramollissement est compris approximativement entre 100 °C et 220 °C selon la norme DIN 52025]
- IT** idrocarburi aromatici,  $C_{20-28}$ , policiclici, derivati da pirólisi mista pene di catrame di carbone polietilene-polipropilene, Prodotti di pirólisi  
[Combinazione complessa di idrocarburi ottenuta da pirólisi mista pene di catrame di carbone polietilene-polipropilene. Composti prevalentemente da idrocarburi aromatici con numero di atomi di carboni prevalentemente nell'intervallo  $C_{20}$  a  $C_{28}$  e punti di ammolimento da 100 °C a 220 °C secondo DIN 52025]
- NL** aromatische koolwaterstoffen,  $C_{20-28}$ , polycyclisch, afkomstig uit de pyrolyse van gemengde koolteerpek, polyethyleen en polypropyleen, Pyrolyse producten  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de pyrolyse van gemengde koolteerpek, polyethyleen en polypropyleen. Voornamelijk samengesteld uit polycyclische aromatische koolwaterstoffen, oerwiegend  $C_{20}$  tot en met  $C_{28}$  met een verwelingstraject van 100 °C tot 220 °C volgens DIN 52025]
- PT** hidrocarbonetos aromáticos,  $C_{20-28}$ , policíclicos, da pirólise de misturas breu de alcatrão de carvão polietileno-polipropileno, Produtos de perólise  
[Uma combinação complexa de hidrocarbonetos obtida da pirólise de misturas breu de alcatrão de carvão polietileno-polipropileno. É composta principalmente por hidrocarbonetos aromáticos policíclicos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{28}$  e com um ponto de amolecimento de 100 °C a 220 °C segundo DIN 52025]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101794-75-6

EEC No 309-957-1

No 548-074-00-9

NOTA H


NOTA M

- ES: hidrocarburos aromáticos,  $C_{20-28}$ , policíclicos, mezcla derivada de la pirólisis de polietileno-brea de alquitrán de hulla; Productos de pirólisis  
[Combinación compleja de hidrocarburos obtenida de la pirólisis de polietileno-brea de alquitrán de hulla. Compuesta principalmente de hidrocarburos aromáticos policíclicos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{28}$  y con un punto de reblandecimiento de 100 °C a 220 °C según DIN 52025.]
- DA: aromatiske carbonhydrider,  $C_{20-28}$ , polycycliske, blander kultjærebeeg og polyethylen, pyrolyseafledte; Pyrolyseprodukter  
[En sammensat blanding af carbonhydrider opnået ved pyrolyse af blander kultjærebeeg og polyethylen. Sammensat primært af polycycliske, aromatiske carbonhydrider, overvejende  $C_{20}$  til og med  $C_{28}$ , med et blødgøringspunkt fra 100 °C til 220 °C ifølge DIN 52025.]
- DE: Aromatische Kohlenwasserstoffe,  $C_{20-28}$ , polycyclisch, gemischte Kohlenteerpech-Polyethylen durch Pyrolyse erhalten; Pyrolyseprodukte  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus gemischter Kohlenteerpech-Polyethylen Pyrolyse erhält. Besteht in erster Linie aus polycyclischen aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{28}$  und hat einen Erweichungspunkt von 100 °C bis 220 °C nach DIN 52025.]
- EL: αρωματικοί υδρογονάνθρακες,  $C_{20-28}$ , πολυκυκλικοί, από μείγμα λιθανθρακόπισσας και πίσσας προερχομένης από πυρόλυση πολυαιθυλενίου. Προϊόντα πυρόλυσης  
Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από μείγμα λιθανθρακόπισσας και πίσσας από πυρόλυση πολυαιθυλενίου. Αποτελείται κυρίως από πολυκυκλικούς αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{28}$  και με σημείο μαλακώματος από 100 °C ως 220 °C σύμφωνα με το DIN 52025.]
- EN: Aromatic hydrocarbons,  $C_{20-28}$ , polycyclic, mixed coal-tar pitch-polyethylene pyrolysis-derived Pyrolysis Products  
[A complex combination of hydrocarbons obtained from mixed coal tar pitch-polyethylene pyrolysis. Composed primarily of polycyclic aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{28}$  and having a softening point of 100 °C to 220 °C (212 °F to 428 °F) according to DIN 52025.]
- FR: hydrocarbures aromatiques polycycliques en  $C_{20-28}$ , dérivés par pyrolyse d'un mélange brai de goudron-polyéthylène; Produits de pyrolyse  
[Combinaison complexe d'hydrocarbures obtenue par pyrolyse d'un mélange brai de goudron-polyéthylène. Se compose principalement d'hydrocarbures aromatiques polycycliques dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}-C_{28}$  et dont le point de ramollissement est compris entre 100 °C et 220 °C selon la norme DIN 52025.]
- IT: idrocarburi aromatici,  $C_{20-28}$ , policiclici, derivati da pirólisi mista pece di catrame di carbone-polietilene; Prodotti di pirólisi  
[Combinazione complessa di idrocarburi ottenuta da pirólisi mista pece di catrame di carbone-polietilene. Costituita prevalentemente da idrocarburi aromatici policiclici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}-C_{28}$  e punto di ammolimento da 100 °C a 220 °C secondo DIN 52025.]
- NL: aromatische koolwaterstoffen,  $C_{20-28}$ , polycyclisch, afkomstig uit de pyrolyse van gemengde koolteerpek en polyethyleen; Pyrolyse producten  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de pyrolyse van gemengde koolteerpek en polyethyleen. Voornamelijk samengesteld uit polycyclische aromatische koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{28}$ , met een verwerkingsstraal van 100 °C tot 220 °C volgens DIN 52025.]
- PT: hidrocarbonetos aromáticos,  $C_{20-28}$ , policíclicos, da pirólise de misturas breu de alcatrão de carvão-polietileno, Produtos de perólise  
[Uma combinação complexa de hidrocarbonetos obtida da pirólise de misturas breu de alcatrão de carvão-polietileno. É constituída principalmente por hidrocarbonetos aromáticos policíclicos com números de átomos carbono predominantemente na gama de  $C_{20}$  ate  $C_{28}$ , e tem um ponto de amolecimento de 100 °C a 220 °C segundo DIN 52025.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101794-76-7

EEC No 309-958-7

No 648-075-00-4

NOTA H

NOTA M


- ES : hidrocarburos aromáticos,  $C_{20-28}$ , policíclicos, mezcla derivada de la pirólisis de poliestireno-brea de alquitrán de hulla ; Productos de pirólisis  
[Combinación compleja de hidrocarburos obtenida de la pirólisis de poliestireno-brea de alquitrán de hulla. Compuesta principalmente de hidrocarburos aromáticos policíclicos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{28}$  con un punto de reblandecimiento de 100 °C a 220 °C según DIN 52025.]
- DA : aromatiske carbonhydrider,  $C_{20-28}$ , polycycliske, blandet kultjærebeg og polystyren, pyrolyseafledte ; Pyrolyseprodukter  
[En sammensat blanding af carbonhydrider opnået ved pyrolyse af blandet kultjærebeg og polystyren. Sammensat primært af polycycliske, aromatiske carbonhydrider, overvejende  $C_{20}$  til og med  $C_{28}$ , med et blødgøringspunkt fra 100 °C til 220 °C ifølge DIN 52025.]
- DE : Aromatische Kohlenwasserstoffe,  $C_{20-28}$ , polycyclisch, gemischte Kohlenteerpech-Polystyrol durch Pyrolyse erhalten ; Pyrolyseprodukte  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus gemischter Kohlenteerpech-Polystyrol Pyrolyse erhält. Besteht in erster Linie aus polycyclischen aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{28}$  und hat einen Erweichungspunkt von 100 °C bis 220 °C nach Din 52025.]
- EL : αρωματικοί υδρογονάνθρακες,  $C_{20-28}$ , πολυκυκλικοί, από μείγμα λιθανθρακόπισσας και πίσσας προερχομένης από πυρόλυση πολυστυρολίου· Προϊόντα πυρόλυσης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από μείγμα λιθανθρακόπισσας και πίσσας από πυρόλυση πολυστυρολίου. Αποτελείται κυρίως από πολυκυκλικούς αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{28}$  και με σημείο μαλακώματος από 100 °C ως 220 °C σύμφωνα με το DIN 52025.]
- EN : Aromatic hydrocarbons,  $C_{20-28}$ , polycyclic, mixed coal-tar pitch-polystyrene pyrolysis-derived ; Pyrolysis Products  
[A complex combination of hydrocarbons obtained from mixed coal tar pitch-polystyrene pyrolysis. Composed primarily of polycyclic aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{28}$  and having a softening point of 100 °C to 220 °C (212 °F to 428 °F) according to DIN 52025.]
- FR : hydrocarbures aromatiques polycycliques en  $C_{20-28}$ , dérivés par pyrolyse d'un mélange brai de goudron-polystyrène ; Produits de pyrolyse  
[Combinaison complexe d'hydrocarbures obtenue par pyrolyse d'un mélange brai de goudron-polystyrène. Se compose principalement d'hydrocarbures aromatiques polycycliques dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{28}$  et dont le point de ramollissement est compris entre 100 °C et 220 °C selon la norme DIN 52025.]
- IT : idrocarburi aromatici,  $C_{20-28}$ , policiclici, derivati da pirolisi mista pece di catrame di carbone-polistirene ; Prodotti di pirolisi  
[Combinazione complessa di idrocarburi ottenuta da pirolisi mista pece di catrame di carbone-polistirene ; Costituita prevalentemente da idrocarburi aromatici policiclici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{28}$  e punto di rammollimento da 100 °C a 220 °C secondo DIN 52025.]
- NL : aromatische koolwaterstoffen,  $C_{20-28}$ , polycyclisch, afkomstig uit de pyrolyse van gemengde koolteerpek en polystyreen ; Pyrolyse producten  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de pyrolyse van gemengde koolteerpek en polystyreen. Voornamelijk samengesteld uit polycyclische aromatische koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{28}$ , met een verwekingstraject van 100 °C tot 220 °C volgens DIN 52025.]
- PT : hidrocarbonetos aromaticos,  $C_{20-28}$ , policiclicos, da pirólise de misturas breu de alcatrão de carvão-poliestireno ; Produtos de perolise  
[Uma combinação complexa de hidrocarbonetos obtida da pirólise de misturas breu de alcatrão de carvão-poliestireno. É constituída principalmente por hidrocarbonetos aromáticos policiclicos com números de átomos carbono predominantemente na gama de  $C_{20}$  até  $C_{28}$  e tem um ponto de amolecimento de 100 °C a 220 °C segundo DIN 52025.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 68187-57-5

EEC No 269-109-0

No 648-076-00-X

NOTA H

NOTA M

- ES : brea, petróleo-alquitrán de hulla ; Residuos de brea  
[Residuo de la destilación de una mezcla de alquitrán de hulla y corrientes de petróleo aromáticas. Sólido con un punto de reblandecimiento de 40 °C a 180 °C. Compuesto principalmente de una combinación compleja de hidrocarburos aromáticos con anillos condensados de tres o más miembros.]
- DA : beg, kultjære- og råolie ; Tjærebeg  
[Remanens fra destillationen af en blanding af stenkulstjære og aromatiske råoliestømme. Et fast stof med et blødgøringspunkt fra 40 °C til 180 °C. Sammensat primært af en kompleks blanding af aromatiske carbonhydrider, bestående af tre- eller flerleddede kondenserede ringe.]
- DE : Pech, Kohlenteer-Erdöl- ; Pechrückstände  
[Rückstand aus der Destillation eines Gemisches aus Kohlenteer und aromatischen Erdöläufen. Feststoff mit einem Erweichungspunkt von 40 °C bis 180 °C. Besteht in erster Linie aus einer komplexen Kombination aromatischer Kohlenwasserstoffe mit drei- oder mehrgliedrigen kondensierten Ringen.]
- EL : πίσσα λιθανθρακόπισσας-πετρελαίου· Υπολείμματα κατραμιού  
[Το υπόλειμμα από την απόσπαση μείγματος λιθανθρακόπισσας και ρευμάτων αρωματικού πετρελαίου. Στερεό με σημείο μαλακώματος από 40 °C ως 180 °C. Αποτελείται πρωτίστως από πολύπλοκο συνδυασμό αρωματικών υδρογονανθράκων με τρεις περισσότερους συμπυκνωμένους δακτύλιους.]
- EN : Pitch, coal tar-petroleum ; Pitch Residues  
[The residue from the distillation of a mixture of coal tar and aromatic petroleum streams. A solid with a softening point from 40 °C to 180 °C (140 °F to 356 °F). Composed primarily of a complex combination of three or more membered condensed ring aromatic hydrocarbons.]
- FR : brai de goudron de houille et de pétrole ; Résidus de brais  
[Résidu de la distillation d'un mélange de goudron de houille et de charges pétrolières aromatiques. Solide dont le point de ramollissement est compris entre 40 °C et 180 °C. Se compose principalement d'une combinaison complexe d'hydrocarbures aromatiques a noyaux condensés comportant trois cycles ou plus.]
- IT : pece, catrame-petrolio di carbone ; Residui peciosi  
[Residuo della distillazione di una miscela di catrame di carbone e correnti aromatiche di petrolio. È un solido con punto di rammolimento nell'intervallo 40 °C-180 °C. È costituito principalmente da una combinazione complessa di idrocarburi aromatici a nuclei condensati di tre o più elementi.]
- NL : pek, koolteer-aardolie ; Pek residuen  
[Residu uit de destillatie van een mengsel van koolteer en aromatische aardoliestromen. Een vaste stof met een verwekingstemperatuur van 40 °C tot 180 °C. Voornamelijk samengesteld uit een complexe verzameling van aromatische koolwaterstoffen met drie of meer gecondenseerde ringen.]
- PT : breu, alcatrão de carvão-petróleo ; Resíduos de piche  
[O resíduo da destilação de uma mistura de alcatrão de carvão e fracções aromáticas do petróleo. Um sólido com um ponto de amolecimento de 40 °C a 180 °C. É constituído principalmente por uma combinação complexa de hidrocarbonetos aromáticos polinucleares com três ou mais membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas. No 122070-78-4

EEC No 310-169-5

No 648-077-00-5

NOTA H  
NOTA M

- ES fenantreno, residuos de destilación ; Redestilado de aceite de antraceno fracción pesada  
[Residuo de la destilación de fenantreno crudo con un intervalo de ebullición aproximada de 340 °C a 420 °C. Compuesto en su mayor parte de fenantreno, antraceno y carbazol.]
- DA : phenanthren, destillationsrester ; Redestilleret tung antracenolie  
[Rest. fra destillationen af rå phenanthren, kogende i området omtrent fra 340 °C til 420 °C. Den består overvejende af phenanthren, anthracen og carbazol.]
- DE : Phenanthren, Destillationsrückstände ; schweres Anthracenöl-Redestillat  
[Rückstand aus der Destillation von rohem Phenanthren siedet im ungefähren Bereich von 340 °C bis 420 °C. Besteht vorherrschend aus Phenanthren, Anthracen und Carbazol.]
- EL : φαινανθρένιο, υπολείμματα απόσταξης· Επαναπόσταγμα βαρέων ελαίων ανθρακενίου  
[Υπόλειμμα από την απόσταξη ακατέργαστου φαινανθρενίου που θράζει στην κατά προσέγγιση περιοχή από 340 °C ως 420 °C. Συνίσταται κυρίως από φαινανθρένιο, ανθρακένιο και καρβαζόλιο.]
- EN Phenanthrene, distn. residues ; Heavy Anthracene Oil Redistillate  
[Residue from the distillation of crude phenanthrene boiling in the approximate range of 340 °C to 420 °C (644 °F to 788 °F). It consists predominantly of phenanthrene, anthracene and carbazole.]
- FR : phénanthrène, résidus de distillation ; Distillat d'huile anthracénique lourde  
[Résidu obtenu par distillation du phénanthrène brut dont le point d'ébullition se situe approximativement entre 340 °C et 420 °C. Se compose essentiellement de phénanthrène, d'anthracène et de carbazole.]
- IT : fenantrene, residui di distillazione ; Ridistillati di olio di antracene II  
[Residuo proveniente dalla distillazione di fenantrene grezzo con punto di ebollizione nell'intervallo di 340 °C - 420 °C. È costituito prevalentemente da fenantrene, antracene e carbazolo.]
- NL fenantreen, destillatieresiduen ; Zware anthraceen olie, destillaat  
[Residu dat wordt verkregen bij de destillatie van ruwe fenantreen met een kooktraject van ongeveer 340 °C tot 420 °C. Bestaat voornamelijk uit fenantreen, antracéen en carbazool.]
- PT : fenantreno, resíduos da destilação ; óleo antracénico pesado redestilado  
[Resíduo da destilação de fenantreno bruto que destila no intervalo aproximado de 340 °C a 420 °C. É constituído predominantemente por fenantreno, antraceno e carbazolo.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 84989-10-6

EEC No 284-899-7

No 648-078-00-0

NOTA H

NOTA M

- ES : destilados (alquitrán de hulla), superiores, libre de fluoreno ; Redestilado aceite lavaje  
[Combinación compleja de hidrocarburos obtenida por la cristalización de aceite de alquitrán. Compuesta de hidrocarburos policíclicos aromáticos, principalmente difenil, dibenzofuran y acenafteno.]
- DA : destillater (stenkultstjære), øvre, fluorenfri ; Redestilleret vaskeolie  
[En sammensat blanding af carbonhydrider opnået ved krystallisation af tjæreolie. Den består af aromatiske, polycykliske carbonhydrider, primært diphenyl, dibenzofuran og acenaphthen.]
- DE : Destillate (Kohlenteer), obere, Fluoren-frei ; Waschöl-Redestillat  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Kristallisation von Teeröl. Besteht aus aromatischen polyzyklischen Kohlenwasserstoffen, in erster Linie Diphenyl, Dibenzofuran und Acenaphthen.]
- EL : αποσταγμάτα (λιθανθρακόπισσας), ανώτερα, απαλλαγμένα φλουορενίου· Επαναπόσταγμα ελαίων έκπλυσης  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με την κρυστάλλωση πίσσελαίου. Συνίσταται από αρωματικούς πολυκυκλικούς υδρογονάνθρακες, κυρίως διφαινύλιο, διβενζοφουράνιο και ακεναφθένιο.]
- EN : Distillates (coal tar), upper, fluorene-free ; Wash Oil Redistillate  
[A complex combination of hydrocarbons obtained by the crystallization of tar oil. It consists of aromatic polycyclic hydrocarbons, primarily diphenyl, dibenzofuran and acenaphthene.]
- FR : distillats supérieurs (goudron de houille), exempts de fluorène ; Distillat d'huile de lavage  
[Combinaison complexe d'hydrocarbures obtenue par cristallisation de l'huile de goudron de houille. Se compose d'hydrocarbures polycycliques aromatiques — principalement, du diphenyle, du dibenzofuranne-et-de l'acénaphthène.]
- IT : distillati (catrame da carbone), di testa, esenti da fluorene ; Olio lavaggio gas ridistillato  
[Combinazione complessa di idrocarburi ottenuta dalla cristallizzazione di olio di catrame. È costituito da idrocarburi aromatici policiclici, prevalentemente difenile, dibenzofurano e acenaftene.]
- NL : destillaten (koolteer), lichte fractie, fluoreenvrij ; Benzol-wasolie, destillaat  
[Een complexe verzameling van koolwaterstoffen die wordt verkregen door de kristallisatie van teerolie. Bestaat uit aromatische polycyclische koolwaterstoffen, voornamelijk difenyl, dibenzofuran en acenafteen.]
- PT : destilados (alcatrão de carvão), de topo, sem fluoreno ; óleo de lavagem redestilado  
[Uma combinação complexa de hidrocarbonetos obtida pela cristalização do óleo de alcatrão. É constituída por hidrocarbonetos aromaticos policiclicos, principalmente difenilo, dibenzofurano e acenafteno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90640-80-5

EEC No 292-602-7

No 648-079-00-6

NOTA H

NOTA M

- ES** : aceite de antraceno ; Aceite de antraceno  
[Combinación compleja de hidrocarburos aromáticos policíclicos obtenida del alquitrán de hulla con un intervalo de destilación aproximado de 300 °C a 400 °C Compuesta principalmente de fenantreno, antraceno y carbazol]
- DA** : anthracenolie ; Anthracenolie  
[En sammensat blanding af polycycliske aromatiske carbonhydrider opnået fra stenkulstjære, med destillationsinterval omtrent fra 300 °C til 400 °C Sammensat primært af phenanthren, anthracen og carbazol]
- DE** : Anthracenöl ; Anthracenöl  
[Komplexe Kombination von polycyclischen aromatischen Kohlenwasserstoffen aus Kohlentee mit einem Destillationsbereich von etwa 300 °C bis 400 °C Besteht in erster Linie aus Phenanthren, Anthracen und Carbazol]
- EL** : έλαιο ανθρακενίου· Έλαια ανθρακενίου  
[Πολύπλοκος συνδυασμός πολυκυκλικών αρωματικών υδρογονανθράκων που λαμβάνεται από λιθανθρακόπισσα που έχει περιοχή απόσταξης από 300 °C ως 400 °C περίπου Αποτελείται κυρίως από φαινανθρένιο, ανθρακένιο και καρβαζόλιο]
- EN** : Anthracene oil ; Anthracene Oil  
[A complex combination of polycyclic aromatic hydrocarbons obtained from coal tar having an approximate distillation range of 300 °C to 400 °C (572 °F to 752 °F) Composed primarily of phenanthrene, anthracene and carbazole]
- FR** : huile anthracénique , Huile anthracénique  
[Combinaison complexe d'hydrocarbures aromatiques polycycliques issue du goudron de houille et dont le point de distillation est approximativement compris entre 300 °C et 400 °C Se compose principalement de phénanthrene, d'anthracène et de carbazole]
- IT** : olio di antracene , Olio di antracene I  
[Combinazione complessa di idrocarburi policiclici aromatici ottenuti da catrame di carbone con intervallo di distillazione da 300 °C a 400 °C ca Costituita prevalentemente da fenantrene, antracene e carbazolo]
- NL** : antraceenolie , Anthraceen olie  
[Een complexe verzameling polycyclische aromatische koolwaterstoffen die wordt verkregen uit koolteer met een destillatietraject van ongeveer 300 °C tot 400 °C Voomamelijk samengesteld uit fenantreen, antraceen en carbazool]
- PT** : óleo de antraceno , óleo antracénico  
[Uma combinação complexa de hidrocarbonetos aromáticos policíclicos obtida do alcatrão de carvão e com um intervalo de destilação de aproximadamente 300 °C a 400 °C É constituída principalmente por fenantreno, antráceno e carbazolo]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotuiiging*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limite: de concentraçào*


Cas No 92061-93-3

EEC No 295-506-3

No 648-080-00-1

NOTA H


NOTA M

- ES: residuos (alquitrán de hulla), destilación del aceite de creosota; Redestilado aceite lavaje  
[Residuo de la destilación fraccionada del aceite de absorción con un intervalo de ebullición aproximado de 270 °C a 330 °C. Consiste en su mayor parte en hidrocarburos aromáticos dinucleares y heterocíclicos.]
- DA: rester (stenkultstjære), creosotolie destillations-; Redestilleret vaskeolie  
[Resten, fra fraktioneret destillation af vaskeolie, med koginterval omtrent fra 270 °C til 330 °C. Den består overvejende af bicycliske aromatiske og heterocycliske carbonhydrider.]
- DE: Rückstände (Kohlenteer), Kreosotöldestillation; Waschöl-Redestillat  
[Rückstand aus der fraktionierten Destillation von Waschöl, siedet im ungefähren Bereich von 270 °C bis 330 °C. Besteht vorherrschend aus dinuklearen aromatischen und heterocyclischen Kohlenwasserstoffen.]
- EL: υπολείμματα (λιθανθρακόπισσας), απόσταξης κρεοζωτελαίου· Επαναπόσταγμα ελαίων έκπλυσης  
[Το υπόλειμμα από την κλασματική απόσταξη ελαίου έκπλυσης που θράζει στην περιοχή από 270 °C ως 330 °C περίπου. Συνίσταται κυρίως από διπύρηνους αρωματικούς και ετεροκυκλικούς υδρογονάνθρακες.]
- EN: Residues (coal tar), creosote oil distn.; Wash Oil Redistillate  
[The residue from the fractional distillation of wash oil boiling in the approximate range of 270 °C to 330 °C (518 °F to 626 °F). It consists predominantly of dinuclear aromatic and heterocyclic hydrocarbons.]
- FR: résidus (goudron de houille), distillation d'huile de créosote; Distillat d'huile de lavage  
[Résidu de la distillation fractionnée d'huile de rinçage dont le point d'ébullition est compris entre 270 °C et 330 °C. Se compose principalement d'hydrocarbures hétérocycliques et aromatiques bicycliques.]
- IT: residui (catrame di carbone), distillazione di olio di creosoto; Olio lavaggio gas ridistillato  
[Residuo dalla distillazione frazionata di olio di lavaggio con punto di ebollizione nell'intervallo 270 °C-330 °C ca. È costituito prevalentemente da idrocarburi aromatici diciclici ed eterociclici.]
- NL: residuen (koolteer), kreosootolie destillatie-; Benzol-wasolie, destillaat  
[Het residu van de gefractioneerde destillatie van spoelolie, met een kooktraject van ongeveer 270 °C tot 330 °C. Bestaat voornamelijk uit dinucleaire aromatische en heterocyclische koolwaterstoffen.]
- PT: resíduos (alcatrão de carvão), da destilação de óleo de creosote; óleo de lavagem redestilado  
[O resíduo da destilação fraccionada de óleo de creosote que destila no intervalo de aproximadamente 270 °C a 330 °C. É constituído predominantemente por hidrocarbonetos aromáticos dinucleares e compostos heterocíclicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Gas No 8007-45-2

EEC No 232-361-7

No 648-081-00-7

NOTA H

- ES. alquitrán, hulla; Alquitrán  
(Subproducto de la destilación destructiva de hulla. Semisólido casi negro. Combinación compleja de hidrocarburos aromáticos, compuestos fenólicos, bases nitrogenadas y tiofeno.)
- DA. trære, stenkuls-; Stenkulstjære  
(Biproduktet fra tørdestillation af kul. Næsten sort halvfast stof. En sammensat blanding af aromatiske carbonhydrider, phenolforbindelser, nitrogenbaser og thiophen.)
- DE. Teer, Kohlen-; Kohlenteer  
(Nebenprodukt bei der Entgasung von Kohle. Fast schwarzer Semifeststoff. Komplexe Kombination von aromatischen Kohlenwasserstoffen, phenolhaltigen Bestandteilen, Stickstoffbasen und Thiophen.)
- EL. λιθανθρακόπισσα· Ανθρακόπισσα  
(Το παραπροϊόν από την ξηρά απόσταξη του άνθρακα. Σχεδόν μαύρο ημιστερεό. Πολύπλοκος συνδυασμός αρωματικών υδρογονανθράκων, φαινολικών ενώσεων, αζωτούχων βάσεων και θειοφαίνιου.)
- EN. tar coal, Coal tar  
(The by-product from the destructive distillation of coal. Almost black semisolid. A complex combination of aromatic hydrocarbons, phenolic compounds, nitrogen bases and thiophene.)
- FR. goudron de houille (charbon), Goudron de houille  
(Sous-produit de la distillation destructive du charbon. Semi-solide noirâtre. Combinaison complexe d'hydrocarbures aromatiques, de composés phénoliques, de bases azotées et de thiophènes.)
- IT. catrame di carbone; Catrame di carbone  
(Sottoprodotto della distillazione distruttiva del carbone. Semisolido di colore quasi nero. Combinazione complessa di idrocarburi aromatici, composti fenolici, basi azotate e tiofene.)
- NL. teer, steenkool, Koolteer  
(Het byproduct van de destructieve destillatie van steenkool. Nagenoeg zwarte halfvaste stof. Een complexe verzameling van aromatische koolwaterstoffen, fenolische verbindingen, stikstofbasen en thiofeen.)
- PT. alcatrão, carvão; Alcatrão de hulha  
(O subproduto da destilação destrutiva do carvão. Um semi-sólido quase negro. Uma combinação complexa de hidrocarbonetos aromáticos, compostos fenólicos, bases azotadas e tiofeno.)

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-89-6

EEC No 266-024-0

No 648-082-00-2


## NOTA H

- ES alquitrán, hulla, elevada temperatura ; Alquitrán  
[Producto de condensación obtenido por enfriamiento, aproximadamente a temperatura ambiente, del gas desprendido en la destrucción destructiva de hulla a elevada temperatura (mayor de 700 °C). Líquido negro viscoso más denso que el agua. Compuesto principalmente de una mezcla compleja de hidrocarburos aromáticos con anillos condensados. Puede contener cantidades minoritarias de compuestos fenólicos y bases nitrogenadas aromáticas.]
- DA : tjære, stenkuls-, højtemperaturs- ; Stenkulstjære  
[Kondensationsproduktet opnået ved at nedkøle, til omtrent omgivelsestemperatur, den gas, der udvikles ved tørdestillation af kul ved høj temperatur (højere end 700 °C). En sort, viskøs væske tungere end vand. Består primært af en sammensat blanding af kondenserede aromatiske carbonyldrider. Kan indeholde mindre mængder phenolforbindelser og aromatiske nitrogenbaser.]
- DE : Teer, Kohlen-, Hochtemperatur- ; Kohlenteer  
[Das Kondensationsprodukt, das durch \*Kühlen, auf etwa Umgebungstemperatur, des bei der Hochtemperatur-(größer als 700 °C)-Entgasung von Kohle anfällt. Es ist eine schwarze viskose Flüssigkeit dichter als Wasser. Besteht in erster Linie aus einer komplexen Mischung von aromatischen Kohlenwasserstoffen mit kondensierten Ringen. Kann geringe Mengen phenolhaltiger Verbindungen und aromatischer Stickstoffbasen enthalten.]
- EL : πίσσα, άνθρακα, υψηλής θερμοκρασίας· Ανθρακόπισσα  
[Το προϊόν συμπύκνωσης που λαμβάνεται με ψύξη περίπου σε θερμοκρασία περιβάλλοντος του αερίου, το οποίο εκλύεται κατά την ξηρά απόσταξη άνθρακα σε υψηλή θερμοκρασία (πάνω από 700 °C). Μαύρο, παχύρευστο υγρό, πυκνότερο από το νερό. Αποτελείται κυρίως από πολύπλοκο μείγμα αρωματικών υδρογονανθράκων με συμπυκνωμένους πυρήνες. Μπορεί να περιέχει μικρότερες ποσότητες φαινολικών ενώσεων και αρωματικών αζωτούχων βάσεων.]
- EN : Tar, coal, high-temp. , Coal tar  
[The condensation product obtained by cooling, to approximately ambient temperature, the gas evolved in the high temperature (greater than 700 °C (1 292 °F)) destructive distillation of coal. A black viscous liquid denser than water. Composed primarily of a complex mixture of condensed ring aromatic hydrocarbons. May contain minor amounts of phenolic compounds and aromatic nitrogen bases.]
- FR : goudron de houille à haute température (charbon) ; Goudron de houille  
[Produit de condensation obtenu par refroidissement, jusqu'à la température ambiante, du gaz généré par la distillation destructive du charbon à haute température (au-dessus de 700 °C). Liquide visqueux de couleur noire, plus dense que l'eau. Se compose principalement d'un mélange complexe d'hydrocarbures aromatiques à noyaux condensés. Peut contenir de petites quantités de composés phénoliques et de bases aromatiques azotées.]
- IT : catrame, carbone, alta temperatura ; Catrame di carbone  
[Prodotto di condensazione ottenuto mediante raffreddamento, all'incirca a temperatura ambiente, del gas sviluppato nella distruzione distruttiva ad alta temperatura (superiore a 700 °C) del carbone. È un liquido nero vischioso, più denso dell'acqua. È costituito principalmente da una miscela complessa di idrocarburi aromatici a nuclei condensati. Può contenere piccole quantità di composti fenolici e di basi azotate aromatiche.]
- NL : teer, kool, hoge temperatuur ; Koolteer  
[Het condensatieproduct dat wordt verkregen door afkoeling tot ongeveer omgevingstemperatuur van het gas dat vrijkomt bij de destructieve destillatie van kool bij hoge temperatuur (hoger dan 700 °C). Een zwarte viskeuze vloeistof met een dichtheid groter dan water. Voornamelijk samengesteld uit een complex mengsel van aromatische koolwaterstoffen met gecondenseerde ringen. Kan ondergeschikte hoeveelheden fenolhoudende verbindingen en aromatische stikstofbasen bevatten.]
- PT : alcatrão, carvão, de temperatura elevada ; Alcatrão de hulha  
[O produto de condensação obtido por arrefecimento, aproximadamente à temperatura ambiente, do gas libertado na destilação destrutiva do carvão a temperatura elevada (superior a 700 °C). Um líquido negro viscoso mais denso do que a água. Compõe-se principalmente de uma mistura complexa hidrocarbonetos aromáticos polinucleares. Pode conter pequenas quantidades de compostos fenólicos e de bases azotadas aromáticas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 1 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 65996-90-9

EEC No 266-025-6

No 648-083-00-8

## NOTA H

- ES: alquitrán, hulla, a baja temperatura; Aceite de alquitrán  
[Producto de condensación obtenido por enfriamiento, aproximadamente a temperatura ambiente, del gas desprendido en la destilación destructiva de hulla a baja temperatura (menor de 700 °C). Líquido negro viscoso más denso que el agua. Compuesto principalmente de hidrocarburos aromáticos con anillos condensados, compuestos fenólicos, bases nitrogenadas aromáticas y sus derivados alquílicos.]
- DA: tjære, stenkuls-, lavtemperaturs-; Stenkulsolie  
[Kondensationsproduktet opnået ved at nedkøle, til omtrent omgivelsestemperatur, den gas, der udvikles ved tørdestillation af kul ved lav temperatur (lavere end 700 °C). En sort, viskøs væske tungere end vand. Sammensat primært af kondenserede aromatiske carbonhydrider, phenolforbindelser, aromatiske nitrogenbaser og deres alkylderivater.]
- DE: Teer, Kohlen-, Niedrigtemperatur-; Kohlenöl  
[Das Kondensationsprodukt, das durch Kühlen, auf etwa Umgebungstemperatur, des bei der Niedrigtemperatur-(weniger als 700 °C)-Entgasung von Kohle anfällt. Es ist eine schwarze viskose Flüssigkeit dichter als Wasser. Besteht in erster Linie aus aromatischen Kohlenwasserstoffen mit kondensierten Ringen, phenolhaltigen Verbindungen, aromatischen Stickstoffbasen und ihren Alkylderivaten.]
- EL: πίσσα, άνθρακα, χαμηλής θερμοκρασίας· Έλαιο λιθανθράκων  
[Το προϊόν συμπύκνωσης που λαμβάνεται με ψύξη, περίπου σε θερμοκρασία περιβάλλοντος, του αερίου το οποίο εκλύεται κατά την ξηρά απόσταξη άνθρακα σε χαμηλή θερμοκρασία (κάτω από 700 °C). Μαύρο, παχύρευστο υγρό, πυκνότερο από το νερό. Αποτελείται κυρίως από αρωματικούς υδρογονάνθρακες με συμπυκνωμένους πυρήνες, φαινολικές ενώσεις, αρωματικές αζωτούχες βάσεις και αλκυλο παράγωγά τους.]
- EN: Tar, coal, low-temp.; Coal oil  
[The condensation product obtained by cooling, to approximately ambient temperature, the gas evolved in low temperature (less than 700 °C (1 292 °F)) destructive distillation of coal. A black viscous liquid denser than water. Composed primarily of condensed ring aromatic hydrocarbons, phenolic compounds, aromatic nitrogen bases, and their alkyl derivatives.]
- FR: goudron de houille à basse température (charbon); Huile lourde de houille  
[Produit de condensation obtenu par le refroidissement, jusqu'à la température ambiante, du gaz généré par la distillation destructive du charbon à basse température (au-dessous de 700 °C). Liquide visqueux de couleur noire, plus dense que l'eau. Se compose principalement d'hydrocarbures aromatiques à noyaux condensés, de composés phénoliques, de bases aromatiques azotées et de leurs dérivés alkylés.]
- IT: catrame, carbone, bassa temperatura; Carbolio  
[Prodotto di condensazione ottenuto raffreddando, all'incirca a temperatura ambiente, il gas sviluppato nella distillazione distruttiva a bassa temperatura (meno di 700 °C) del carbone. Si presenta come un liquido nero vischioso, di densità superiore all'acqua. È composto principalmente da idrocarburi aromatici a nuclei condensati, composti fenolici, basi azotate aromatiche e loro alchilidervati.]
- NL: teer, kool, lage temperatuur; Petroleum  
[Het condensatieproduct dat wordt verkregen door afkoeling tot ongeveer omgevingstemperatuur van het gas dat vrijkomt bij de destructieve destillatie van kool bij lage temperatuur (lager dan 700 °C). Een zwarte viskeuze vloeistof met een grotere dichtheid dan water. Voornamelijk samengesteld uit aromatische koolwaterstoffen met gecondenseerde ringen, fenolhoudende verbindingen en aromatische stikstofbasen en hun alkylderivaten.]
- PT: alcatrão, carvão, de temperatura baixa; óleo de alcatrão  
[O produto de condensação obtido por arrefecimento, aproximadamente à temperatura ambiente, do gás libertado na destilação destrutiva do carvão a temperatura baixa (inferior a 700 °C). Um líquido viscoso negro mais denso do que a água. Compõe-se principalmente de hidrocarbonetos aromáticos polinucleares, compostos fenólicos, bases azotadas aromáticas, e dos seus derivados alquílo.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 85029-51-2

EEC No 285-076-5

No 648-084-00-3

NOTA H

NOTA J

NOTA M

- ES : destilados (hulla), aceite ligero del horno de coque, fracción de naftaleno ; Aceite naftalina  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento previo (destilación continua) del aceite ligero del horno de coque. Compuesta en su mayor parte de naftaleno, cumarona e indeno y con un punto de ebullición por encima de 148 °C.]
- DA : destillater (kul), koksovnns-letolie, naphthalenfraktion ; Naftalinolie  
[Den sammensatte blanding af carbonhydrider opnået ved prefractionering (kontinuerlig destillation) af koksovnnsletolie. Den består overvejende af naphthalen, coumaron og inden og koger højere end 148 °C.]
- DE : Destillate (Kohlen), Koksofenleichtöl, Naphthalin-Schnitt ; Naphthalinöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Prefractionierung (kontinuierliche Destillation) von Koksofenleichtöl. Besteht vorherrschend aus Naphthalin, Cumaron und Inden und siedet über 148 °C.]
- EL : αποστάγματα (άνθρακα), ελαφρό έλαιο φούρνου παραγωγής κοκ, κλάσμα ναφθαλίνης Έλαια ναφθαλίνης  
[Ο πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από συνεχή απόσταξη ελαφρού ελαίου φούρνου παραγωγής κοκ. Συνίσταται κυρίως από ναφθαλίνη, κουμαρόνη και ινδένιο και δράζει πάνω από 148 °C.]
- EN : Distillates (coal), coke-oven light oil, naphthalene cut ; Naphthalene Oil  
[The complex combination of hydrocarbons obtained from prefractionation (continuous distillation) of coke oven light oil. It consists predominantly of naphthalene, coumarone and indene and boils above 148 °C (298 °F).]
- FR : distillats (charbon), huile légère de four à coke, coupe naphthalène ; Huile naphthalénique  
[Combinaison complexe d'hydrocarbures issue du préfractionnement (distillation continue) d'huile légère de four à coke. Se compose principalement de naphthalène, de coumarone et d'indène. Son point d'ébullition se situe au-dessus de 148 °C.]
- IT : distillati (carbone), olio leggero di cokeria, taglio naftalene ; Olio naftalinoso  
[La combinazione complessa di idrocarburi ottenuti dal prefrazionamento (distillazione continua) di olio leggero di cokeria. È costituita prevalentemente da naftalené, cumarone ed indene con punto di ebollizione superiore a 148 °C.]
- NL : destillaten (kool), cokesoven lichte olie, naftaleenfractie ; Naftaline olie  
[De complexe verzameling koolwaterstoffen verkregen uit voorfractionering (continue destillatie) van lichte olie uit een cokesoven. Het bestaat voornamelijk uit naftaleen, coumaron en indeen en kookt boven 148 °C.]
- PT : destilados (carvão), óleo leve do forno de coque, corte de naftaleno ; óleo naftaleno  
[A combinação complexa de hidrocarbonetos obtida do prefractionamento (destilação contínua) do óleo leve do forno de coque. É constituída predominantemente por naftaleno, cumarona e indeno e destila abaixo de 148 °C.]

Cas No 84650-04-4

EEC No 283-484-8

No 648-085-00-9

NOTA H

NOTA I

NOTA M

- ES:** destilados (alquitrán de hulla), aceites de naftaleno ; Aceite naftalina  
[Combinación compleja de hidrocarburos obtenida por la destilación del alquitrán de hulla. Compuesta principalmente de productos aromáticos y otros hidrocarburos, compuestos fenólicos y compuestos aromáticos con nitrógeno y con un intervalo de destilación aproximado de 200 °C a 250 °C.]
- DA:** destillater (stenkultstjære), naphthalenolier ; Naftalinolie  
[En sammensat blanding af carbonhydrier opnået ved destillationen af stenkultstjære. Den består primært af aromater og carbonhydrier, phenolforbindelser og aromatiske nitrogenforbindelser, med kogesinterval omtrent fra 200 °C til 250 °C.]
- DE:** Destillate (Kohlenteer), Naphthalinöle ; Naphthalinöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Kohlenteer. Besteht in erster Linie aus aromatischen und anderen Kohlenwasserstoffen, phenolhaltigen Verbindungen und aromatischen Stickstoffverbindungen und destilliert im ungefähren Bereich von 200 °C bis 250 °C.]
- EL:** αποσταγμάτων (λιθανθρακόπισσας), έλαια ναφθαλίνης ; Έλαια ναφθαλίνης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την απόσταξη λιθανθρακόπισσας. Συνίσταται κυρίως από αρωματικούς και άλλους υδρογονάνθρακες, φαινολικές ενώσεις και αζωτούχες αρωματικές ενώσεις και αποσταζει στην περιοχή από 200 °C ως 250 °C περίπου.]
- EN:** Distillates (coal tar), naphthalene oils ; Naphthalene Oil  
[A complex combination of hydrocarbons obtained by the distillation of coal tar. It consists primarily of aromatic and other hydrocarbons, phenolic compounds and aromatic nitrogen compounds and distills in the approximate range of 200 °C to 250 °C (392 °F to 482 °F).]
- FR:** distillats de goudron de houille, huiles de naphthalène ; Huile naphthalénique  
[Combinaison complexe d'hydrocarbures obtenue par distillation du goudron de houille. Se compose principalement d'hydrocarbures aromatiques et autres, de composés phénoliques et de composés azotés aromatiques, et distille approximativement entre 200 °C et 250 °C.]
- IT:** distillati (catrame di carbone), olii naftalenici ; Olio naftalinoso  
[Combinazione complessa di idrocarburi ottenuta per distillazione del catrame di carbone. È costituita principalmente da idrocarburi aromatici e altri idrocarburi, composti fenolici e composti aromatici azotati e distilla nell'intervallo 200 °C - 250 °C ca.]
- NL:** destillaten (koolteer), naftaleenoliën , Naftaline olie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van koolteer. Bestaat voornamelijk uit aromatische en andere koolwaterstoffen, fenolhoudende verbindingen en aromatische stikstofverbindingen en heeft een destillatietraject van ongeveer 200 °C tot 250 °C.]
- PT:** destilados (alcatrão de carvão), óleos de naftaleno ; óleo naftaleno  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação do alcatrão de carvão. É constituída principalmente por hidrocarbonetos aromáticos e outros, compostos fenólicos e compostos de azoto aromáticos e destila no intervalo de aproximadamente 200 °C a 250 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Roetulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 84989-09-3

EEC No 284-898-1

No 648-086-00-4

NOTA H

NOTA J

NOTA M

- ES : destilados (alquitrán de hulla), aceites de naftaleno, bajo contenido de naftaleno ; Redestilado aceite naftalina  
[Combinación compleja de hidrocarburos obtenida por cristalización de aceite de naftaleno. Compuesta principalmente de naftaleno, alquilnaftalenos y compuestos fenólicos.]
- DA : destillater (stenkultsjære), naphthalenolier, med lavt indhold af naphthalen ; Redestilleret naftalinolie  
[En sammensat blanding af carbonhydrider opnået ved krystallisation af naphthalenolie. Sammensat primært af naphthalen, alkyl-naphthalen og phenolforbindelser.]
- DE : Destillate (Kohlenteer), Naphthalinöle, Naphthalin-niedrig ; Naphthalinöl-Redestillat  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Kristallisation von Naphthalinöl Besteht vorrangig aus Naphthalin, Alkyl-naphthalinen und phenolischen Verbindungen.]
- EL : αποσταγμάτων (λιθανθρακόπισσας), έλαια ναφθαλίνης, χαμηλής περιεκτικότητας σε ναφθαλίνη. Επαναπόσταγμα ελαίων ναφθαλίνης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κυστάλλωση ναφθαλινελαίου. Αποτελείται κυρίως από ναφθαλίνιο, αλκυλναφθαλίνια και φαινολικές ενώσεις.]
- EN : Distillates (coal tar), naphthalene oils, naphthalene-low ; Naphthalene Oil Redistillate  
[A complex combination of hydrocarbons obtained by crystallization of naphthalene oil. Composed primarily of naphthalene, alkyl naphthalenes and phenolic compounds.]
- FR : distillats d'huiles de naphthalène (goudron de houille), à faible teneur en naphthalène ; Distillat d'huile naphthalénique  
[Combinaison complexe d'hydrocarbures obtenue par cristallisation de l'huile de naphthalène. Se compose principalement de naphthalène, d'alkylnaphthalènes et de composés phénoliques.]
- IT : distillati (catrame di carbone), olii di naftalene, a basso tenore di naftalene ; Olio naftalinoso ridistillato  
[Combinazione complessa di idrocarburi ottenuta dalla cristallizzazione di olio naftalenico. Composto principalmente da naftalene, alchil naftaleni e composti fenolici.]
- NL : destillaten (koolteer), naftaleenoliën, zware nafta ; Naftaline olie, destillaat  
[Een complexe verzameling van koolwaterstoffen die wordt verkregen door kristallisatie van naftaleenolie. Bestaat voornamelijk uit naftaleen, alkyl-naftalenen en fenolhoudende verbindingen.]
- PT : destilados (alcatrão de carvão), óleos de naftaleno, baixo teor de naftaleno ; óleo naftaleno redestilado  
[Uma combinação complexa de hidrocarbonetos obtida por cristalização de óleo de naftaleno. É constituída principalmente por naftaleno, alquil naftalenos e compostos fenólicos.]

*Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indelsing, Classificație*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 52-43

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995-49-2

EEC No 295-310-8

No 648-087-00-X

NOTA H

NOTA J


NOTA M

- ES: destilados (alquitrán de hulla), líquido madre de cristalización del aceite de naftaleno; Redestilado aceite naftalina [Combinación compleja de compuestos orgánicos obtenida como un filtrado de la cristalización de la fracción de naftaleno del alquitrán de hulla y con un intervalo de ebullición aproximado de 200 °C a 230 °C Contiene principalmente naftaleno, tionafteno y alquilnaftalenos.]
- DA: destillater (stenkultstjære), naphthalenolie-krystallisationsmoderlud, Redestilleret naftalinolie [En sammensat blanding af organiske forbindelser, opnået som et filtrat fra krystallisationen af naphthalenfraktionen fra stenkultstjære, med kogesinterval omtrent fra 200 °C til 230 °C. Indeholder hovedsageligt naphthalen, thionaphthalen og alkylnaphthalener.]
- DE: Destillate (Kohlenteer), Naphthalinöl Kristallisation Mutterlauge; Naphthalinöl-Redestillat [Komplexe Kombination organischer Verbindungen, die man als Filtrat aus der Kristallisation der Naphthalin Fraktion von Kohlenteer erhält. Siedet im Bereich von etwa 200 °C bis 230 °C Enthält hauptsächlich Naphthalin, Thionaphthen und Alkyl-naphthaline.]
- EL: αποστάγματα (λιθανθρακόπισσας), μητρικού υγρού κρυστάλλωσης ελαίου ναφθαλίνης. Επαναπόσταγμα ελαίων ναφθαλίνης [Πολυπλοκός συνδυασμός οργανικών ενώσεων που λαμβάνεται ως το διήθημα από την κρυστάλλωση του κλάσματος ναφθαλίνης από λιθανθρακόπισσα και βράζει στην περιοχή από 200 °C ως 230 °C περίπου. Περιέχει κυρίως ναφθαλίνη, θειοναφθένιο και αλκυλοναφθαλίνες.]
- EN: Distillates (coal tar), naphthalene oil crystn. mother liquor, Naphthalene Oil Redistillate [A complex combination of organic compounds obtained as a filtrate from the crystallization of the naphthalene fraction from coal tar and boiling in the range of approximately 200 °C to 230 °C (392 °F to 446 °F) Contains chiefly naphthalene, thionaphthene and alkylnaphthalenes.]
- FR: distillats (goudron de houille), cristallisation de l'huile de naphthalène, eau-mère, Distillat d'huile naphthalénique [Combinaison complexe de composés organiques obtenue comme filtrat de la cristallisation de la fraction naphthalène issue du goudron c. houille et dont le point d'ébullition est approximativement compris entre 200 °C et 230 °C. Se compose principalement de naphthalène, de thionaphténe et d'alkylnaphthalènes.]
- IT: distillati (catrame di carbone), acque madri della cristallizzazione di olio naftalenico, Olio naftalinoso ridistillato [Combinazione complessa di composti organici ottenuti quali filtrato dalla cristallizzazione della frazione naftalenica da catrame di carbone e con punto di ebollizione nell'intervallo 200 °C-230 °C ca. Contiene prevalentemente naftalene, tionaftalene ed alchilnaftaleni.]
- NL: destillatie (koolteer), moederloog uit naftaleenoliekrystallisatie, Naftaline olie, destillaat [Een complexe verzameling organische verbindingen die wordt verkregen als een filtraat uit de kristallisatie van de naftaleenfractie uit koolteer en een kooktraject heeft van ongeveer 200 °C tot 230 °C. Bevat voornamelijk naftaleen, thionafteen en alkylnaftalenen.]
- PT: destilados (alcatrão de carvão), águas-mães de cristalização de óleo de naftaleno, óleo naftaleno redestilado [Uma combinação complexa de compostos orgânicos obtida como um filtrado da cristalização da fracção de naftaleno de alcatrão de carvão e que destila no intervalo de aproximadamente 200 °C a 230 °C. Contém sobretudo naftaleno, tionaftaleno e alquilnaftalenos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 121620-47-1

LEC No 310-166-9

No 648-088-00-5

NOTA H

NOTA J


NOTA M

- ES: residuos del extracto (hulla), aceite de naftaleno, alcalino: Extracto residuo aceite naftalina  
[Combinación compleja de hidrocarburos obtenida del lavado con álcalis de aceite de naftaleno para separar compuestos fenólicos (ácidos de alquitrán). Compuesta de naftaleno y alquilnaftalenos.]
- DA: ekstraktionsrester (stenkul), naphthalenolie, alkaliske; Syrefri naftalinolie  
[En sammensat blanding af carbonhydrider opnået ved den alkaliske vask af naphthalenolie for at fjerne phenolforbindelser (tjæresyrer). Den består af naphthalen og alkylnaphthalen.]
- DE: Extraktückstände (Kohle), Naphthalinöl, alkalisch; Naphthalinölextrakt-Rückstand  
[Komplexe Kombination von Kohlenwasserstoffen erhalten aus alkalischem Waschen von Naphthalinöl zur Beseitigung von phenolischen Verbindungen (Teersäuren). Besteht aus Naphthalin und Alkylnaphthalinen.]
- EL: αποσταγμα (λιθανθρακόπισσας), κλάσμα βενζολίου, υπολείμματα απόσταξης: Υπόλειμμα εκχύλισης ελαίου ναφθαλίνης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την αλκαλική έκχυση ναφθαλινελαίου για να απομακρυνθούν φαινολικές ενώσεις (οξέα πίσσας). Αποτελείται από ναφθαλίνιο και αλκυλο ναφθαλίνια.]
- EN: Extract residues (coal), naphthalene oil, alk.; Naphthalene Oil Extract Residue  
[A complex combination of hydrocarbons obtained from the alkali washing of naphthalene oil to remove phenolic compounds (tar acids). It is composed of naphthalene and alkyl naphthalenes.]
- FR: résidus d'extraction alcalins (charbon), huile de naphthalène, Résidu d'extraction d'huile naphthalénique  
[Combinaison complexe d'hydrocarbures obtenue par lavage alcalin d'huile de naphthalène pour extraire les composés phénoliques (huiles de goudron acides). Se compose de naphthalènes et d'alkylnaphthalènes.]
- IT: residui estratti (carbone), olio di naftalene, alcalini: Olio naftalinoso lavato  
[Combinazione complessa di idrocarburi ottenuta dal lavaggio con alcali dell'olio di naftalene per eliminare i composti fenolici (acidi di catrame). È composta da naftalene e alchil naftaleni.]
- NL: extractieresiduen (kool), naftaleenolie, alkalisch; Naftaline-olie, extractie-residu  
[Een complexe verzameling koolwaterstoffen die wordt verkregen bij de alkalische spoeling van naftaleenolie waarbij fenolische verbindingen (teerzuren) worden verwijderd. Het bestaat voornamelijk uit naftaleen en alkylnaftalenen.]
- PT: resíduos de extracção (carvão), óleo de naftaleno, alcalinos: Extracto de residuo de óleo naftaleno  
[Uma combinação complexa de hidrocarbonetos obtida da lavagem alcalina de óleo de naftaleno para remover compostos fenólicos (ácidos do alcatrão). É constituída por naftaleno e alquil naftalenos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Roetulagem*

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	R : 45
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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, -  
Límites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 121620-48-2

EEC No 310-167-4

No 648-089-00-0

NOTA H

NOTA I

NOTA M

- ES : residuos del extracto (hulla), aceite de naftaleno, alcalino, bajo contenido de naftaleno ; Extracto residuo aceite naftalina  
[Combinación compleja de hidrocarburos que quedan después de la separación de naftaleno procedente de aceite de naftaleno lavado con álcalis mediante un proceso de cristalización. Compuesta principalmente de naftaleno y alquilnaftalenos.]
- DA : ekstraktionsrester (stenkul), naphthalenolie, alkaliske, med lavt indhold af naphthalen ; Syrefri naftalinolie  
[En sammensat blanding af carbonhydrider tilbageblevet efter fjernelsen af naphthalen fra alkalivasket naphthalenolie ved en krystalliseringsproces. Den er sammensat primært af naphthalen og alkyl naphthalen.]
- DE : Extraktückstände (Kohle), Naphthalinöl, alkalisch, Naphthalin-niedrig ; Naphthalinölextrakt-Rückstand  
[Komplexe Kombination von Kohlenwasserstoffen bleibt nach Entfernen von Naphthalin aus Alkali-gewaschenem Naphthalinöl durch ein Kristallisations-Verfahren. Besteht vorherrschend aus Naphthalin und Alkyl naphthalinen.]
- EL : υπολείμματα εκχύλισης (άνθρακα), ναφθαλινέλαιο, αλκαλικό, χαμηλής περιεκτικότητας σε ναφθαλίνιο Υπόλειμμα εκχύλισης ελαίων ναφθαλίνης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παραμένει μετά την απομάκρυνση ναφθαλινίου από αλκαλική έκπλυση ναφθαλινελαίου με κρυστάλλωση. Αποτελείται κυρίως από ναφθαλίνιο και αλκυλοναφθαλίνια.]
- EN : Extract residues (coal), naphthalene oil, alk., naphthalene-low ; Naphthalene Oil Extract Residue  
[A complex combination of hydrocarbons remaining after the removal of naphthalene from alkali-washed naphthalene oil by a crystallization process. It is composed primarily of naphthalene and alkyl naphthalenes.]
- FR : résidus d'extraction alcalins (charbon), huile de naphthalène, pauvres en naphthalènes ; Résidu d'extraction d'huile naphthalénique  
[Combinaison complexe d'hydrocarbures résultant de l'extraction du naphthalène, par un procédé de cristallisation, d'huile de naphthalène ayant subi un lavage alcalin. Se compose principalement de naphthalène et d'alkyl naphthalènes.]
- IT : residui estratti (carbone), olio di naftalene, alcalini, a basso contenuto di naftalene ; Olio naftalinoso lavato  
[Combinazione complessa di idrocarburi rimanenti dopo l'eliminazione del naftalene da un olio di naftalene lavato con alcali per mezzo di un processo di cristallizzazione. È composta prevalentemente da naftalene e alchil naftaleni.]
- NL : extractieresiduen (kool), naftaleenolie, alkalisch, laag naftaleengehalte ; Naftaline olie, extractie-residu  
[Een complexe verzameling van koolwaterstoffen die resteert na de verwijdering van naftaleen door middel van een kristallisatie-proces uit alkali-gespoelde naftaleenolie. Het is voornamelijk samengesteld uit naftaleen en alkyl naftalenen.]
- PT : resíduos de extracção (carvão), óleo de naftaleno, alcalino, pobre em naftaleno ; Extracto de residuo de óleo naftaleno  
[Uma combinação complexa de hidrocarbonetos remanescente após a remoção de naftaleno de óleo de naftaleno lavado com álcali por um processo de cristalização. É constituída principalmente por naftaleno e alquil naftalenos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indehing, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Romslag*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 90640-90-7

EEC No 292-612-1

No 648-090-00-6

NOTA H

NOTA J

NOTA M

- ES : destilados (alquitrán de hulla), aceites de naftaleno, libres de naftaleno, extractos alcalinos ; Extracto residuo aceite naftalina  
[Aceite que queda después de la separación de compuestos fenólicos (ácidos de alquitrán) a partir de aceite de naftaleno drenado por un lavado alcalino. Compuesto principalmente de naftaleno y alquilnaftalenos.]
- DA : destillater (stenkultstjære), naphthalenolier, naphthalenfrie, alkaliske ekstrakter ; Syrefri naftalinolie  
[Den tilbageblevne olie efter fjernelse af phenolforbindelser (tjæresyrer) fra drænet naphthalenolie ved en alkalisk vask. Sammensat primært af naphthalen og alkyl naphthalener.]
- DE : Destillate (Kohlenteer), Naphthalinöle, Naphthalin-frei, alkalische Extrakte ; Naphthalinölextrakt-Rückstand  
[Öl, das nach Entfernen phenolhaltiger Verbindungen (Teersäuren) aus abgelenem Naphthalinöl durch alkalische Wäsche zurückbleibt. Besteht in erster Linie aus Naphthalin und Alkyl naphthalinen.]
- EL : αποσταγμάτων (λιθανθρακόπισσας), ελαίων ναφθαλίνης, απαλλαγμένων ναφθαλίνης, αλκαλικά εκχυλίσματα· Υπόλειμμα εκχύλισης ελαίων ναφθαλίνης  
[Το έλαιο που παραμένει μετά την απομάκρυνση των φαινολικών ενώσεων (οξέων πίσσας) από αποστραγγισμένο έλαιο ναφθαλίνης με αλκαλική έκπλυση. Συνίσταται πρωτίστως από ναφθαλίνη και αλκυλο ναφθαλίνες.]
- EN : Distillates (coal tar), naphthalene oils, naphthalene-free, alk. exts. ; Naphthalene Oil Extract Residue  
[The oil remaining after the removal of phenolic compounds (tar acids) from drained naphthalene oil by an alkali wash. Composed primarily of naphthalene and alkyl naphthalenes.]
- FR : distillats (goudron de houille), huiles de naphthalène, extraits alcalins exempts de naphthalène ; Résidu d'extraction d'huile naphthalénique  
[Huile restant après élimination, par un lavage alcalin, des composés phénoliques (huiles de goudron acides) de l'huile de naphthalène drainée. Se compose principalement de naphthalène et d'alkyl naphthalènes.]
- IT : distillati (catrame di carbone), olii naftalenici, privi di naftalene, estratti alcalini ; Olio naftalinoso lavato  
[Olio che rimane dopo la rimozione di composti fenolici (acidi di catrame) dall'olio naftalenico purgato per mezzo di un lavaggio alcalino. Costituito prevalentemente da naftalene ed alchil naftaleni.]
- NL : destillaten (koolteer), naftaleenoliën, naftaleenvrij, alkalische extracten ; Naftaline olie, extractie-residu  
[De olie die resteert na de verwijdering van fenolhoudende verbindingen (teerzuren) uit afgegoten naftaleenolie door een alkalische spoeling. Voornamelijk samengesteld uit naftaleen en alkyl naftalenen.]
- PT : destilados (alcatrão de carvão), óleos de naftaleno, sem naftaleno, extractos alcalinos ; Extracto de residuo de óleo naftaleno  
[O óleo remanescente após a remoção de compostos fenólicos (ácidos do alcatrão) de um óleo de naftaleno por lavagem alcalina. É constituído principalmente por naftaleno e alquilnaftalenos.]

*Classification, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2: R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Eschettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90641-04-6

BEC No 292-627-3

No 648-091-00-1

NOTA H

NOTA J

NOTA M

- ES : residuos del extracto (hulla), producto alcalino del aceite de naftaleno, productos de cabeza de la destilación ;  
Extracto residuo aceite naftalina  
[Destilado del aceite de naftaleno lavado con base con un intervalo de destilación aproximado de 180 °C a 220 °C. Compuesto principalmente de naftaleno, alquilbencenos, indeno e indano.]
- DA : ekstraktionsrester (kul), naphthalenolie alkaliske, destillationstopfraktioner ; Syrefri naftalinolie  
[Destillatet fra alkalivasket naphthalenolie, med destillationsinterval omtrent fra 180 °C til 220 °C. Sammensat primært af naphthalen, alkylbenzener, inden og indan.]
- DE : Extraktückstände (Kohle), Naphthalinöl alkalisch, Kopfdestillate ; Naphthalinölextrakt-Rückstand  
[Destillat aus alkalisch gewaschenem Naphthalinöl mit einem Siedebereich von etwa 180 °C bis 220 °C. Besteht in erster Linie aus Naphthalin, Alkylbenzolen, Inden und Indan.]
- EL : ναφθαλίνης, προϊόντα κορυφής απόσταξης ; Υπόλειμμα εκχύλισης ελαίων ναφθαλίνης  
[Το απόσταγμα από έλαιο ναφθαλίνης που έχει εκλυθεί με άλκαλι και έχει περιοχή απόσταξης από 180 °C ως 220 °C περίπου. Αποτελείται πρωτίστως από ναφθαλίνη, αλκυλοβενζόλια, ινδένιο και ινδάνιο.]
- EN : Extract residues (coal), naphthalene oil alk., distn. overheads ; Naphthalene Oil Extract Residue  
[The distillation from alkali-washed naphthalene oil having an approximate distillation range of 180 °C to 220 °C (356 °F to 428 °F). Composed primarily of naphthalene, alkylbenzenes, indene and indan.]
- FR : résidu d'extrait alcalin (charbon), huile de naphthalène, distillats de tête ; Résidu d'extraction d'huile naphthalénique  
[Distillat issu d'huile de naphthalène ayant subi un lavage alcalin et dont l'intervalle de distillation s'étend approximativement de 180 °C à 220 °C. Se compose principalement de naphthalène, d'alkylbenzènes, d'indène et d'indane.]
- IT : residui di estrazione (carbone), olio naftalenico alcalino, frazioni di testa della distillazione ; Olio naftalinoso lavato  
[Il distillato da olio naftalenico lavato con alcali con un intervallo di distillazione 180 °C-220 °C. Costituito prevalentemente da naftalene, alchilbenzeni, indene ed indano.]
- NL : extract-residuen (kool), naftaleenolie alkalische, destillatietopprodukten ; Naftaline olie, extractie-residu  
[Het destillaat dat wordt gevormd uit met alkali gespoelde naftaleenolie, met een kooktraject van ongeveer 180 °C tot 220 °C. Voornamelijk samengesteld uit naftaleen, alkylbenzenen, indeen en indan.]
- PT : residuos de extracção (carvão), alcalinos de óleo de naftaleno, produtos de cabeça da destilação ;  
Extracto de resíduo de óleo naftaleno  
[O destilado de óleo de naftaleno lavado com álcali destilando no intervalo de aproximadamente 180 °C a 220 °C. É constituído principalmente por naftaleno, alquilbenzenos, indeno e indano.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 101896-27-9

EEC No 309-985-4

No. 648-092-00-7

NOTA H

NOTA J


NOTA M

- ES : destilados (alquitrán de hulla), aceites de naftaleno, fracción de metilnaftaleno ; Aceite de metilnaftalina  
[Destilado de la destilación fraccionada de alquitrán de hulla a elevada temperatura. Compuesto principalmente de hidrocarburos aromaticos con dos anillos sustituidos y bases nitrogenadas con un intervalo de ebullición aproximado de 225 °C a 255 °C.]
- DA : destillater (stenkultsjære), naphthalenolier, methylnaphthalenfraktion ; Methylnaftalin  
[Et destillat fra den fraktionerede destillation af højtemperatur-stenkultsjære. Sammensat primært af substituerede, bicycliske, aromatiske carbonhydrider og aromatiske nitrogenbaser, med koginterval omtrent fra 225 °C til 255 °C.]
- DE : Destillate (Kohlenteer), Naphthalinöle, Methylnaphthalin-Fraktion ; Methylnaphthalinöl  
[Destillat aus der fraktionierten Destillation von Hochtemperatur-Kohlenteer. Besteht in erster Linie aus substituierten aromatischen Kohlenwasserstoffen mit zwei Ringen und aromatischen Stickstoffbasen und siedet im Bereich von etwa 225 °C bis 255 °C.]
- EL : αποσταγμάτα (λιθανθρακόπισσας), ναφθαλινέλαια, κλάσμα μεθυλοναφθαλίνης ; Έλαια μεθυλοναφθαλίνης  
[Απόσταγμα από την κλασματική απόσταξη λιθανθρακόπισσας υψηλής θερμοκρασίας. Αποτελείται πρωτίστως από αποκατεστημένους αρωματικούς υδρογονάνθρακες με δύο δακτύλιους και αρωματικές βάσεις αζώτου, με περιοχή βρασμού από 225 °C ως 255 °C περίπου.]
- EN : Distillates (coal tar), naphthalene oils, methylnaphthalene fraction ; Methylnaphthalene Oil  
[A distillate from the fractional distillation of high temperature coal tar. Composed primarily of substituted two ring aromatic hydrocarbons and aromatic nitrogen bases boiling in the range of approximately 225 °C to 255 °C (437 °F to 491 °F).]
- FR : distillats (goudron de houille), huiles de naphthalène, fraction méthylnaphthalène ; Huile méthylnaphthalénique  
[Distillat obtenu par distillation fractionnée de goudron de houille à haute température. Se compose principalement d'hydrocarbures aromatiques bicycliques substitués et de bases aromatiques azotées dont le point d'ébullition est compris approximativement entre 225 °C et 255 °C.]
- IT : distillati (catrame di carbone), olii naftalenici, frazione metilnaftalene ; Olio di metilnaftalene  
[Distillato della distillazione frazionata di catrame di carbone ad alta temperatura. È costituito prevalentemente da idrocarburi aromatici sostituiti biciclici e basi azotate aromatiche con punto di ebollizione nell'intervallo 225 °C-255 °C ca.]
- NL : destillaten (koolteer), naftaleenoliën, methylnaftaleenfractie ; Methylnaftaline olie  
[Een destillaat dat afkomstig is uit de gefractioneerde destillatie van bij hoge temperatuur verkregen koolteer. Voornamelijk samengesteld uit gesubstitueerde tweerings aromatische koolwaterstoffen en aromatische stikstofbasen, met een kooktraject van ongeveer 225 °C tot 255 °C.]
- PT : destilados (alcatrão de carvão), óleos de naftaleno, fracção de metilnaftaleno ; óleo metil naftaleno  
[Um destilado de destilação fraccionada de alcatrão de carvão de temperatura elevada. É constituído principalmente por hidrocarbonetos aromaticos bicíclicos substituidos e bases azotadas aromaticas e destila no intervalo de aproximadamente 225 °C a 255 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101794-91-6

EEC No 309-972-3

No 648-093-00-2

NOTA H

NOTA J

NOTA M

- ES : destilados (alquitrán de hulla), aceites de naftaleno, fracción de metilnaftaleno-indol ; Aceite de metil-naftalina  
[Destilado de la destilación fraccionada de alquitrán de hulla a elevada temperatura. Compuesto principalmente de indol y metil-naftaleno con un intervalo de ebullición aproximado de 235 °C a 255 °C.]
- DA : destillater (stenkultsjære), naphthalenolier, indol-methylnaphthalenfraktion ; Methylnaftalin  
[Et destillat fra den fraktionerede destillation af højttemperaturs-stenkultsjære. Sammensat primært af indol og methylnaphthalen, med kogesinterval omtrent fra 235 °C til 255 °C.]
- DE : Destillate (Kohlenteer), Naphthalinöle, Indol-Methylnaphthalin-Fraktion ; Methylnaphthalinöl  
[Destillat aus der fraktionierten Destillation von Hochtemperatur-Kohlenteer. Besteht in erster Linie aus Indol und Methylnaphthalin und siedet im Bereich von etwa 235 °C bis 255 °C.]
- EL : αποστάγματα (λιθανθρακόπισσας), ναφθαλινελαίων, κλάσμα ινδόλης-μεθυλοναφθαλίνης· Έλαια μεθυλοναφθαλίνης  
[Απόσταγμα κλασματικής απόσταξης λιθανθρακόπισσας υψηλής θερμοκρασίας. Αποτελείται κυρίως από ινδόλιο και μεθυλενοναφθαλίνη, με περιοχή βρασμού από 235 °C ως και 255 °C περίπου.]
- EN : Distillates (coal tar), naphthalene oils, indole-methylnaphthalene fraction ; Methylnaphthalene Oil  
[A distillate from the fractional distillation of high temperature coal tar. Composed primarily of indole and methylnaphthalene boiling in the range of approximately 235 °C to 255 °C (455 °F to 491 °F).]
- FR : distillats (goudron de houille), huiles de naphthalène, fraction indole-méthylnaphthalène ; Huile méthylnaphthalénique  
[Distillat obtenu par distillation fractionnée de goudron de houille à haute température. Se compose principalement d'indole et de méthylnaphthalène dont le point d'ébullition est compris approximativement entre 235 °C et 255 °C.]
- IT : distillati (catrame di carbone), frazione indolo-metilnaftalene ; Olio di metilnaftalene  
[Distillato dalla distillazione frazionata di catrame di carbone ad alta temperatura. È costituito prevalentemente da indolo e metilnaftalene con punto di ebollizione nell'intervallo 235 °C-255 °C ca.]
- NL : destillaten (koolteer), naftaleenoliën, indool-methylnaftaleenfractie ; Methylnaftaline olie  
[Een destillaat dat afkomstig is uit de gefractioneerde destillatie van bij hoge temperatuur verkregen koolteer. Voornamelijk samengesteld uit indool en methylnaftaleen, met een kooktraject van ongeveer 235 °C tot 255 °C.]
- PT : destilados (alcatrão de carvão), óleos de naftaleno, fracção de indole-metilnaftaleno ; óleo metil naftaleno  
[Um destilado da destilação fraccionada de alcatrão de carvão de temperatura elevada. É constituído principalmente por indole e metilnaftaleno e destila no intervalo de aproximadamente 235 °C a 255 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995 48 1

E1 C No 295 309 2

No 48 094 00 8

NOTA H

NOTA J

NOTA M

- ES destilados (alquitrán de hulla), aceites de naftaleno, extractos ácidos ; Extracto residuo de aceite de metil-naftalina  
[Combinación compleja de hidrocarburos obtenida por degradación de la fracción de metilnaftaleno obtenida por la destilación de alquitrán de hulla y con un intervalo de ebullición aproximado de 230 °C a 255 °C Contiene principalmente 1(2)-metilnaftaleno, naftaleno, dimetilnaftaleno y bifenilo]
- DA destillater (stenkultsjære), naphthalenolier, syreekstrakter , Methylnaftalinolie  
[En sammensat blanding af carbonhydrider, opnået ved at fjerne baser fra methylnaphthalenfraktionen opnået ved destillation af stenkultsjære, med kogesinterval omtrent fra 230 °C til 255 °C. Indeholder hovedsageligt 1(2)-methylnaphthalen, naphthalen, dimethylnaphthalen og biphenyl]
- DE Destillate (Kohlenteer), Naphthalinole, saure Extrakte , Methylnaphthalinöl-extrakt-Rückstand  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Entfernen der Basis der Methylnaphthalin-Fraktion aus der Destillation von Kohlenteer erhält. Siedet im Bereich von etwa 230 °C bis 255 °C. Enthält hauptsächlich 1(2)-Methylnaphthalin, Naphthalin, Dimethylnaphthalin und Biphenyl]
- EL αποσταγμάτων (λιθανθρακόπισσας) ελαίων ναφθαλίνης, όξινα εκχυλίσματα Υπόλειμμα εκχύλισης ελαίων μεθύλο ναφθαλίνης  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με απομακρυνση των βάσεων του κλάσματος μεθύλοναφθαλίνης το οποίο λαμβάνεται με την απόσταξη λιθανθρακόπισσας και βράζει στην περιοχή από 230 °C ως 255 °C περίπου (Περιέχει κυρίως 1(2)-μεθύλοναφθαλίνη, ναφθαλίνη, διμεθύλοναφθαλίνη και διφαινύλιο]
- EN Distillates (coal tar), naphthalene oils, acid exts , Methylnaphthalene Oil Extract Residue  
[A complex combination of hydrocarbons obtained by debasing the methylnaphthalene fraction obtained by the distillation of coal tar and boiling in the range of approximately 230 °C to 255 °C (446 °F to 491 °F). Contains chiefly 1(2) methylnaphthalene, naphthalene, dimethylnaphthalene, and biphenyl]
- FR distillats (goudron de houille), huiles de naphthalene, extraits acides , Residu d'extraction d'huile methylnaphthalénique  
[Combinaison complexe d'hydrocarbures obtenue par élimination des bases de la fraction methylnaphthalénique issue de la distillation du goudron de houille et dont l'intervalle d'ébullition est approximativement compris entre 230 °C et 255 °C. Se compose principalement de méthyl-1(2)-naphthalene, de naphthalene, de dimethylnaphthalene et de biphenyle]
- IT distillati (catrame di carbone), olii naftalenici, estratti acidi , Olio di metilnaftalene lavato  
[Combinazione complessa di idrocarburi ottenuti per eliminazione delle basi dalla frazione metilnaftalenica ottenuta mediante la distillazione di catrame di carbone e con punto di ebollizione nell'intervallo 230 °C-255 °C ca. Contiene prevalentemente 1(2) metilnaftalene, naftalene, dimetilnaftalene e bifenile]
- NL destillaten (koolteer), naftaleenolien, zuurextracten , Methylnaftaline olie, extractie-residu  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het van basen ontdoen van de methylnaftalenfractie die wordt verkregen uit de destillatie van koolteer en een kooktraject heeft van ongeveer 230 °C tot 255 °C. Bevat voornamelijk 1(2)-methylnaftaleen, naftaleen, dimethylnaftaleen en bifenyl]
- PT destilados (alcatrao de carvão), oleos de naftaleno, extractos ácidos , Extracto do residuo de óleo metil naftaleno  
[Uma combinação complexa de hidrocarbonetos obtida por debasificação da fração de metilnaftaleno obtida pela destilação de alcatrao de carvão e que destila no intervalo de aproximadamente 230 °C a 255 °C. Contém sobretudo 1(2) metilnaftaleno, naftaleno, dimetilnaftaleno e bifenilo]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90641-05-7

EEC No 292-628-9

No 648-095-00-3

NOTA H

NOTA J


NOTA M

- ES : residuos del extracto (hulla), producto alcalino del aceite de naftaleno, residuos de destilación ; Extracto residuo de aceite de metil-naftalina  
[Residuo de la destilación de aceite de naftaleno lavado con base con un intervalo de destilación aproximado de 220 °C a 300 °C. Compuesto principalmente de naftaleno, alquilnaftalenos y bases nitrogenadas aromáticas.]
- DA : ekstraktionsrester (kul), naphthalenolie alkaliske, destillationsrester ; Methylnaftalinolie  
[Resten fra destillationen af alkalivasket naphthalenolie, med destillationsinterval omtrent fra 220 °C til 300 °C. Sammensat primært af naphthalen, alkylbenzener og aromatiske nitrogenbaser.]
- DE : Extraktückstände (Kohle), Naphthalinöl alkalisch, Destillationsrückstände ; Methylnaphthalinölextrakt-Rückstand  
[Rückstand aus der Destillation von alkalisch gewaschenem Naphthalinöl mit einem Siedebereich von etwa 220 °C bis 300 °C. Besteht in erster Linie aus Naphthalin, Alkyl-naphthalinen und aromatischen Stickstoffbasen.]
- EL : υπολειμμάτων εκχύλισματος (άνθρακα), αλκαλικού ελαίου ναφθαλίνης, υπολείμματα απόσταξης ; Υπόλειμμα εκχύλισης ελαίων μεθυλωναφθαλίνης  
[Το υπόλειμμα από την απόσταξη ελαίου ναφθαλίνης το οποίο έχει εκλυθεί με άλκαλι και έχει περιοχή απόσταξης από 220 °C ως 300 °C περίπου. Αποτελείται πρωτίστως από ναφθαλίνη, αλκυλωναφθαλίνες και αρωματικές αζωτούχες βάσεις.]
- EN : Extract residues (coal), naphthalene oil alk., distn. residues ; Methylnaphthalene Oil Extract Residue  
[The residue from the distillation of alkali-washed naphthalene oil having an approximate distillation range of 220 °C to 300 °C (428 °F to 572 °F). Composed primarily of naphthalene, alkyl-naphthalenes and aromatic nitrogen bases.]
- FR : résidu d'extrait alcalin (charbon), huile de naphthalène, résidu de distillation ; Résidu d'extraction d'huile méthyl-naphthalénique  
[Résidu issu de la distillation d'huile de naphthalène ayant subi un lavage alcalin, dont l'intervalle de distillation s'étend approximativement de 220 °C à 300 °C. Se compose principalement de naphthalène, d'alkyl-naphthalènes et de bases aromatiques azotées.]
- IT : residui di estrazione (carbone), olio naftalenico alcalino, residui della distillazione ; Olio di metilnaftalene lavato  
[Il residuo della distillazione di olio naftalenico lavato con alcali con un intervallo di distillazione 220 °C-300 °C. Costituito prevalentemente da naftalene, alchilnaftaleni e basi azotate aromatiche.]
- NL : extract-residuen (kool), naftaleenolie alkalisch, destillatieresiduen ; Methylnaftaline olie, extractie-residu  
[Het residu dat afkomstig is uit de destillatie van met alkali gespoelde naftaleenolie met een destillatietraject van ongeveer 220 °C tot 300 °C. Voornamelijk samengesteld uit naftaleen, alkylnaftalenen en aromatische stikstofbasen.]
- PT : resíduos de extracção (carvão), alcalinos de óleo de naftaleno, resíduos da destilação ; Extracto de residuo de óleo metil naftaleno  
[O residuo da destilação de óleo de naftaleno lavado com álcali destilando no intervalo de aproximadamente 220 °C a 300 °C. É constituído principalmente por naftaleno, alquilnaftalenos e bases azotadas aromáticas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : S3-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*




Cas No 84989-12-8

EEC No 284-901-6

No 648-096-00-9

NOTA H

NOTA J

NOTA M

- ES : aceites del extracto (hulla), ácidos, libres de base del alquitrán ; Extracto residuo de aceite de metil-naftalina  
[Aceite del extracto con un intervalo de ebullición aproximado de 220 °C a 265 °C procedente del residuo del extracto alcalino del alquitrán de hulla producido por un lavado ácido del tipo del ácido sulfúrico acuoso después de destilar para separar las bases de alquitrán. Compuesto principalmente de alquilnaftalenos.]
- DA : ekstraktionsolier (kul), sure, tjærebaser-frie ; Methylnaftalinolie  
[Ekstraktionsolien, med kogesinterval omtrent fra 220 til 265 °C, fra alkaliske stenkulstjære-ekstraktionsrester fremstillet ved en sur vask, såsom vandig svovlsyre, efter destillation for at fjerne tjærebaser. Sammensat primært af alkylnaphthalener.]
- DE : Extraktöle (Kohle), sauer, Teerbaseren-frei ; Methylnaphthalinölextrakt-Rückstand  
[Extraktöl, siedet im Bereich von etwa 220 °C bis 265 °C, aus alkalischem Kohlenteer-Extraktückstand, hergestellt durch saure Wäsche, wie wäßrige Schwefelsäure, nach der Destillation zur Abtrennung der Teerbaser. Besteht in erster Linie aus Alkylnaphthalinen.]
- EL : εκχυλισματικό έλαιο (άνθρακα), όξινο, ελεύθερο βάσης πίσσας. Υπόλειμμα εκχύλισης ελαίων μεθυλοναφθαλίνης  
[Το εκχυλισματικό έλαιο με περιοχή θρασμού από 220 °C ως 265 °C περίπου από αλκαλικό εκχύλισμα υπολείμματος λιθανθρακοπισσας, που παραγεται με όξινο μέσο εκχύλισης, όπως θειικό οξύ μετά από υπόσταξη για να απομακρυνθούν οι βάσεις πίσσας. Συνίσταται πρωτίστως από αλκυλοναφθαλίνια.]
- EN : Extract oils (coal), acidic, tar-base free ; Methylnaphthalene Oil Extract Residue  
[The extract oil boiling in the range of approximately 220 °C to 265 °C (428 °F to 509 °F) from coal tar alkaline extract residue produced by an acidic wash such as aqueous sulfonic acid after distillation to remove tar bases. Composed primarily of alkylnaphthalenes.]
- FR : huiles d'extrait acides (charbon), exemptes de base de goudron ; Résidu d'extraction d'huile méthylnaphthalénique  
[Huile d'extrait dont le point d'ébullition est compris approximativement entre 220 °C et 265 °C, issue du résidu d'extrait alcalin de goudron de houille obtenu par un lavage à l'acide, tel que l'acide sulfurique, après distillation en vue d'éliminer les bases de goudron. Se compose principalement d'alkylnaphthalènes.]
- IT : olii di estrazione (carbone), acidi, privi di basi di catrame ; Olio di metilnaftalene lavato  
[L'olio di estrazione con punto di ebollizione nell'intervallo 220 °C-265 °C ca., da residuo alcalino di estrazione di catrame di carbone, ottenuto da un lavaggio acido quale una soluzione acquosa di acido solforico dopo distillazione per eliminare sostanze basiche presenti nel catrame. Costituito principalmente da alchilnaftaleni.]
- NL : extractolie (kool), zuur, vrij van teerbaser ; Methylnaftaline olie, extractie-residu  
[De extractolie met een kooktraject van ongeveer 220 °C tot 265 °C, uit alkalisch koolteerextractresidu geproduceerd door met een zuur, zoals wateng zwavelzuur, te wassen na destillatie om teerbaser te verwijderen. Voornamelijk samengesteld uit primaire alkylnaftalenen.]
- PT : oleos de extracção (carvão), ácidos, sem bases do alcatrão ; Extracto de residuo de óleo metil naftaleno  
[O óleo de extracção que destila no intervalo de aproximadamente 220 °C a 265 °C do residuo do extracto alcalino do alcatrão de carvão produzido por uma lavagem com ácido por exemplo com ácido sulfúrico aquoso apos destilação para remover bases do alcatrão. É constituído principalmente por alquilnaftalenos.]

*Classification* Κλασification / Ταξινόμηση Classification Classification / Ταξινόμηση

Circ (at 2 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, ετικέτα, étiquette, Клеймо, etikedo*

**T**



**R : 45**

S 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Огра́нче́ния концен́трации, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Силы де концентрации*


Cas No 121620-46-0

EEC No 310-165-3

No 648-097-00-4

NOTA H

NOTA J

NOTA M

- ES: destilados (alquitrán de hulla), fracción de benzol, residuos de destilación; Aceite de lavaje  
[Combinación compleja de hidrocarburos obtenida de la destilación de benzol crudo (alquitrán de hulla de elevada temperatura). Puede ser un líquido con un intervalo de destilación aproximado de 150 °C a 300 °C o un semisólido o un sólido con un punto de fusión por encima de 70 °C. Compuesta principalmente de naftaleno y alquil naftalenos.]
- DA: destillater (stenkultstjære), benzolfraction, destillationsrester; Vaskeolie  
[En sammensat blanding af carbonhydrider opnået ved destillation af rå benzol (højtemperaturstenkultstjære). Den kan være en væske med et destillationsinterval omtrent fra 150 °C til 300 °C eller et halvfast eller fast stof med et smeltepunkt på op til 70 °C. Den er sammensat primært af naphthalen og alkyl naphthalener.]
- DE: Destillate (Kohleteer), Benzolfraction, Destillationsrückstände; Waschöl  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von rohem Benzol (Hochtemperaturkohleteer). Kann flüssig sein mit dem ungefähren Destillationsbereich von 150 °C bis 300 °C oder halbfest oder fest mit einem Schmelzpunkt bis zu 70 °C. Besteht vorrangig aus Naphthalin und Alkyl naphthalinen.]
- EL: αποσταγμα (λιθανθρακόπισσα), κλάσμα δεζολίου, υπολείμματα απόσταξης Έλαια έκπλυσης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη αργού δενζολίου (λιθανθρακόπισσας υψηλής θερμοκρασίας). Μπορεί να είναι υγρό με περιοχή απόσταξης από 150 °C ως 300 °C περίπου ή ένα ημιστερεό ή στερεό με σημείο τήξης μέχρι 70 °C. Αποτελείται κυρίως από ναφθαλίνη και αλκυλναφθαλίνια.]
- EN: Distillates (coal tar), benzole fraction, distn. residues; Wash Oil  
[A complex combination of hydrocarbons obtained from the distillation of crude benzole (high temperature coal tar). It may be a liquid with the approximate distillation range of 150 °C to 300 °C (302 °F to 572 °F) or a semi-solid or solid with a melting point up to 70 °C (158 °F). It is composed primarily of naphthalene and alkyl naphthalenes.]
- FR: distillats (goudron de houille), fraction benzol, résidus de distillation; Huile de lavage  
[Combinaison complexe d'hydrocarbures obtenue par distillation de benzol brut (goudron de houille à haute température). Liquide dont le point de distillation se situe approximativement entre 150 °C et 300 °C, ou semi-solide ou solide dont le point de fusion est 70 °C. Se compose en majorité de naphthalène et d'alkyl naphthalènes.]
- IT: distillati (catrame di carbone), frazione benzolo, residui di distillazione; Olio lavaggio gas  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di benzolo grezzo (catrame di carbone ad alta temperatura). Può essere un liquido con intervallo di distillazione 150 °C-300 °C ca. oppure un semisolido o un solido con punto di fusione fino a 70 °C. È composta prevalentemente da naftalene e alchil naftaleni.]
- NL: destillaten (koolteer), benzolfractie, destillatieresiduen; Benzol-wasolie  
[Een complexe verzameling van koolwaterstoffen die wordt verkregen uit de destillatie van ruwe benzol (hoge-temperatuur-koolteer). Het kan een vloeistof zijn, met een destillatietraject van ongeveer 150 °C tot 300 °C, of een vaste of halfvaste stof met een smeltpunt tot 70 °C. Het bestaat voornamelijk uit naftaleen en alkyl naftalenen.]
- PT: destilados (alcatrão de carvão), fracção de benzole, resíduos da destilação; óleo de lavagem  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de benzole bruto (alcatrão de carvão de temperatura elevada). Pode ser um líquido com o intervalo de destilação aproximado de 150 °C a 300 °C ou um semi-sólido ou sólido com um ponto de fusão até 70 °C. É constituída principalmente por naftaleno e alquil naftalenos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90640-84-9

EEC No 292-605-3

No 648 098 00 X

NOTA H

NOTA J

NOTA M

- ES aceite de creosota, fracción de acenafteno ; Aceite de lavaje  
[Combinación compleja de hidrocarburos producida por la destilación de alquitrán de hulla y con un intervalo de ebullición aproximado de 240 °C a 280 °C. Compuesta principalmente de acenafteno, naftaleno y alquilnaftaleno]
- DA creosotolie, acenaphthenfraktion , Vaskeolie  
[En sammensat blanding af carbonhydrier, fremstillet ved destillation af stenkulstjære, med kogeminterval omkring fra 240 °C til 280 °C. Sammensat primært af acenaphthen, naphthalen og alkylnaphthalen.]
- DE Kreosotöl, Acenaphthen-Fraktion ; Waschol  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Kohlentee und siedet im Bereich von etwa 240 °C bis 280 °C. Besteht in erster Linie aus Acenaphthen, Naphthalin und Alkylnaphthalinen.]
- EL κρεοζωτέλαιο, κλάσμα ακεναφθενίου· Έλαια έκπλυσης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη λιθανθρακόπισσας και διατίθεται στην περιοχή από 240 °C ως 280 °C περίπου. Αποτελείται πρωτίστως από ακεναφθένιο, ναφθαλινη και αλκυλο ναφθαλινη.]
- EN Creosote oil, acenaphthene fraction ; Wash Oil  
[A complex combination of hydrocarbons produced by the distillation of coal tar and boiling in the range of approximately 240 °C to 280 °C (464 °F to 536 °F). Composed primarily of acenaphthene, naphthalene and alkyl naphthalene.]
- FR huile de créosote, fraction acénaphthène , Huile de lavage  
[Combinaison complexe d'hydrocarbures obtenue par distillation de goudron de houille et dont le point d'ébullition est approximativement compris entre 240 °C et 280 °C. Se compose principalement d'acenaphthène, de naphthalène et d'alkylnaphthalène.]
- IT olio di creosoto, frazione acenaftene , Olio lavaggio gas  
[Combinazione complessa di idrocarburi prodotta dalla distillazione di catrame di carbone e con punto di ebollizione nell'intervallo 240 °C-280 °C ca. Costituita prevalentemente da acenaftene, naftalene ed alchil naftalene.]
- NL creosootolie acenafteenfractie ; Benzol-wasolie  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van koolteer, met een kookpunt van ongeveer 240 °C tot 280 °C. Voornamelijk samengesteld uit acenafteen, naftaleen en alkylnaftaleen.]
- PT óleo de creosote, fracção de acenafteno , óleo de lavagem  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de alcatrão de carvão e que destila no intervalo de aproximadamente 240 °C a 280 °C. É constituída principalmente por acenafteno, naftaleno e alquilnaftaleno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classifica,ão*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 61789-28-4

EEC No 263-047-8

No 648-099-00-5

NOTA H

NOTA J

NOTA M

**ES :** aceite de creosota ; Aceite de lavaje

[Combinación compleja de hidrocarburos obtenida de la destilación de alquitrán de hulla. Compuesta principalmente de hidrocarburos aromáticos y puede contener cantidades apreciables de ácidos y bases de alquitrán. Tiene un intervalo de destilación aproximado de 200 °C a 325 °C.]

**DA :** creosotolie ; Vaskeolie

[En sammensat blanding af carbonhydrider opnået ved destillationen af stenkulstjære. Den består primært af aromatiske carbonhydrider og kan indeholde betydelige mængder tjæresyrer og tjærebaser. Den destillerer i området omtrent fra 200 °C til 325 °C.]

**DE :** Kreosotöl ; Waschöl

[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation von Kohlenteer. Besteht in erster Linie aus aromatischen Kohlenwasserstoffen und kann beträchtliche Mengen von Teersäuren und Teerbasen enthalten. Destilliert im ungefähren Bereich von 200 °C bis 325 °C.]

**EL :** κρεοζωτέλαιο· Έλαια έκπλυσης

[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη λιθανθρακόπισσας. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες και μπορεί να περιέχει σημαντικές ποσότητες οξέων και βάσεων πίσσας. Αποστάζει στην περιοχή από 200 °C έως 325 °C περίπου.]

**EN :** Creosote oil ; Wash Oil

[A complex combination of hydrocarbons obtained by the distillation of coal tar. It consists primarily of aromatic hydrocarbons and may contain appreciable quantities of tar acids and tar bases. It distills at the approximate range of 200 °C to 325 °C (392 °F to 617 °F).]

**FR :** huile de créosote ; Huile de lavage

[Combinaison complexe d'hydrocarbures obtenue par distillation du goudron de houille. Se compose principalement d'hydrocarbures aromatiques et peut contenir des huiles de goudron acides et des bases de goudron en quantité notable. Son point de distillation se situe approximativement entre 200 °C et 325 °C.]

**IT :** olio di creosoto ; Olio lavaggio gas

[Combinazione complessa di idrocarburi ottenuti dalla distillazione di catrame di carbon fossile. È costituita prevalentemente da idrocarburi aromatici e può contenere quantità apprezzabili di acidi di catrame e basi di catrame. Distilla nell'intervallo 200 °C-325 °C ca.]

**NL :** creosootolie ; Benzol-wasolie

[Een complexe verzameling koolwaterstoffen verkregen door de destillatie van koolteer. Bestaat voornamelijk uit aromatische koolwaterstoffen en kan aanzienlijke hoeveelheden teerzuren en teerbasen bevatten. Het destillatietraject ligt ongeveer tussen 200 °C en 325 °C.]

**PT :** oleo de creosote ; óleo de lavagem

[Uma combinação complexa de hidrocarbonetos obtida pela destilação de alcatrão de carvão. É constituída principalmente por hidrocarbonetos aromáticos e pode conter quantidades apreciáveis de ácidos do alcatrão e de bases do alcatrão. Destila no intervalo aproximado de 200 °C a 325 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 70321-79-8

EEC No 274-565-9

No 648-100-00-9

NOTA H

NOTA J

NOTA M

- ES : aceite de creosota, destilado de elevado punto de ebullición ; Aceite de lavaje  
[Fracción de destilación de elevado punto de ebullición obtenida de la carbonización a elevada temperatura de hulla bituminosa, que se refina de nuevo para separar el exceso de sales cristalinas. Consiste principalmente en aceite de creosota con algo de sales aromáticas polinucleares normales, que son componentes de los destilados del alquitrán de hulla, separados. Está libre de cristales a aproximadamente 5 °C.]
- DA : kresotolie, højt kogende destillat ; Vaskeolie  
[Den højt kogende destillationsfraktion opnået fra højtemperaturforkulningen af bituminøst kul, som ydeligere raffineres for at fjerne overskud af krystallinske salte. Den består primært af kresotolie samt nogle af de normale polycykliske aromatiske salte, som er komponenter af stenkulstjæredestillater, fjernede. Den er krystalfri ved omtrent 5 °C.]
- DE : Kresotöl, hochsiedendes Destillat ; Waschöl  
[Hochsiedender Destillationsbestandteil, erhalten aus der Hochtemperatur-Verkokung von Steinkohle, die weiter aufbereitet wird, um überschüssige kristalline Salze zu entfernen. Besteht in erster Linie aus Kresotöl, aus dem einige der normalerweise vorkommenden polynuklearen aromatischen Salze, die Bestandteile von Kohleerdestillaten sind, entfernt sind. Ist bei etwa 5 °C kristallfrei.]
- EL : κρεοζωτελαίου, απόσταγμα υψηλής θερμοκρασίας βρασμού· Έλαια έκπλυσης  
[Το υψηλής θερμοκρασίας βρασμού κλάσμα απόσταξης, που λαμβάνεται από την εξανθράκωση σε υψηλή θερμοκρασία πρισσούχου ανθρακα, που εν συνεχεία καθαρίζεται για να απομακρυνθεί η περίσσεια των κρυσταλλικών αλάτων. Συνίσταται πρωτίστως από κρεοζωτέλαιο από το οποίο έχουν απομακρυνθεί μερικά από τα κανονικά πολυκυρηνικά αρωματικά άλατα, που είναι συστατικά αποσταγμάτων λιθανθρακόπισσας. Στους 5 °C περίπου είναι ελεύθερο κρυστάλλων.]
- EN : Creosote oil, high-boiling distillate ; Wash Oil  
[The high-boiling distillation fraction obtained from the high temperature carbonization of bituminous coal which is further refined to remove excess crystalline salts. It consists primarily of creosote oil with some of the normal polynuclear aromatic salts which are components of coal tar distillates, removed. It is crystal free at approximately 5 °C (41 °F)]
- FR : huile de créosote, distillat à point d'ébullition élevé ; Huile de lavage  
[Fraction de distillation, à point d'ébullition élevé, obtenue par carbonisation à haute température de charbon bitumineux, puis raffinée en vue de séparer les sels cristallins en excès. Se compose principalement d'huile de créosote, une partie des sels aromatiques polycycliques entrant normalement dans la composition des distillats de goudron de houille ayant été éliminée. La fraction est exempte de cristaux à partir de 5 °C approximativement.]
- IT : olio di creosoto, distillato altobollente ; Olio lavaggio gas  
[Taglio di distillazione altobollente ottenuto dalla carbonizzazione ad alta temperatura di carbone bituminoso che viene ulteriormente raffinato per separare i sali cristallini in eccesso. È costituito principalmente da olio di creosoto da cui sono stati separati alcuni dei sali aromatici polinucleari normali che compongono i distillati di catrame di carbone. È privo di cristalli alla temperatura di 5 °C ca.]
- NL : creosootolie, hoogkokend destillaat ; Benzol-wasolie  
[De hoogkokende destillatiefractie die wordt verkregen uit de carbonisatie bij hoge temperatuur van bitumineuze kool en die verder wordt gezuiverd om een overschot aan kristallijne zouten te verwijderen. Bestaat voornamelijk uit creosootolie waarbij enige normale polynucleaire aromatische zouten, die bestanddelen zijn van koolteerdestillaten, zijn verwijderd. Het is kristalvrij bij ongeveer 5 °C.]
- PT : óleo de creosote, destilado de ponto de ebulição elevado ; óleo de lavagem  
[A fracção da destilação com ponto de ebulição elevado obtida da carbonização a temperatura elevada de carvão betuminoso que é posteriormente refinada para remover o excesso de sais cristalinos. É constituída principalmente por óleo de creosote com alguns dos sais normais aromáticos polinucleares, que são constituintes de destilados de alcatrão de carvão, removidos. Não apresenta cristais a aproximadamente 5 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, R tulageti*



*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 8001-58-9

EEC No 232-287-5

No 648-101-00-4

NOTA H

NOTA J

NOTA M

ES: creosota; Aceite de lavaje

[Destilado del alquitrán de hulla producido por carbonización a alta temperatura de hulla bituminosa. Compuesto principalmente de hidrocarburos aromáticos, ácidos de alquitrán y bases de alquitrán.]

DA: creosot; Vaskeolie

[Destillatet af stenkulstjære fremstillet ved højtemperaturforkulning af bituminøs kul. Det består primært af aromatiske carbonhydrider, tjæresyrer og tjærebaser.]

DE: Kreosot; Waschöl

[Kohlenteerdestillat aus der Hochtemperaturverkokung von Steinkohle. Besteht in erster Linie aus aromatischen Kohlenwasserstoffen, Teersäuren und Teerbasen.]

EL: κρεόζωτο; Έλαια έκλυσης

[Το απόσταγμα λιθανθρακόπισσας που παράγεται με την εξανθράκωση σε υψηλή θερμοκρασία διτουμενικού άνθρακα. Συνίσταται πρωτίστως από αρωματικούς υδρογονάνθρακες, οξέα πίσσας και βάσεις πίσσας.]

EN: Creosote; Wash Oil

[The distillate of coal tar produced by the high temperature carbonization of bituminous coal. It consists primarily of aromatic hydrocarbons, tar acids and tar bases.]

FR: creosote; Huile de lavage

[Distillat de goudron de houille produit par carbonisation à haute température de charbon bitumineux. Se compose principalement d'hydrocarbures aromatiques, d'huiles de goudron acides et de bases de goudron.]

IT: creosoto; Olio lavaggio gas

[Distillato di catrame di carbone prodotto mediante distillazione ad alta temperatura del carbone bituminoso. È costituito principalmente da idrocarburi aromatici, acidi di catrame e basi di catrame.]

NL: creosoot; Benzol-wasolie

[Het destillaat van koolteer geproduceerd bij de carbonisatie bij hoge temperatuur van vette kolen. Het bestaat voornamelijk uit aromatische koolwaterstoffen, teerzuren en teerbasen.]

PT: creosote; óleo de lavagem

[O destilado do alcatrão de carvão produzido pela carbonização a temperatura elevada de carvão betuminoso. É constituído principalmente por hidrocarbonetos aromáticos, ácidos do alcatrão e bases do alcatrão.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 122384-77-4

EEC No 310-189-4

No 648-102-00-X

NOTA H

NOTA J

NOTA M

- ES : residuos del extracto (hulla), ácido de aceite de creosota ; Extracto residuo de aceite lavaje  
[Combinación compleja de hidrocarburos de una fracción libre de bases procedente de la destilación de alquitrán de hulla con un intervalo de ebullición de 250 °C a 280 °C aproximadamente. Compuesta en su mayor parte de bifenilo y difenilnaftalenos isoméricos.]
- DA : ekstraktionsrester (stenkul), creosotolie sure ; Syrefri vaskeolie  
[En sammensat blanding af carbonhydrider fra den basebefriede fraktion fra destillationen af stenkulstjære, med kogesinterval omtrent fra 250 °C til 280 °C. Den består overvejende af biphenyl og isomere diphenylnaphthener.]
- DE : Extraktückstände (Kohle), Kreosotölsäure ; Waschölextrakt-Rückstand  
[Komplexe Kombination von Kohlenwasserstoffen aus der von der Basis-befreiten Fraktion aus der Destillation von Kohleteer, siedet im Bereich von ungefähr 250 °C bis 280 °C. Besteht vorherrschend aus biphenylen und isomeren Diphenylnaphthalinen.]
- EL : υπολείμματα εκχύλισης (άνθρακα), οξύ κρεοζοτελαίου· Υπόλειμματα εκχύλισης ελαίων έκπλυσης  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από το ελεύθερο μέρος κλάσμα απόσταξης λιθανθρακόπισσας, που βράζει στην περιοχή από 250 °C ως 280 °C περίπου. Συνίσταται κυρίως από διφαινύλιο και ισομερή διφαινυλναφθαλίνια.]
- EN : Extract residues (coal), creosote oil acid ; Wash Oil Extract Residue  
[A complex combination of hydrocarbons from the base-freed fraction from the distillation of coal tar, boiling in the range of approximately 250 °C to 280 °C (482 °F to 536 °F). It consists predominantly of biphenyl and isomeric diphenylnaphthalenes.]
- FR : résidus d'extraction acides (charbon), huile de créosote ; Résidu d'extraction d'huile de lavage  
[Combinaison complexe d'hydrocarbures issue de la fraction dépourvue de bases résultant de la distillation du goudron de houille, dont le point d'ébullition se situe approximativement entre 250 °C et 280 °C. Se compose principalement de biphényle et de diphénylnaphtalènes isomériques.]
- IT : residui estratti (carbone), olio acido di creosoto ; Olio lavaggio gas lavato  
[Combinazione complessa di idrocarburi proveniente dalla frazione priva di basi dalla distillazione di catrame di carbone, con punto di ebollizione nell'intervallo 250 °C-280 °C ca. È costituito prevalentemente da bifenile e dimetilnaftaleni isomeri.]
- NL : extractieresiduen (kool), creosootolie zure ; Benzol-wasolie, extractie-residu  
[Een complexe verzameling koolwaterstoffen, afkomstig uit de van basen ontdane fractie uit de destillatie van koolteer, met een kooktraject van ongeveer 250 °C tot 280 °C. Bestaat voornamelijk uit biphenyl en isomere difenylnaftalenen.]
- PT : resíduos de extracção (carvão), ácidos de óleo de creosote ; Extracto de resíduo de óleo de lavagem  
[Uma combinação complexa de hidrocarbonetos da fracção liberta de bases da destilação de alcatrão de carvão, destilando no intervalo de aproximadamente 250 °C a 280 °C. É constituída predominantemente por bifenilo e difenilnaftalenos isoméricos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90640-81-6

EEC No 292-603-2

No 648-103-00-5

NOTA H

NOTA J

NOTA M

- ES : aceite de antraceno, pasta de antraceno ; Fracción de aceite de antraceno  
[Sólido rico en antraceno obtenido por cristalización y centrifugación de aceite de antraceno. Compuesto principalmente de antraceno, carbazol y fenantreno.]
- DA : anthracenolie, anthracenpasta ; Anthracenoliefraction  
[Det anthracenrige faste stof, opnået ved krystallisation og centrifugering af anthracenolie. Det er sammensat primært af anthracen, carbazol og phenanthren.]
- DE : Anthracenöl, Anthracenpaste ; Anthracenöl-Fraktion  
[Anthracen-reicher Feststoff, erhalten durch Kristallisation und Zentrifugieren von Anthracenöl. Besteht in erster Linie aus Anthracen, Carbazol und Phenanthren.]
- EL : ελαίου ανθρακενίου, πάστα ανθρακενίου· Κλάσμα ελαίων ανθρακενίου  
[Το εμπλουτισμένο σε ανθρακένιο στερεό που λαμβάνεται με την κρυστάλλωση και φυγοκέντρωση ελαίου ανθρακενίου. Αποτελείται κυρίως από ανθρακένιο, καρβαζόλιο και φαινανθρένιο.]
- EN : Anthracene oil, anthracene paste ; Anthracene Oil Fraction  
[The anthracene-rich solid obtained by the crystallization and centrifuging of anthracene oil. It is composed primarily of anthracene, carbazole and phenanthrene.]
- FR : huile anthracénique, pâte anthracénique ; Fraction d'huile anthracénique  
[Solide riche en athracène obtenu par cristallisation et centrifugation d'huile anthracénique. Se compose principalement d'anthracène, de carbazole et de phénanthrène.]
- IT : olio di antracene, pasta di antracene ; Frazione di olio di antracene  
[Solido ricco di antracene ottenuto per cristallizzazione e centrifugazione di olio di antracene. Costituito prevalentemente da antracene, carbazolo e fenantreno.]
- NL : antraceenolie, antraceenpasta ; Anthraceen olie, fractie  
[De antraceenrijke vaste stof die wordt verkregen door de kristallisatie en centrifugatie van antraceenolie. Voornamelijk samengesteld uit antraceen, carbazool en fenantreen.]
- PT : oleo de antraceno, pasta de antraceno ; Fracção de óleo antracénico  
[O sólido rico em antraceno obtido pela cristalização e centrifugação de óleo de antraceno. É constituído principalmente por antraceno, carbazole e fenantreno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 90640-82-7

EEC No 292-604-8

No 648-104-00-0

NOTA H

NOTA J

NOTA M

- ES : aceite de antraceno, bajo contenido de antraceno ; Fracción de aceite de antraceno  
[Aceite que queda después de la separación, por un proceso de cristalización, de un sólido rico en antraceno (pasta de antraceno) procedente de aceite de antraceno. Compuesto principalmente de compuestos aromáticos de dos, tres y cuatro miembros.]
- DA : anthracenolie, med lavt indhold af anthracen ; Anthracenoliefraktion  
[Den tiloversblevne olie efter fjernelse, ved en krystallisationsproces, af et anthracenrigt fast stof (anthracenpasta) fra anthracenolie. Den er sammensat primært af to-, tre- og fireleddede aromatiske forbindelser.]
- DE : Anthracenöl, Anthracen-frei ; Anthracenöl-Fraktion  
[Öl, das nach Entfernen durch ein Kristallisationsverfahren eines Anthracen-reichen Feststoffes (Anthracenpaste) aus Anthracenöl zurückbleibt. Besteht in erster Linie aus zwei-, drei- und viergliedrigen aromatischen Verbindungen.]
- EL : έλαιο ανθρακενίου, χαμηλής περιεκτικότητας σε ανθρακένιο· Κλάσμα ελαίων ανθρακενίου  
[Το έλαιο που παραμένει μετά την απομάκρυνση, με κρυστάλλωση, στερεού πλούσιου σε ανθρακένιο (πάστα ανθρακενίου) από έλαιο ανθρακενίου. Αποτελείται κυρίως από αρωματικές ενώσεις με δύο, τρεις και τέσσερις δακτυλίους.]
- EN : Anthracene oil, anthracene-low ; Anthracene Oil Fraction  
[The oil remaining after the removal, by a crystallization process, of an anthracene-rich solid (anthracene paste) from anthracene oil. It is composed primarily of two, three and four membered aromatic compounds.]
- FR : huile anthracénique à faible teneur en anthracène ; Fraction d'huile anthracénique  
[Huile restant après l'élimination de l'huile anthracénique, par cristallisation, de la pâte anthracénique (solide riche en anthracène). Se compose principalement de composés aromatiques comportant 2, 3 ou 4 cycles.]
- IT : olio di antracene, a basso contenuto di antracene ; Frazione di olio di antracene  
[Olio che rimane dopo la rimozione, per mezzo di un processo di cristallizzazione, di un solido ricco di antracene (pasta di antracene) da olio di antracene. Costituito prevalentemente da composti aromatici a due, tre e quattro elementi.]
- NL : antraceenolie, laag antraceengehalte ; Anthraceen olie, fractie  
[De olie die resteert na de verwijdering, door middel van een kristallisatieproces, van een antraceenrijke vaste stof (antraceenpasta) uit antraceenolie. Is voornamelijk samengesteld uit aromatische verbindingen met twee, drie of vier ringen.]
- PT : óleo de antraceno, baixo teor de antraceno ; Fracção de óleo antracénico  
[O óleo remanescente após a remoção, por um processo de cristalização, de um sólido rico em antraceno (pasta de antraceno) do óleo de antraceno. É constituído principalmente por compostos aromáticos com dois, três e quatro membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rosulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 92061-92-2

EEC No 295-505-8

No 648-105-00-6

NOTA H

NOTA I

NOTA M

- ES : residuos (alquitran de hulla), destilación del aceite de antraceno ; Fracción de aceite de antraceno  
[Residuo de la destilación fraccionada de antraceno crudo con un intervalo de ebullición aproximado de 340 °C a 400 °C. Consiste en su mayor parte en hidrocarburos aromáticos tri- y polinucleares y heterocíclicos.]
- DA : rester (stenkulstjære), anthracenolie destillations- ; Anthracenoliefraktion  
[Resten/ fra fraktioneret destillation af rå anthracen, med kogesinterval omtrent fra 340 °C til 400 °C. Den består overvejende af tri- og polycykliske, aromatiske og heterocycliske carbonhydrider.]
- DE : Rückstände (Kohlenteer), Anthracenöldestillation ; Anthracenöl-Fraktion  
[Rückstand aus der fraktionierten Destillation von rohem Anthracen, siedet im ungefähren Bereich von 340 °C bis 400 °C. Besteht vorherrschend aus tri- und polynuklearen aromatischen und heterocyclischen Kohlenwasserstoffen.]
- EL : υπολείμματα (λιθανθρακόπισσας), απόσταξης ελαίου ανθρακενίου· Κλάσμα ελαίων ανθρακενίου  
[Το υπόλειμμα από την κλασματική απόσταξη ακαθάρτου ανθρακενίου που βράζει στην περιοχή από 340 °C ως 400 °C περίπου. Συνίσταται κυρίως από tri- και πολυκυκλικούς αρωματικούς και ετεροκυκλικούς υδρογονάνθρακες.]
- EN : Residues (coal tar), anthracene oil distr. ; Anthracene Oil Fraction  
[The residue from the fraction distillation of crude anthracene boiling in the approximate range of 340 °C to 400 °C (644 °F to 752 °F). It consists predominantly of tri- and polynuclear aromatic and heterocyclic hydrocarbons.]
- FR : résidus (goudron de houille), distillation d'huile anthracénique ; Fraction d'huile anthracénique  
[Résidu de la distillation fractionnée d'anthracène brut dont le point d'ébullition est compris entre 340 °C et 400 °C. Se compose principalement d'hydrocarbures hétérocycliques et aromatiques tri- en polycycliques.]
- IT : residui (catrame di carbone), distillazione di olio di antracene ; Frazione di olio di antracene  
[Residuo dalla distillazione frazionata di antracene grezzo con punto di ebollizione nell'intervallo 340 °C-400 °C ca. È costituito prevalentemente da idrocarburi aromatici di e triciclici ed eterociclici.]
- NL : residuen (koolteer), anthraceenolie destillatie- ; Anthraceen olie, fractie  
[Het residu van de gefractioneerde destillatie van ongezuiverde anthraceen, met een kooktraject van ongeveer 340 °C tot 400 °C. Bestaat voornamelijk uit tri- en polynucleaire aromatische en heterocyclische koolwaterstoffen.]
- PT : resíduos (alcatrão de carvão), da destilação de óleo de antraceno ; Fracção de óleo antracénico  
[O resíduo da destilação fraccionada de antraceno bruto que destila no intervalo de aproximadamente 340 °C a 400 °C. É constituído predominantemente por hidrocarbonetos aromáticos tri- e polinucleares e compostos heterocíclicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995-15-2

EEC No 295-275-9

No 648-106-00-1

NOTA H

NOTA J


NOTA M

- ES:** aceite de antraceno, pasta de antraceno, fracción de antraceno ; Fracción de aceite de antraceno  
[Combinación compleja de hidrocarburos de la destilación del antraceno obtenida por la cristalización del aceite de antraceno de alquitrán bituminoso a elevada temperatura y con un intervalo de ebullición de 330 °C a 350 °C. Contiene principalmente antraceno, carbazol y fenantreno.]
- DA:** anthracenolie, anthracenpasta, anthracenfraktion ; Anthracenoliefraktion  
[En sammensat blanding af carbonhydrider fra destillationen af anthracen, opnået ved krystallisation af anthracenolie fra bituminøs højtemperaturstjære, med kogesinterval omtrent fra 330 °C til 350 °C. Den indeholder hovedsageligt anthracen, carbazol og phenanthren.]
- DE:** Anthracenöl, Anthracenpaste, Anthracen-Fraktion ; Anthracenöl-Fraktion  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Anthracen, das man durch Kristallisation von Anthracenöl aus bituminösem Hochttemperatur-Teer erhält. Siedet im Bereich von 330 °C bis 350 °C. Enthält hauptsächlich Anthracen, Carbazol und Phenanthren.]
- EL:** ελαίου ανθρακενίου, πάστας ανθρακενίου, κλάσμα ανθρακενίου· Κλάσμα ελαίων ανθρακενίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη ανθρακενίου που λαμβάνεται με την κρυστάλλωση ελαίου ανθρακενίου από διτουμινική πίσσα υψηλής θερμοκρασίας και βράζει στην περιοχή από 330 °C ως 350 °C. Περιέχει κυρίως ανθρακένιο, καρβαζόλιο και φαινανθρένιο.]
- EN:** Anthracene oil, anthracene paste, anthracene fraction ; Anthracene Oil Fraction  
[A complex combination of hydrocarbons from the distillation of anthracene obtained by the crystallization of anthracene oil from bituminous high temperature tar and boiling in the range of 330 °C to 350 °C (626 °C to 662 °C). It contains chiefly anthracene, carbazole and phenanthrene.]
- FR:** huile anthracénique, pâte anthracénique, fraction anthracène ; Fraction d'huile anthracénique  
[Combinaison complexe d'hydrocarbures résultant de la distillation de l'anthracène obtenu par cristallisation de l'huile anthracénique a partir de goudron à haute température bitumineux ; son point d'ébullition est compris entre 330 °C et 350 °C. Se compose principalement d'anthracène, de carbazole et de phénanthrène.]
- IT:** olio di antracene, pasta di antracene, frazione antracene ; Frazione di olio di antracene  
[Combinazione complessa di idrocarburi dalla distillazione di antracene ottenuta mediante cristallizzazione di olio di antracene da catrame bituminoso ad alta temperatura e con punto di ebollizione nell'intervallo 330 °C -350 °C ca. Contiene prevalentemente antracene, carbazolo e fenantrene.]
- NL:** antraceenolie, antraceenpasta, antraceenfractie ; Anthraceen olie, fractie  
[Een complexe verzameling koolwaterstoffen uit de destillatie van antraceen die wordt verkregen door de kristallisatie van antraceenolie uit bitumineuze hoge temperatuur teer, met een kooktraject van ongeveer 330 °C tot 350 °C. Bevat hoofdzakelijk antraceen, carbazool en fenantreen.]
- PT:** óleo de antraceno, pasta de antraceno, fracção de antraceno ; Fracção de óleo antracénico  
[Uma combinação complexa de hidrocarbonetos da destilação de antraceno obtido pela cristalização de óleo de antraceno de alcatrão de carvão betuminoso de temperatura elevada e que destila no intervalo de 330 °C a 350 °C. Contem sobretudo antraceno, carbazolo e fenantreno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995-16-3

EEC No 295-276-4

No 648-107-00-7

NOTA H

NOTA J


NOTA M

- ES : aceite de antraceno, pasta de antraceno, fracción de carbazol ; Fracción de aceite de antraceno  
[Combinación compleja de hidrocarburos de la destilación del antraceno obtenida por cristalización del aceite de antraceno de alquitrán de hulla bituminosa a elevada temperatura y con un intervalo de ebullición aproximado de 350 °C a 360 °C. Contiene principalmente antraceno, carbazol y fenantreno.]
- DA : anthracenolie, anthracenpasta, carbazolfraktion ; Anthracenoliefraktion  
[En sammensat blanding af carbonhydrider fra destillationen af anthracen, opnået ved krystallisation af anthracenolie fra højtemperaturstjære fra bituminøse kul, med kogesinterval omtrent fra 350 °C til 360 °C. Den indeholder hovedsagelig anthracen, carbazol og phenanthren.]
- DE : Anthracenöl, Anthracenpaste, Carbazol-Fraktion ; Anthracenöl-Fraktion  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Anthracen, das man durch Kristallisation von Anthracenöl aus Steinkohlen-Hochtemperatur-Teer erhält. Siedet im ungefähren Bereich von 350 °C bis 360 °C. Enthält hauptsächlich Anthracen, Carbazol und Phenanthren.]
- EL : ελαίου ανθρακενίου, πάστας ανθρακενίου, κλάσμα καρβαζολίου· Κλάσμα ελαίων ανθρακενίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη ανθρακενίου που λαμβάνεται με κρυστάλλωση ελαίου ανθρακενίου από υψηλής θερμοκρασίας πίσσα διτουμενικού άνθρακα και βράζει στην περιοχή από 350 °C ως 360 °C περίπου. Περιέχει κυρίως ανθρακένιο, καρβαζόλιο και φαινανθρένιο.]
- EN : Anthracene oil, anthracene paste, carbazole fraction ; Anthracene Oil Fraction  
[A complex combination of hydrocarbons from the distillation of anthracene obtained by crystallization of anthracene oil from bituminous coal high temperature tar and boiling in the approximate range of 350 °C to 360 °C (662 °F to 680 °F). It contains chiefly anthracene, carbazole and phenanthrene.]
- FR : huile anthracénique, pâte anthracénique, fraction carbazole ; Fraction d'huile anthracénique  
[Combinaison complexe d'hydrocarbures résultant de la distillation de l'anthracène obtenu par cristallisation de l'huile anthracénique à partir de goudron à haute température de charbon bitumineux : son point d'ébullition est compris approximativement entre 350 °C et 360 °C. Se compose principalement d'anthracène, de carbazole et de phénanthrène.]
- IT : olio di antracene, pasta di antracene, frazione carbazolo ; Frazione di olio di antracene  
[Combinazione complessa di idrocarburi dalla distillazione di antracene, ottenuta mediante cristallizzazione di olio di antracene da catrame bituminoso ad alta temperatura e con punto di ebollizione nell'intervallo 350 °C-360 °C ca. Contiene prevalentemente antracene, carbazolo e fenantrene.]
- NL : antraceenolie, antraceenpasta, carbazoolfractie ; Anthraceen olie, fractie  
[Een complexe verzameling koolwaterstoffen uit de destillatie van antraceen die wordt verkregen door de kristallisatie van antraceenolie uit bitumineuze hoge temperatuur teer, met een kooktraject van ongeveer 350 °C tot 360 °C. Bevat hoofdzakelijk antraceen, carbazool en fenantreen.]
- PT : oleo de antraceno, pasta de antraceno, fracção de carbazole ; Fracção de óleo antracénico  
[Uma combinação complexa de hidrocarbonetos de destilação obtido pela cristalização de óleo de antraceno de alcatrão de carvão betuminoso de temperatura elevada e que destila no intervalo de aproximadamente 350 °C e 360 °C. Contém sobretudo antraceno, carbazole e fenantreno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 91995-17-4

BEC No 295-278-5

No 648-108-00-2

NOTA H

NOTA J

NOTA M

- ES : aceite de antraceno, pasta de antraceno, fracción ligera de destilación ; Fracción de aceite de antraceno  
[Combinación compleja de hidrocarburos de la destilación del antraceno obtenida por la cristalización del aceite de antraceno de alquitrán bituminoso a temperatura suave y con un intervalo de ebullición aproximado de 290 °C a 340 °C. Contiene principalmente productos aromáticos trinucleares y sus dihidro derivados.]
- DA : anthracenolie, anthracenpasta, lette destillationsfraktioner ; Anthracenoliefraktion  
[En sammensat blanding af carbonhydrider fra destillation af anthracen, opnået ved krystallisation af anthracenolie fra bituminøs lavtemperaturstjære, med kogesinterval omtrent fra 290 °C til 340 °C. Den indeholder hovedsageligt tricycliske aromater og deres dihydroderivater.]
- DE : Anthracenöl, Anthracenpaste, leichte Destillate ; Anthracenöl-Fraktion  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Anthracen, das man durch Kristallisation von Anthracenöl aus bituminösem leichtem Temperatur-Teer erhält. Siedet im ungefähren Bereich von 290 °C bis 340 °C. Enthält hauptsächlich trinukleare Aromaten und ihre Dihydroderivate.]
- EL : ελαίου ανθρακενίου, πάστας ανθρακενίου, ελαφρά αποστάγματα· Κλάσμα ελαίων ανθρακενίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη ανθρακενίου που λαμβάνεται με κρυστάλλωση ελαίου ανθρακενίου από διτουμενική πίσσα χαμηλής θερμοκρασίας και βράζει στην περιοχή από 290° C ως 340° C περίπου. Περιέχει κυρίως τριπυρηνικά αρωματικά και διυδρο παράγωγά τους.]
- EN : Anthracene oil, anthracene paste, distn. lights ; Anthracene Oil Fraction  
[A complex combination of hydrocarbons from the distillation of anthracene obtained by crystallization of anthracene oil from bituminous light temperature tar and boiling in the range of approximately 290 °C to 340 °C (554° F to 644° F). It contains chiefly trinnuclear aromatics and their dihydro derivatives.]
- FR : huile anthracénique, pâte anthracénique, fraction légère de distillation ; Fraction d'huile anthracénique  
[Combinaison complexe d'hydrocarbures résultant de la distillation de l'anthracène obtenu par cristallisation de l'huile anthracénique à partir de goudron à basse température bitumineux ; son point d'ébullition est compris approximativement entre 290° C et 340° C. Contient principalement des composés aromatiques tricycliques et leur dérivés dihydrogénés.]
- IT : olio di antracene, pasta di antracene, frazioni leggere della distillazione ; Frazione di olio di antracene  
[Combinazione complessa di idrocarburi dalla distillazione di antracene ottenuta mediante cristallizzazione di olio di antracene da catrame bituminoso ad alta temperatura e con punto di ebollizione nell'intervallo 290 °C-340 °C ca. Contiene prevalentemente aromatici triciclici e loro di idroderivati.]
- NL : antraceenolie, antraceenpasta, lichte destillatiefracties ; Anthraceen olie, fractie  
[Een complexe verzameling koolwaterstoffen uit de destillatie van antraceen die wordt verkregen door de kristallisatie van antraceenolie uit bitumineuze lage temperatuur teer, met een kooktraject van ongeveer 290 °C tot 340 °C. Bevat hoofdzakelijk trinucleaire aromaten en dihydroderivaten daarvan.]
- PT : oleo de antraceno, pasta de antraceno, fracções leves da destilação ; Fracção de óleo antracénico  
[Uma combinação complexa de hidrocarbonetos da destilação de antraceno obtido por cristalização de óleo de antraceno de alcatrão de carvão betuminoso de temperatura baixa e que destila no intervalo de aproximadamente 290 °C a 340 °C. Contém sobretudo hidrocarbonetos aromáticos trinucleares e os seus derivados dihidro.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 101316-87-4

EEC No 309-889-2

Flu 648 109 00 8

NOTA H

NOTA J

NOTA M

- ES :** aceites de alquitrán, hulla, baja temperatura ; Aceite de alquitrán, alto punto de ebullición  
[Destilado de alquitrán de hulla a baja temperatura. Compuesto principalmente de hidrocarburos, compuestos fenólicos y bases nitrogenadas aromáticas con un intervalo de ebullición aproximado de 160 °C a 340 °C.]
- DA :** tjæreolier, stenkuls-, lavtemperatur ; Kultjæreolie, højt kogende  
[Et destillat fra lavtemperaturstenkulstjære. Sammensat primært af carbonhydnder, phenolforbindelser og aromatiske nitrogen-baser, med kogeinterval omtrent fra 160 °C til 340 °C.]
- DE :** Teeröle, Kohle, Niedrigtemperatur ; Teeröl, hochsiedend  
[Destillat aus Niedrigtemperatur-Kohlenteer. Besteht in erster Linie aus Kohlenwasserstoffen, phenolhaltigen Verbindungen und aromatischen Stickstoffbasen und siedet in einem Bereich von etwa 160 °C bis 340 °C.]
- EL :** πισσέλαια, άνθρακα, χαμηλής θερμοκρασίας ; Πισσέλαιο, υψηλού σημείου ζέσης  
[Απόσταγμα από λινθανθρακόπισσα χαμηλής θερμοκρασίας. Αποτελείται κυρίως από υδρογονάνθρακες, φαινολικές ενώσεις και αρωματικές αζωτούχες βάσεις με απόσταγμα από λινθανθρακόπισσα χαμηλής θερμοκρασίας. Αποτελείται κυρίως από υδρογονάνθρακες, φαινολικές ενώσεις και αρωματικές αζωτούχες βάσεις με περιοχή βρασμού από 160 °C ως 340 °C περίπου.]
- EN :** Tar oils, coal, low-temp. ; Tar Oil, high boiling  
[A distillate from low-temperature coal tar. Composed primarily of hydrocarbons, phenolic compounds and aromatic nitrogen bases boiling in the range of approximately 160 °C to 340 °C (320 °F to 644 °F).]
- FR :** huiles de goudron de houille à basse température ; Huile de goudron, haut point d'ébullition  
[Distillat de goudron de houille à basse température. Se compose principalement d'hydrocarbures, de composés phenoliques et de bases aromatiques azotées dont le point d'ébullition est compris approximativement entre 160 °C et 340 °C.]
- IT :** olii di catrame, carbone, bassa temperatura ; Olio di catrame, altobollente  
[Distillato da catrame di carbone a bassa temperatura. Costituito principalmente da idrocarburi, composti fenolici e basi azotate aromatiche con punto di ebollizione nell'intervallo 160 °C-340 °C ca.]
- NL :** teeroliën, kool, lage temperatuur ; Teerolie, hoogkokend  
[Een destillaat uit bij lage temperatuur verkregen koolteer. Voornamelijk samengesteld uit koolwaterstoffen, fenolhoudende verbindingen en aromatische stikstofbasen, met een kooktraject van ongeveer 160 °C to 340 °C.]
- PT :** óleos do alcatrão, carvão, de temperatura baixa ; óleos de alcatrão alto ponto de ebulição  
[Um destilado do alcatrão de carvão de temperatura baixa. É constituído principalmente por hidrocarbonetos, compostos fenólicos e bases azotadas aromáticas e destila no intervalo de aproximadamente 160 °C a 340 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Inndeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R: 45
	S: 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 122384-78-5

EEC No 310-191-5

No 648-110-00-3

NOTA H

NOTA J


NOTA M

- ES : residuos del extracto (hulla), alcalino de alquitrán de hulla a baja temperatura ;  
[Residuo de aceites de alquitrán de hulla a baja temperatura después de un lavado alcalino, como el hidróxido de sodio acuoso, para separar los ácidos crudos de alquitrán de hulla. Compuesto principalmente de hidrocarburos y bases de nitrógeno aromáticas.]
- DA : ekstraktionsrester (stenkul), lavtemperaturstenkultjære alkaliske ;  
[Resten fra lavtemperaturstenkultjæreolier efter en alkalisk vask, så som vandig natriumhydroxid, for at fjerne råstenkultjæresyrer. Sammensat primært af carbonhydrider og aromatiske nitrogenbaser.]
- DE : Extraktückstände (Kohle), Niedrigtemperatur Kohleteeralkalin ;  
[Rückstand von Niedrigtemperatur Kohleteerölen nach alkalinem Waschen, wie mit wässrigem Natriumhydroxid, um rohe Kohleteersäuren zu beseitigen. Besteht vorrangig aus Kohlenwasserstoffen und aromatischen Stickstoffbasen.]
- EL : υπολείμματα εκχύλισης (άνθρακα), αλκαλική λιθανθρακόπισσα χαμηλής θερμοκρασίας ;  
[Το υπόλειμμα από την αλκαλική έκπλυση με υδατικό διάλυμα καυστικού νατρίου πισσελαίων χαμηλής θερμοκρασίας λιθανθρακόπισσας για να απομακρυνθούν όξια ακατέργαστης λιθανθρακόπισσας. Αποτελείται κυρίως από υδρογονάνθρακες και αρωματικές αζωτούχες βάσεις.]
- EN : Extract residues (coal), low temp. coal tar alk. ;  
[The residue from low temperature coal tar oils after an alkaline wash, such as aqueous sodium hydroxide, to remove crude coal tar acids. Composed primarily of hydrocarbons and aromatic nitrogen bases.]
- FR : résidu d'extraction alcalins (charbon), goudron de houille à basse température ;  
[Résidu d'huiles de goudron de houille à basse température après un lavage alcalin avec, par exemple, l'hydroxyde de sodium aqueux, pour extraire les huiles acides de goudron de houille brutes. Se compose principalement d'hydrocarbures et de bases azotées aromatiques.]
- IT : estratti residui (carbone), catrame di carbone alcalino a bassa temperatura ;  
[Residuo di catrame di carbone a bassa temperatura dopo lavaggio alcalino, come con sodio idrossido in soluzione, per eliminare gli acidi di catrame di carbone grezzo. Composto prevalentemente da idrocarburi a basi aromatiche azotate.]
- NL : extractieresiduen (kool), lage-temperatuur-koolteer-alkalische ;  
[Het residu afkomstig uit lage-temperatuur-koolteeroliën na een alkalische spoeling, bijvoorbeeld met waterig natriumhydroxide, waarbij ruwe koolteerzuren worden verwijderd. Voornamelijk samengesteld uit koolwaterstoffen en aromatische stikstofbasen.]
- PT : resíduos de extracção (carvão), alcalinos de alcatrão de carvão de temperatura baixa ;  
[O residuo dos óleos de alcatrão de carvão de temperatura baixa após uma lavagem alcalina, tal como hidróxido de sódio aquoso, para remover ácidos do alcatrão de carvão bruto. É constituído principalmente por hidrocarbonetos e bases azotadas aromáticas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 84988-93-2

EEC No 284-881-9

No 648-111-00-9

NOTA H

NOTA J


NOTA M

- ES:** fenoles, extracto de licor amoniacal ; Extracto alcalino  
[Combinación de fenoles extraídos, utilizando isobutil acetato, del licor amoniacal condensado del gas desprendido en la destilación destructiva de hulla a baja temperatura (menos de 700 °C). Compuesta en su mayor parte de una mezcla de fenoles monohídricos y dehidricos.]
- DA:** phenoler, ammoniakludsekstrakt ; Alkaliske ekstrakter  
[Blandingen af phenoler ekstraheret, ved brug af isobutylacetat, fra ammoniakludden, kondenseret fra gassen udviklet ved lavtemperaturdestillation (mindre end 700 °C) af kul. Den består overvejende af en blanding af monohydrerede og dihydrerede phenoler.]
- DE:** Phenole, Ammoniaklösung Extrakt ; Laugenextrakt  
[Kombination von Phenolen, mit Isobutylacetat aus der Ammoniaklösung extrahiert, die aus dem bei der Niedrigtemperatur- (weniger als 700 °C) Entgasung von Kohle anfallenden Gas kondensiert. Besteht vorherrschend aus einem Gemisch von ein- und zweiwertigen Phenolen.]
- EL:** φαινόλες, εκχύλισμα αμμωνιακών υγρών· Αλκαλικό εκχύλισμα  
[Ο συνδυασμός φαινολών, που εκχλίζονται με χρησιμοποίηση οξικού ισοβουτυλίου από αμμωνιακό υγρό, που συμπυκνώνεται από το αέριο, που εκλύεται σε χαμηλής θερμοκρασίας (λιγότερο από 700 °C) ξηρά απόσταξη του άνθρακα. Συνίσταται κυρίως από μείγμα μονοϋδρικών και διϋδρικών φαινολών.]
- EN:** Phenols, ammonia liquor ext. ; Alkaline Extract  
[The combination of phenols extracted, using isobutyl acetate, from the ammonia liquor condensed from the gas evolved in low-temperature (less than 700 °C (1 292 °F)) destructive distillation of coal. It consists predominantly of a mixture of monohydric and dihydric phenols.]
- FR:** phénols, extraits de l'ammoniaque ; Extrait basique  
[Combinaison de phénols extraits, à l'aide d'acétate d'isobutyle, de l'ammoniaque issue de la condensation des gaz émis lors de la distillation destructive du charbon à basse température (au-dessous de 700 °C). Se compose principalement d'un mélange de phénols monohydriques et dihydriques.]
- IT:** fenoli, estratto di liscivio ammoniacale ; Estratto alcalinico  
[La combinazione di fenoli estratti, mediante l'uso di acetato di isobutile, dal liscivio ammoniacale condensato dal gas evoluto nella distillazione distruttiva del carbone a basse temperature (meno di 700 °C). Costituita prevalentemente da una miscela di mono- e bifenoli.]
- NL:** fenolen, ammoniakprocesvochtextextract ; Alkalisch extract  
[De verzameling van fenolen geëxtraheerd met isobutylacetaat, uit het gecondenseerde ammoniakprocesvocht uit het gas ontwikkeld bij de lage temperatuur destructieve destillatie (minder dan 700 °C) van kool. Bestaat voornamelijk uit een mengsel van mono- en di-waterstof-fenolen.]
- PT:** fenóis, extracto do licor amoniacal ; Extractos alcalinos  
[A combinação de fenóis extraídos, com acetato de isobutilo, do licor amoniacal condensado do gás liberto na destilação destrutiva do carvão a temperatura baixa (menos de 700 °C). É constituída predominantemente por uma mistura de fenóis monohídricos e dehidricos.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 90640-88-3

EEC No 292-610-0

No 648-112-00-4

NOTA H

NOTA J


NOTA M

- ES : destilados (alquitrán de hulla), aceites ligeros, extractos alcalinos ; Extracto alcalino  
[Extracto acuoso del aceite carbólico producido por un lavado alcalino del tipo del hidróxido de sodio acuoso. Compuesto principalmente de las sales alcalinas de varios compuestos fenólicos.]
- DA : destillater (stenkultstjære), letolier, alkaliske ekstrakter ; Alkaliske ekstrakter  
[Det vandige ekstrakt fra carbololie fremstillet ved en alkalisk vask med f. eks. vandig natriumhydroxid. Sammensat primært af de alkaliske salte af forskellige phenolforbindelser.]
- DE : Destillate (Kohlenteer), leichte Öle, alkalische Extrakte ; Laugenextrakt  
[Wässriger Extrakt aus Karbolöl, hergestellt durch eine alkalische Wäsche wie wässriges Natriumhydroxid. Besteht in erster Linie aus den Alkalisalzen verschiedener phenolhaltiger Verbindungen.]
- EL : αποσταγμάτων (λιθανθρακόπισσας), ελαφρών ελαίων, αλκαλικά εκχυλίσματα· Αλκαλικό εκχύλισμα  
[Το υδατικό εκχύλισμα από καρβολικό έλαιο που παράγεται με έκπλυση με αλκαλικό μέσο όπως υδατικό υδροξείδιο νατρίου. Αποτελείται πρωτίστως από τα αλκαλικά άλατα διαφόρων φαινολικών ενώσεων.]
- EN : Distillates (coal tar), light oils, alk. exts. ; Alkaline Extract  
[The aqueous extract from carbolic oil produced by an alkaline wash such as aqueous sodium hydroxide. Composed primarily of the alkali salts of various phenolic compounds.]
- FR : distillats (goudron de houille), huiles légères, extraits alcalins ; Extrait basique  
[Substance aqueuse extraite de l'huile carbolique par un lavage alcalin, avec, par exemple, de l'hydroxyde de sodium aqueux. Se compose principalement de sels alcalins de différents composés phénoliques.]
- IT : distillati (catrame di carbone), olii leggeri, estratti alcalini ; Estratto alcalinico  
[Estratto acquoso da olio carbolico prodotto mediante lavaggio alcalino quale l'idrossido di sodio in acqua. Costituito prevalentemente da sali alcalini di vari composti fenolici.]
- NL : destillaten (koolteer), lichte oliën, alkalische extracten ; Alkalisch extract  
[Het waterig extract uit carbololie dat wordt gevormd door een alkalische spoeling zoals waterig natriumhydroxide. Voornamelijk samengesteld uit de alkali-zouten van verscheidene fenolhoudende verbindingen.]
- PT : destilados (alcatrão de carvão), óleos leves, extractos alcalinos ; Extractos alcalinos  
[O extracto aquoso de carboleína produzido por lavagem alcalina por exemplo com uma solução aquosa de hidróxido de sódio. É constituído principalmente por sais alcalinos de diversos compostos fenólicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-83-0

EEC No 266-017-2

No 648-113-00-X

NOTA H

NOTA J

NOTA M

- ES: extractos, alcalinos del aceite del alquitrán de hulla; Extracto alcalino  
[Extracto del aceite de alquitrán de hulla producido por un baño alcalino como hidróxido de sodio acuoso. Compuesto principalmente de las sales alcalinas de diversos compuestos fenólicos.]
- DA: ekstrakter, stenkulstjæreolie alkaliske; Alkaliske ekstrakter  
[Ekstrakt for stenkulstjæreolie fremstillet ved en alkalisk vask, såsom vandig natriumhydroxid. Sammensat primært af alkaliske af forskellige phenolforbindelser.]
- DE: Extrakte, alkalische Kohlenteeröl-; Laugenextrakt  
[Extrakt aus Kohlenteeröl, hergestellt durch alkalische Wäsche, zum Beispiel wässriges Natriumhydroxid. Besteht in erster Linie aus den Alkalisalzen verschiedener phenolhaltiger Verbindungen.]
- EL: εκχυλίσματα, αλκαλικού ελαίου λιθανθρακόπισσας; Αλκαλικό εκχύλισμα  
[Το εκχύλισμα από έλαιο λιθανθρακόπισσας που παράγεται με έκλυση με αλκαλικό μέσο, όπως υδατικό υδροξείδιο νατρίου. Αποτελείται κυρίως από τα αλκαλικά άλατα διαφόρων φαινολικών ενώσεων.]
- EN: Extracts, coal tar oil alk.; Alkaline Extract  
[The extract from coal tar oil produced by an alkaline wash such as aqueous sodium hydroxide. Composed primarily of the alkali salts of various phenolic compounds.]
- FR: extraits alcalins d'huile de goudron de houille (charbon); Extrait basique  
[Extrait de l'huile de goudron de houille obtenu par un lavage alcalin avec, par exemple, de l'hydroxyde de sodium aqueux. Se compose principalement de sels alcalins de divers composés phénoliques.]
- IT: estratti, olio di catrame di carbone, alcalini; Estratto alcalinico  
[L'estratto di olio di catrame di carbone ottenuto per lavaggio alcalino, ades. con soluzione acquosa di idrato di sodio. È composto principalmente dai sali alcalini di vari composti fenolici.]
- NL: extracten, koolteerolie alkalische; Alkalisch extract  
[Het extract van koolteerolie dat wordt gevormd door een alkalische spoeling zoals wateng natumhydroxide. Voornamelijk samengesteld uit de alkalizouten van verscheidene fenolhoudende verbindingen.]
- PT: extractos, alcalinos de óleo de alcatrão de carvão; Extractos alcalinos  
[O extracto de óleo de alcatrão de carvão produzido por uma lavagem alcalina com hidróxido de sódio aquoso. Compõe-se principalmente dos sais alcalinos de diversos compostos fenólicos.]

*Clasificación, Klassificering, Einstufung, Τοξινότητα, Classification, Classification, Classificazione, Indetning, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90640-89-4

EEC No 292-611-6

No 648-114-00-5

NOTA H

NOTA J

NOTA M

- ES : destilados (alquitrán de hulla), aceites de naftaleno, extractos alcalinos ; Extracto alcalino  
[Extracto acuoso del aceite de naftaleno producido por un lavado alcalino del tipo del hidróxido de sodio acuoso. Compuesto principalmente de las sales alcalinas de diversos compuestos fenólicos.]
- DA : destillater (stenkultsjære), naphthalenolier, alkaliske ekstrakter ; Alkaliske ekstrakter  
[Det vandige ekstrakt fra naphthalenolie fremstillet ved en alkalisk vask med f. eks vandig natriumhydroxid. Sammensat primært af alkaliske salte af forskellige phenolforbindelser.]
- DE : Destillate (Kohlenteer), Naphthalinöle, alkalische Extrakte ; Laugenextrakt  
[Wässriger Extrakt aus Naphthalinöl, hergestellt durch eine alkalische Wäsche wie wässriges Natriumhydroxid. Besteht in erster Linie aus den Alkalisalzen verschiedener phenolhaltiger Verbindungen.]
- EL : αποσταγμάτων (λιθανθρακόπισσας), ελαίων ναφθαλίνης, αλκαλικά εκχυλίσματα· Αλκαλικό εκχύλισμα  
[Το υδατικό εκχύλισμα από έλαιο ναφθαλίνης που παράγεται με έκλυση με αλκαλικό μέσο όπως υδατικό υδροξείδιο νατρίου. Αποτελείται πρωτίστως από τα αλκαλικά άλατα διαφόρων φαινολικών ενώσεων.]
- EN : Distillates (coal tar), naphthalene oils, alk. exts. ; Alkaline Extract  
[The aqueous extract from naphthalene oil produced by an alkaline wash such as aqueous sodium hydroxid. Composed primarily of the alkali salts of various phenolic compounds.]
- FR : distillats (goudron de houille), huiles de naphtalène, extraits alcalins ; Extrait basique  
[Substance aqueuse extraite de l'huile de naphtalène par un lavage alcalin, avec, par exemple, de l'hydroxyde de sodium aqueux. Se compose principalement de sels alcalins de différents composés phénoliques.]
- IT : distillati (catrame di carbone), olii naftalenici, estratti alcalini ; Estratto alcalinico  
[Estratto acquoso da olio naftalenico prodotto da un lavaggio alcalino quale l'idrossido di sodio in acqua. Costituito prevalentemente da sali alcalini di vari composti fenolici.]
- NL : destillaten (koolteer), naftaleenoliën, alkalische extracten ; Alkalisch extract  
[Het waterig extract uit naftaleenolie dat wordt gevormd door een alkalische spoeling zoals waterig natriumhydroxide. Voornamelijk samengesteld uit de alkali-zouten van verscheidene fenolhoudende verbindingen.]
- PT : destilados (alcatrão de carvão), óleos de naftaleno, extractos alcalinos ; Extractos alcalinos  
[O extracto aquoso de um óleo de naftaleno produzido por uma lavagem alcalina por exemplo com uma solução aquosa de hidróxido de sódio. É constituído principalmente por sais alcalinos de diversos compostos fenólicos.]

lassificac  n, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classifica  o

Carc. Cat. 2 ; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  tiquette, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45
	S : S3-45

 mites de concentraci  n, Koncentrationsgr enser, Konzentrationsgrenzwerte,  ρια συγκ ντρωσης, Concentration limits,  mites de concentration, Limiti di concentrazione, Concentratiegrenzen,  mites de concentra  o


Cas No 90641-06-8

EEC No 292-629-4

No 648-1'15-00-0

NOTA H

NOTA J

NOTA M

- ES : residuos del extracto (hulla), producto alcalino del aceite de alquitrán, carbonatado, tratado con cal ; Fenol bruto  
[Producto obtenido por tratamiento del extracto alcalino de aceite de alquitrán de hulla con  $\text{CO}_2$  y  $\text{CaO}$ . Compuesto principalmente de  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{Na}_2\text{CO}_3$  y otras impurezas orgánicas e inorgánicas.]
- DA : ekstraktionsrester (kul), tjæreolie alkaliske, carbonaterede, kalkede ; Råfenol  
[Produktet opnået ved behandling af et alkalisk stenkulstjæreolieekstrakt med  $\text{CO}_2$  og  $\text{CaO}$ . Sammensat primært af  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{Na}_2\text{CO}_3$  og andre organiske og uorganiske urenheder.]
- DE : Extraktückstände (Kohle), Teeröl alkalisch, karbonisiert, mit Kalk behandelt ; Rohphenole  
[Produkt, erhalten durch Behandeln von alkalischem Extrakt aus Kohlenteer mit  $\text{CO}_2$  und  $\text{CaO}$ . Besteht in erster Linie aus  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{Na}_2\text{CO}_3$  und anderen organischen und anorganischen Verunreinigungen.]
- EL : υπολειμμάτων εκχυλίσματος (άνθρακα), αλκαλικό πισσέλαιο, κατεργασμένο με ανθρακικό, κατεργασμένο με άσβεστο· Ακατέργαστες φαινόλες  
[Το προϊόν που λαμβάνεται με κατεργασία αλκαλικού εκχυλίσματος πισσελαίου άνθρακα με  $\text{CO}_2$  και  $\text{CaO}$ . Αποτελείται πρωτίστως από  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{Na}_2\text{CO}_3$  και άλλες οργανικές και ανόργανες ξένες προσμίξεις.]
- EN : Extract residues (coal), tar oil alk., carbonated, limed ; Crude Phenols  
[The product obtained by treatment of coal tar oil alkaline extract with  $\text{CO}_2$  and  $\text{CaO}$ . Composed primarily of  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{Na}_2\text{CO}_3$  and other organic and inorganic impurities.]
- FR : résidus d'extrait alcalin (charbon), huile de goudron de houille, carbonatés et traités à la chaux ; Phénols bruts  
[Produit obtenu par traitement au  $\text{CO}_2$  et au  $\text{CaO}$  d'extrait alcalin d'huile de goudron de houille. Se compose principalement de  $\text{CaCO}_3$ , de  $\text{Ca}(\text{OH})_2$ , de  $\text{Na}_2\text{CO}_3$  et d'autres impuretés organiques et minérales.]
- IT : residui dell'estrazione (carbone), olio di catrame alcalino, carbonati, trattati con calce ; Fenoli grezzi  
[Il prodotto ottenuto dal trattamento di estratto alcalino di olio di catrame di carbone con  $\text{CO}_2$  e  $\text{CaO}$ . Costituito prevalentemente da  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{Na}_2\text{CO}_3$  ed altre impurezze organiche ed inorganiche.]
- NL : extract-residuen (kool), teerolie alkalisch, gecarbonateerd, met ongebluste kalk behandeld ; Ruwe fenolen  
[Het produkt dat wordt verkregen door de behandeling van een alkalisch extract van koolteerolie met  $\text{CO}_2$  en  $\text{CaO}$ . Voornamelijk samengesteld uit  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{Na}_2\text{CO}_3$  en andere organische en anorganische onzuiverheden.]
- PT : resíduos de extracção (carvão), alcalinos de óleo de alcatrão, carbonatados, tratados com cal ; Fenóis brutos  
[O produto obtido pelo tratamento do extracto alcalino de óleo de alcatrão de carvão com  $\text{CO}_2$  e  $\text{CaO}$ . É constituído principalmente por  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{Na}_2\text{CO}_3$  e outras impurezas orgânicas e inorgânicas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 65996-85-2

EEC No 266-019-3

No 648-116-00-6

NOTA H

NOTA J

NOTA M

ES : **ácidos de alquitrán, hulla, crudos ; Fenol bruto**

[Producto de reacción obtenido por neutralización de un extracto alcalino del aceite del alquitrán de hulla con una solución ácida como el ácido sulfúrico acuoso o el dióxido de carbono gaseoso, para obtener los ácidos libres. Compuesto principalmente de ácidos de alquitrán como fenol, cresoles y xilenoles.]

DA : **tjæresyrer, stenkuls-, rå ; Råfenol**

[Reaktionsproduktet opnået ved at neutralisere stenkulstjæreolie alkalisk ekstrakt fra stenkulstjæreolie med en sur opløsning, såsom vandig svovlsyre, eller gasformig carbondioxid, for at udvinde de frie syrer. Sammensat primært af tjæresyrer såsom phenol, cresoler og xylenoler.]

DE : **Teersäuren, Kohle, roh ; Rohphenole**

[Reaktionsprodukt, erhalten durch Neutralisieren von alkalinem Kohlenteerölextrakt mit einer sauren Lösung, zum Beispiel wässriger Schwefelsäure oder gasförmigem Kohlendioxid, um die freien Säuren zu erhalten. Besteht in erster Linie aus Teersäuren wie Phenol, Kresolen und Xylenolen.]

EL : **οξέα πίσσας, άνθρακα; ακατέργαστα· Ακατέργαστες φαινόλες**

[Το προϊόν αντίδρασης που λαμβάνεται με εξουδετέρωση αλκαλικού εκχυλίσματος ελαίου λιθανθρακόπισσας με όξινο διάλυμα όπως υδατικό θειικό οξύ, ή αερίου διοξειδίου άνθρακος ώστε να ληφθούν τα ελεύθερα οξέα. Αποτελείται κυρίως από οξέα πίσσας όπως φαινόλη, κρεσόλες και ξυλενόλες.]

EN : **Tar acids, coal, crude ; Crude Phenols**

[The reaction product obtained by neutralizing coal tar oil alkaline extract with an acidic solution, such as aqueous sulfuric acid, or gaseous carbon dioxide, to obtain the free acids. Composed primarily of tar acids such as phenol, cresols, and xylenols.]

FR : **huiles acides de goudron de houille brutes ; Phénols bruts**

[Produit de réaction obtenu par neutralisation d'extrait alcalin d'huile de goudron de houille par une solution acide, telle que l'acide sulfurique aqueux ou le dioxyde de carbone gazeux, pour obtenir des acides libres. Se compose principalement d'huiles de goudron acides, telles que le phénol, les crésols et les xylénols.]

IT : **acidi di catrame, carbone, grezzi ; Fenoli grezzi**

[Il prodotto di reazione ottenuto neutralizzando l'estratto alcalino di olio di catrame di carbone con soluzione acida, ad es. acido solforico in soluzione acquosa, o anidride carbonica gassosa, al fine di ottenere gli acidi liberi. È composto principalmente da fenolo, cresoli e xilenoli.]

NL : **teerzuren, kool, ruw ; Ruwe fenolen**

[Het reactieproduct verkregen door het neutraliseren van een alkalisch extract van koolteerolie met een zure oplossing, zoals wateng zwavelzuur of gasvormig kooldioxide, om vrije zuren te verkrijgen. Voornamelijk samengesteld uit teerzuren, zoals fenolen, kresolen en xylenolen.]


PT : **ácidos do alcatrão, carvão, brutos ; Fenóis brutos**

[O produto da reacção obtido por neutralização do extracto alcalino de óleo de alcatrão de carvão com uma solução ácida, como ácido sulfúrico aquoso, ou dióxido de carbono gasoso, para obter os ácidos livres. É constituído principalmente por ácidos do alcatrão tais como fenol, cresóis, e xilenóis.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101316-86-3

EEC No 309-888-7

No 648-117-00-1

NOTA H

NOTA J

NOTA M

- ES: ácidos de alquitrán, lignito, crudos ; Fenol bruto  
[Extracto alcalino acidificado del destilado de alquitrán de lignito. Compuesto principalmente de fenol y homólogos del fenol.]
- DA: tærresyrer, brunkuls-, rå ; Råfenol  
[Et forsøret alkalisk ekstrakt af brunkulstjæredestillat. Sammensat primært af phenol og phenolhomologer.]
- DE: Teersäuren, Braunkohle, roh ; Rohphenole  
[Angesäuerter alkalischer Extrakt von Braunkohlenteerdestillat. Besteht in erster Linie aus Phenol und Phenolhomologen.]
- EL: Οξέα πίσσας, λιγνίτη ακατέργαστα· Ακατέργαστες φαινόλες  
[Οξυνισμένο αλκαλικό εκχύλισμα αποστάγματος πίσσας λιγνίτη. Αποτελείται κυρίως από φαινόλη και ομόλογα φαινόλης.]
- EN: Tar acids, brown-coal, crude ; Crude Phenols  
[An acidified alkaline extract of brown coal tar distillate. Composed primarily of phenol and phenol homologs.]
- FR: huiles de goudron de lignite acides, brutes ; Phénols bruts  
[Extrait alcalin acidifié de distillat de goudron de lignite. Se compose principalement de phénols et d'homologues du phénol.]
- IT: acidi di catrame, carbone bruno, grezzi ; Fenoli grezzi  
[Estratto alcalino acidificato di distillato di catrame di carbone bruno. Costituito principalmente da fenolo e omologhi del fenolo.]
- NL: teerzuren, bruinkool, ruw ; Ruwe fenolen  
[Een aangezuurd alkalisch extract van bruinkoolteerdestillaat. Voornamelijk samengesteld uit fenol en fenolhomologen.]
- PT: ácidos do alcatrão, lenhite, brutos ; Fenóis brutos  
[Um extracto alcalino acidificado de destilado de alcatrão de lenhite. É constituído principalmente por fenol e homólogos de fenol.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : S3-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92062-22-1

EEC No 295-536-7

No 648-118-00-7

NOTA H

NOTA J

NOTA M

- ES : ácidos de alquitrán, gasificación de lignito ; Fenol bruto  
[Combinación compleja de compuestos orgánicos obtenida de la gasificación de lignito. Compuesta principalmente de fenoles hidroxiaromáticos de  $C_{6-10}$  y sus homólogos.]
- DA : tjæresyrer, brunkulsforgasnings- ; Råfenol  
[En sammensat blanding af organiske forbindelser opnået fra brunkulsforgasning. Sammensat primært af  $C_{6-10}$  hydroxyaromatiske phenoler og deres homologer.]
- DE : Teersäuren, Braunkohlevergasung ; Rohphenole  
[Komplexe Kombination organischer Verbindungen, die man aus der Vergasung von Braunkohle erhält. Besteht in erster Linie aus  $C_{6-10}$ -Hydroxy-aromatischen Phenolen und ihren Homologen.]
- EL : οξέα πίσσας, εξαερίωσης λιγνίτη. Ακατέργαστες φαινόλες  
[Πολύπλοκος συνδυασμός οργανικών ενώσεων που λαμβάνεται από την εξαερίωση λιγνίτη. Αποτελείται πρωτίστως από υδροξύ αρωματικές φαινόλες με  $C_{6-10}$  και ομόλογά τους.]
- EN : Tar acids, brown-coal gasification ; Crude Phenols  
[A complex combination of organic compounds obtained from brown coal gasification. Composed primarily of  $C_{6-10}$  hydroxy aromatic phenols and their homologs.]
- FR : huiles de goudron acides, gazéification du lignite ; Phénols bruts  
[Combinaison complexe de composés organiques issue de la gazéification du lignite. Se compose principalement de phénols hydroxy-aromatiques en  $C_{6-10}$  en d'homologues.]
- IT : acidi di catrame, gasificazione del carbone bruno ; Fenoli grezzi  
[Combinazione complessa di composti organici ottenuti della gasificazione di carbone bruno. Costituita principalmente da fenoli idrossiaromatici  $C_{6-10}$  e loro omologhi.]
- NL : teerzuren, bruinkoolvergassing ; Ruwe fenolen  
[Een complexe verzameling organische verbindingen die wordt verkregen uit de bruinkoolvergassing. Voornamelijk samengesteld uit  $C_{6-10}$ -hydroxy-aromaat-fenolen en homologen daarvan.]
- PT : ácidos do alcatrão, da gaseificação de lenhite ; Fenóis brutos  
[Uma combinação complexa de compostos orgânicos obtida da gaseificação de lenhite. É constituída principalmente por fenóis em  $C_{6-10}$  e seus homólogos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 96690-55-0

EEC No 306-251-5

No 648-119-00-2

NOTA H

NOTA J


NOTA M

- ES : ácidos de alquitrán, residuos de destilación ; Fenoles destilados  
[Residuo de la destilación de fenol bruto de la hulla. Compuesto en su mayor parte de fenoles con un número de carbonos dentro del intervalo de  $C_6$  a  $C_{10}$  y con un punto de reblandecimiento de 60 °C a 80 °C.]
- DA : tæresyer, destillationsrester ; Fenoldestilleret  
[En rest fra destillationen af råphenol fra kul. Den består overvejende af phenoler,  $C_6$  til og med  $C_{10}$  med blødgøringspunkt fra 60 °C til 80 °C.]
- DE : Teersäuren, Destillationsrückstände ; Destillat-Phenole  
[Rückstand aus der Destillation von rohem Phenol aus Kohle. Besteht vorherrschend aus Phenolen mit Kohlenstoffzahlen im Bereich von  $C_6$  bis  $C_{10}$  mit einem Erweichungspunkt von 60 °C bis 80 °C.]
- EL : οξέων πίσσας, υπολείμματα απόσταξης ; Απόσταγμα φαινόλης  
[Υπόλειμμα από την απόσταξη ακατέργαστης φαινόλης από άνθρακα. Συνίσταται κυρίως από φαινόλες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_6$  ως και  $C_{10}$  με σημείο μαλακώματος από 60 °C ως 80 °C.]
- EN : Tar acids, distn. residues ; Distillate Phenols  
[A residue from the distillation of crude phenol from coal. It consists predominantly of phenols having carbon numbers in the range of  $C_6$  through  $C_{10}$  with a softening point of 60 °C to 80 °C (140 °F to 176 °F).]
- FR : huiles de goudron acides, résidus de distillation ; Phénols distillés  
[Résidu de la distillation de phénol brut à partir de charbon. Se compose principalement de phénols dont le nombre de carbones se situe dans la gamme  $C_6$ - $C_{10}$  et dont le point de ramollissement est compris entre 60 °C et 80 °C.]
- IT : acidi di catrame, residui della distillazione ; Fenoli distillati  
[Residuo della distillazione di fenolo grezzo da carbone. Costituito prevalentemente da fenoli con numero di atomi di carbonio nell'intervallo  $C_6$ - $C_{10}$  con un punto di rammollimento 60 °C-80 °C.]
- NL : teerzuren, destillatieresiduen ; Gedestilleerde fenolen  
[Het residu van de destillatie van ongezuiverde fenol uit kool. Bestaat voornamelijk uit fenolen, overwegend  $C_6$  tot en met  $C_{10}$ , met een verwekingstraject van 60 °C tot 80 °C.]
- PT : ácidos do alcatrão, resíduos da destilação ; Fenóis destilados  
[Um residuo da destilação de fenol bruto do carvão. É constituído predominantemente por fenóis com números de átomos de carbono na gama de  $C_6$  até  $C_{10}$  com um ponto de amolecimento de 60 °C a 80 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 84989-04-8

EEC No 284-892-9

No 648-120-00-8

NOTA H

NOTA J

NOTA M

- ES: ácidos de alquitrán, fracción de metilfenol; Fenoles destilados  
[Fracción de ácidos de alquitrán, rica en 3-y 4-metilfenol, recuperada por destilación a baja temperatura de ácidos crudos de alquitrán de hulla.]
- DA: tjæresyrer, methylphenolfraktion; Fenoldestilleret  
[Fraktionen af tjæresyre, rig på 3- og 4-methylphenol, genvundet ved destillation af råtjæresyre fra lavtemperatursstenkultstjære.]
- DE: Teersäuren, Methylphenol-Fraktion; Destillat-Phenole  
[Die an 3- und 4-Methylphenol-reiche Teersäuren-Fraktion, die durch Destillation von Niedrigtemperatur-Kohlenteer-rohen Teersäuren gewonnen wird.]
- EL: οξέων πίσσας, κλάσμα μεθυλοφαινόλης· Απόσταγμα φαινόλης  
[Το κλάσμα των οξέων πίσσας, πλούσιο σε 3- και 4-μεθυλοφαινόλη, που ανακτάται με απόσταξη χαμηλής θερμοκρασίας, ακατέργαστων οξέων πίσσας λιθανθρακόπισσας.]
- EN: Tar acids, methylphenol fraction.; Distillate Phenols  
[The fraction of tar acid rich in 3- and 4-methylphenol, recovered by distillation of low-temperature coal tar crude tar acids.]
- FR: huiles de goudron acides, fraction méthylphénol; Phénols distillés  
[Fraction des huiles de goudron acides riche en méthyl-3 phénol et en méthyl-4 phénol, récupérée par distillation des huiles acides brutes de goudron de houille à basse température.]
- IT: acidi di catrame, frazione metilfenolo; Fenoli distillati  
[La frazione di acidi di catrame, ricca di 3- e 4-metilfenolo, recuperata dalla distillazione di acidi di catrame grezzi di catrame di carbone a bassa temperatura.]
- NL: teerzuren, methylphenolfractie; Gedestilleerde fenolen  
[De fractie van teerzuur rijk aan 3- en 4-methylfenol, verkregen door destillatie van lage temperatuur koolteer ongezuiverde teerzuren.]
- PT: ácidos do alcatrão, fracção de metilfenóis; Fenóis destilados  
[A fracção dos ácidos do alcatrão, rica em 3- e 4-metilfenol, recuperada por destilação dos ácidos brutos do alcatrão de carvão de temperatura baixa.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 84989-05-9

EEC No 284-893-4

No 648-121-00-3

NOTA H

NOTA J

NOTA M

- ES : ácidos de alquitrán, fracción de polialquilfenol ; Fenoles destilados  
[Fracción de ácidos de alquitrán recuperada por destilación a baja temperatura de ácidos crudos de alquitrán de hulla, con un intervalo de ebullición aproximado de 225 °C a 320 °C. Compuesta principalmente de polialquilfenoles.]
- DA : tjæresyrer, polyalkylphenolfraction ; Fenoldestilleret  
[Fraktionen af tjæresyrer, genvundet ved destillation af rå tjæresyrer fra lavtemperatursstenkultjære, med kogesinterval omtrent fra 225 °C til 320 °C. Sammensat primært af polyalkylphenoler.]
- DE : Teersäuren, Polyalkylphenol-Fraktion ; Destillat-Phenole  
[Die Teersäuren-Fraktion, die durch Destillation von Niedrigtemperatur-Kohlenteer-rohen Teersäuren mit einem Siedebereich von etwa 225 °C bis 320 °C gewonnen wird. Besteht in erster Linie aus Polyalkylphenolen.]
- EL : οξέων πίσσας κλάσμα πολυαλκυλοφαινόλης; Απόσταγμα φαινόλης  
[Το κλάσμα των οξέων πίσσας, που ανακτάται με απόσταξη χαμηλής θερμοκρασίας οξέων πίσσας λιθανθρακόπισσας με περιοχή βρασμού από 225 °C έως 320 °C περίπου. Συνίσταται πρωτίστως από πολυαλκυλοφαινόλες.]
- EN : Tar acids, polyalkylphenol fraction ; Distillate Phenols  
[The fraction of tar acids, recovered by distillation of low-temperature coal tar crude tar acids, having an approximate boiling range of 225 °C to 320 °C (437 °F to 608 °F). Composed primarily of polyalkylphenols.]
- FR : huiles de goudron acides, fraction polyalkylphénol ; Phénols distillés  
[Fraction des huiles de goudron acides récupérée par distillation des huiles acides brutes de goudron de houille à basse température, et dont le point d'ébullition est compris approximativement entre 225 °C et 320 °C. Se compose principalement de polyalkyl-phénols.]
- IT : acidi di catrame, frazione polialchilfenolo ; Fenoli distillati  
[La frazione di acidi di catrame, ricca di 3- e 4-etilfenolo, recuperata dalla distillazione a bassa temperatura di acidi di catrame grezzi, con punto di ebollizione nell'intervallo 225 °C-320 °C ca. Costituita principalmente da polialchilfenoli.]
- NL : teerzuren, polyalkylfenolfractie ; Gedestilleerde fenolen  
[De fractie van teerzuren, verkregen door destillatie van lage temperatuur koolteer ongezuiverde teerzuren, met een kooktraject van ongeveer 225 °C tot 320 °C. Bestaat voornamelijk uit polyalkylfenolen.]
- PT : ácidos do alcatrão, fracção de polialquilfenóis ; Fenóis destilados  
[A fracção dos ácidos de alcatrão, recuperada por destilação dos ácidos brutos de alcatrão de carvão de temperatura baixa, destilando no intervalo de aproximadamente 225 °C a 320 °C. É constituída principalmente por polialquilfenóis.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 84989-06-0

EEC No 284-895-5

No 648-122-00-9

NOTA H

NOTA J

NOTA M

- ES : ácidos de alquitrán, fracción de xilenol ; Fenoles destilados  
[Fracción de ácidos de alquitrán, rica, en 2,4- y 2,5-dimetilfenol, recuperada por destilación a baja temperatura de ácidos crudos de alquitrán de hulla.]
- DA : tjæresyrer, xylenolfraction ; Fenoldestilleret  
[Fraktionen af tjæresyrer, rig på 2,4- og 2,5-dimethylphenol, genvundet ved destillation af rå tjæresyrer fra lavtemperatursstenkuls-tjære.]
- DE : Teersäuren, Xylenol-Fraktion ; Destillat-Phenole  
[Die an 2,4- und 2,5-Dimethylphenol-reiche Teersäuren-Fraktion, die durch Destillation von Niedrigtemperatur-Kohlenteer-rohen Teersäuren gewonnen wird.]
- EL : οξέων πίσσας, κλάσμα ξυλενόλης· Απόσταγμα φαινόλης  
[Το κλάσμα των οξέων πίσσας, πλούσιο σε 2,4- και 2,5-διμεθυλοφαινόλη, που ανακτάται με απόσταξη χαμηλής θερμοκρασίας ακατέργαστων οξέων πίσσας λιθανθρακόπισσας.]
- EN : Tar acids, xylene fraction ; Distillate Phenols  
[The fraction of tar acids, rich in 2,4- and 2,5-dimethylphenol, recovered by distillation of low-temperature coal tar crude tar acids.]
- FR : huiles de goudron acides, fraction xylénol ; Phénols distillés  
[Fraction des huiles de goudron acides riche en diméthyl-2,4 phénol et en diméthyl-2,5 phénol, récupérée par distillation des huiles acides brutes de goudron de houille à basse température.]
- IT : acidi di catrame, frazione xilenolo ; Fenoli distillati  
[La frazione di acidi di catrame, ricca di 2,4- e 2,5-dimetilfenolo, recuperata dalla distillazione di acidi di catrame grezzi di catrame di carbone a bassa temperatura.]
- NL : teerzuren, xylenolfraction ; Gedestilleerde fenolen  
[De fractie van teerzuren, rijk aan 2,4- en 2,5-dimethylfenol, verkregen door destillatie van ongezuiverde teerzuren uit bij lage temperatuur verkregen koolteer.]
- PT : ácidos de alcatrão, fracção de xilenóis ; Fenóis destilados  
[A fracção de ácidos do alcatrão, rica em 2,4- e 2,5-dimetilfenol, recuperada por destilação dos ácidos brutos do alcatrão de carvão de temperatura baixa.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R - 45
	S : S3-45

*Limites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 84989-03-7

EEC No 284-891-3

No 648-123-00-4

NOTA H

NOTA J

NOTA M

- ES : ácidos de alquitrán, fracción de etilfenol ; Fenoles destilados  
[Fracción de ácidos del alquitrán, rica en 3- y 4-etilfenol, recuperada por destilación a baja temperatura de ácidos crudos del alquitrán de hulla.]
- DA : tjæresyrer, ethylphenolfraction ; Fenoldestilleret  
[Fraktionen af tjæresyrer, rig på 3- og 4-ethylphenol, genvundet ved destillation af råtjæresyrer fra lavtemperatursstenkultjære.]
- DE : Teersäuren, Ethylphenol-Fraktion ; Destillat-Phenole  
[Die an 3- und 4-Ethylphenol-reiche Teersäuren-Fraktion, die durch Destillation von Niedrigtemperatur-Kohlenteer-rohen Teersäuren gewonnen wird.]
- EL : Οξέων πίσσας, κλάσμα αιθυλοφαινόλης; Απόσταγμα φαινόλης  
[Το κλάσμα των οξέων πίσσας, πλούσιο σε 3- και 4-αιθυλοφαινόλη, που ανακτάται με απόσταξη χαμηλής θερμοκρασίας, ακατέργαστων οξέων πίσσας λιθανθρακόπισσας.]
- EN : Tar acids, ethylphenol fraction ; Distillate Phenols  
[The fraction of tar acids, rich in 3- and 4-ethylphenol, recovered by distillation of low-temperature coal tar crude tar acids.]
- FR : huiles de goudron acides, fraction éthylphénol ; Phénols distillés  
[Fraction des huiles de goudron acides riche en éthyl-3 phénol et en éthyl-4 phénol, récupérée par distillation des huiles acides brutes de goudron de houille à basse température.]
- IT : acidi di catrame, frazione etilfenolo ; Fenoli distillati  
[La frazione di acidi di catrame, ricca di 3- e 4- etilfenolo, ricuperata dalla distillazione di acidi di catrame grezzi di catrame di carbone a bassa temperatura.]
- NL : teerzuren, ethylfenolfractie ; Gedestilleerde fenolen  
[De fractie van teerzuren, rijk aan 3- en 4-ethylfenol, verkregen door destillatie van lage-temperatuur koolteer ongezuiverde teerzuren.]
- PT : ácidos do alcatrão, fracção de etilfenóis ; Fenóis destilados  
[A fracção de ácidos do alcatrão, rica em 3- e 4-etilfenol, recuperada por destilação de ácidos brutos de carvão de temperatura baixa.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 84989-07-1

EEC No 284-896-0

No 648-124-00-X

NOTA R

NOTA ;

NOTA M

- ES : ácidos de alquitrán, fracción de 3,5-xilenol ; Fenoles destilados  
[Fracción de ácidos de alquitrán, rica en 3,5-dimetilfenol, recuperada por destilación a baja temperatura de ácidos de alquitrán de hulla.]
- DA : tjæresyrer, 3,5-xylenolfraktion ; Fenoldestilleret  
[Fraktionen af tjæresyrer, rig på 3,5-dimethylphenol, genvundet ved destillation af lavtemperatursstenkultjæresyrer.]
- DE : Teersäuren, 3,5-Xylenol-Fraktion ; Destillat-Phenole  
[Die an 3,5-Dimethylphenol-reiche Teersäuren-Fraktion, die durch Destillation von Niedrigtemperatur-Kohlenteer-rohen Teersäuren gewonnen wird.]
- EL : οξέων πίσσας, κλάσμα 3,5-ξυλενόλης· Απόσταγμα φαινόλης  
[Το κλάσμα των οξέων πίσσας, πλούσιο σε 3,5-διμεθυλοφαινόλη, που ανακτάται με απόσταξη χαμηλής θερμοκρασίας οξέων λιθανθρακόπισσας.]
- EN : Tar acids, 3,5-xyleneol fraction ; Distillate Phenols  
[The fraction of tar acids, rich in 3,5-dimethylphenol, recovered by distillation of low-temperature coal tar acids.]
- FR : huiles de goudron acides, fraction xylénol-3,5 ; Phénols distillés  
[Fraction des huiles de goudron acides riche en diméthyl-3,5 phénol, récupérée par distillation des huiles acides de goudron de houille à basse température.]
- IT : acidi di catrame, frazione 3,5-xilenolo ; Fenoli distillati  
[La frazione di acidi di catrame, ricca di 3,5-dimetilfenolo, recuperata dalla distillazione di acidi di catrame di carbone a bassa temperatura.]
- NL : teerzuren, 3,5-xylenolfractie ; Gedestilleerde fenolen  
[De fractie van teerzuren, rijk aan 3,5-dimethylfenol, verkregen door destillatie van bij lage temperatuur verkregen koolteerzuren.]
- PT : ácidos do alcatrão, fracção de 3,5-xilenol ; Fenóis destilados  
[A fracção de ácidos do alcatrão, rica em 3,5-dimetilfenol, recuperada por destilação dos ácidos do alcatrão de carvão de temperatura baixa.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-23-6

EEC No 270-713-1

No 648-125-00-5

NOTA F

NOTA

NOTA M

ES: ácidos de alquitrán, residuos, destilados, fracción primera; Fenoles destilados  
[Residuo de la destilación en el intervalo de 235 °C a 355 °C de aceite carbólico ligero.]

DA: tjæresyrer, rester, destillater, første fraktion; Fenoldestillereet  
[Resten fra destillationen i området fra 235 °C til 355 °C af let karbololie.]

DE: Teersäuren, Rückstände, Destillate, erster Schnitt; Destillat-Phenole  
[Rückstand aus der Destillation von leichtem Carbolöl im Bereich von 235 °C bis 355 °C.]

EL: οξέων πίσσας, υπολειμμάτων, αποσταγμάτων, πρώτο κλάσμα: Απόσταγμα φαινόλης  
[Το υπόλειμμα από την απόσταξη ελαφρού καρβολικού ελαίου στην περιοχή από 235 °C ως 355 °C.]

EN: Tar acids, residues, distillates, first-cut; Distillate Phenols  
[The residue from the distillation in the range of 235 °C to 355 °C (481 °F to 697 °F) of light carbolic oil.]

FR: huiles de goudron acides, résidus de distillation, fraction légère; Phénols distillés  
[Résidu de la distillation entre 235 °C et 355 °C d'huile carbolique légère.]

IT: acidi di catrame, distillati, taglio primario; Fenoli distillati  
[Il residuo da distillazione di olio carbolic leggero nell'intervallo 235 °C - 355 °C.]

NL: teerzuren, residuen, destillaten, voorloop; Gedestilleerde fenolen  
[Het residu van de destillatie van lichte carbolische olie in het traject van 235 °C tot 355 °C.]

PT: ácidos do alcatrão, resíduos, destilados, primeiro corte; Fenóis destilados  
[O residuo de destilação de carboleína leve no intervalo de 235 °C a 355 °C.]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificaziune, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 68555-24-8

EEC No 271-418-0

No 648-126-00-0

NOTA H

NOTA J


NOTA M

- ES ácidos de alquitrán, cresílico, residuos ; Fenoles destilados  
[Residuo de ácidos de alquitrán de hulla crudos después de la separación de fenol, cresoles, xilenoles y algunos fenoles de elevado punto de ebullición. Sólido negro con un punto de fusión aproximado de 80 °C. Compuesto principalmente de polialquilfenoles, gomas de resina y sales inorgánicas.]
- DA tjæresyrer, cresylske, rester ; Fenoldestilleret  
[Resten fra rå stenkulstjæresyrer efter fjernelse af phenol, cresoler, xyleneoler og alle højerekogende phenoler. Et sort, fast stof med et smeltepunkt på omtrent 80 °C. Sammensat primært af polyalkylphenoler, harpiksgummier og uorganiske salte.]
- DE Teersäuren, cresylisch, Rückstände ; Destillat-Phenole  
[Rückstand aus rohen Kohlentjäersäuren nach Entfernen von Phenol, Kresolen, Xylenolen und irgendwelchen höher siedenden Phenolen. Schwarzer Feststoff mit einem Schmelzpunkt ungefähr über 80 °C. Besteht in erster Linie aus Polyalkylphenolen, Harzgummis und anorganischen Salzen.]
- EL οξέων πίσσας, κρεζυλικών, υπολείμματα· Απόσταγμα φαινόλης  
[Το υπόλειμμα από τα οξέα ακάθαρτης λιθανθρακόπισσας μετά την απομάκρυνση φαινόλης, κρεζολών, ξυλενολών και οποιονδήποτε φαινόλων με υψηλότερο σημείο βρασμού. Μαύρο στερεό με σημείο τήξης πάνω από 80 °C περίπου. Αποτελείται κυρίως από πολυαλκυλοφαινόλες, κόμματα ρητινών και ανόργανα άλατα.]
- EN Tar acids, cresylic, residues ; Distillate Phenols  
[The residue from crude coal tar acids after removal of phenol, cresols, xylenols and any higher boiling phenols. A black solid with a melting point approximately 80 °C (176 °F). Composed primarily of polyalkylphenols, resin gums, and inorganic salts.]
- FR huiles de goudron, acides crésyliques, résidus ; Phénols distillés  
[Résidu obtenu à partir des huiles acides brutes de goudron de houille après extraction du phénol, des crésols, des xylénols et des phénols à haut point d'ébullition. Solide de couleur noire dont le point de fusion se situe approximativement au-dessus de 80 °C. Se compose essentiellement de polyalkylphénols, de gomme-résines et de sels minéraux.]
- IT acidi di catrame, cresilici, residui ; Fenoli distillati  
[Residuo di acidi di catrame di carbone grezzi dopo separazione di fenoli, cresoli, xilenoli e alcuni fenoli altobollenti. Solido nero con punto di fusione di 80 °C ca. È composto principalmente da polialchilfenoli, gomme resinose e sali inorganici.]
- NL teerzuren, cresylhoudend, residuen ; Gedestilleerde fenolen  
[Het residu van teerzuren, afkomstig uit ruwe kool, na verwijdering van fenol, kresolen, xylenolen en andere, bij een hogere temperatuur kokende, fenolen. Een zwarte vaste stof, met een smeltpunt van ongeveer 80 °C. Voornamelijk samengesteld uit polyalkylfenolen, harsgommen en anorganische zouten.]
- PT ácidos do alcatrão, cresílicos, resíduos ; Fenóis destilados  
[O residuo dos ácidos do alcatrão de carvão bruto após remoção de fenol, cresóis, xilenóis e quaisquer outros fenóis de ponto de ebulição mais elevado. Um sólido negro com ponto de fusão de aproximadamente 80 °C. É constituído principalmente por polialquilfenóis, gomas resínicas, e sais inorgânicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 91079-47-9

EEC No 293-435-2

No 648-127-00-6

NOTA H

NOTA J

NOTA M

ES: fenoles, C<sub>9-11</sub>; Fenoles destiladosDA: phenoler, C<sub>9-11</sub>; FenoldestilleretDE: Phenole, C<sub>9-11</sub>; Destillat-PhenoleEL: Φαινόλες, C<sub>9-11</sub>; Απόσταγμα φαινόληςEN: Phenols, C<sub>9-11</sub>; Distillate PhenolsFR: phénols en C<sub>9-11</sub>; Phénols distillésIT: fenoli, C<sub>9-11</sub>; Fenoli distillatiNL: fenolen, C<sub>9-11</sub>; Gedestilleerde fenolenPT: fenóis, C<sub>9-11</sub>; Fenóis destilados*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rorulagem*

T



R: 45

S: 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 92062-26-5

EEC No 295-540-9

No 648-128-00-1

NOTA H

NOTA J

NOTA M

- ES : ácidos de alquitrán, cresílicos ; Fenoles destilados  
[Combinación compleja de compuestos orgánicos obtenida del lignito y con un intervalo de ebullición aproximado de 200 °C a 230 °C. Contiene principalmente fenoles y bases de piridina.]
- DA : tjæresyrer, cresylske ; Fenoldestilleret  
[En sammensat blanding af organiske forbindelser, opnået fra brunkul, med koginterval omtrent fra 200 °C til 230 °C. Den består hovedsageligt af phenoler og pyridinbaser.]
- DE : Teersäuren, kresylisch ; Destillat-Phenole  
[Komplexe Kombination organischer Verbindungen, die man aus Braunkohle erhält und die im Bereich von etwa 200 °C bis 230 °C siedet. Enthält hauptsächlich Phenole und Pyridinbasen.]
- EL : οξεία πίσσας, κρεζυλικά· Απόσταγμα φαινόλης  
[Πολύπλοκος συνδυασμός οργανικών ενώσεων που λαμβάνεται από λιγνίτη και βράζει στην περιοχή από 200 °C ως 230 °C περίπου. Περιέχει κυρίως φαινόλες και πυριδινικές βάσεις.]
- EN : Tar acids, cresylic ; Distillate Phenols  
[A complex combination of organic compounds obtained from brown coal and boiling in the range of approximately 200 °C to 230 °C (392 °F to 446 °F). It contains chiefly phenols and pyridine bases.]
- FR : huiles de goudron acides, crésyliques ; Phénols distillés  
[Combinaison complexe de composés organiques tirée du lignite et dont le point d'ébullition est compris approximativement entre 200 °C et 230 °C. Se compose principalement de phénols et de bases pyridiniques.]
- IT : acidi di catrame, cresilici ; Fenoli distillati  
[Combinazione complessa di composti organici ottenuta da carbone bruno e con punto di ebollizione nell'intervallo 200 °C-230 °C ca. Costituita principalmente da fenoli e basi piridiniche.]
- NL : teerzuren, cresylhoudend ; Gedestilleerde fenolen  
[Een complexe verzameling organische verbindingen die wordt verkregen uit bruinkool, met een kooktraject van ongeveer 200 °C tot 230 °C. Bestaat voornamelijk uit fenolen en pyridinebasen.]
- PT : ácidos do alcatrão, cresílicos ; Fenóis destilados  
[Uma combinação complexa de compostos orgânicos obtida a partir de lenhite e que destila no intervalo de aproximadamente 200 °C a 230 °C. É constituída sobretudo por fenóis e bases piridínicas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 94114-29-1

EEC No 302-662-9

No 648-129-00-7

NOTA H

NOTA J

NOTA M

- ES: ácidos de alquitrán, lignito, fracción de C<sub>2</sub>-alquilfenol; Fenoles destilados  
[Destilado de la acidificación del destilado alcalino de alquitrán de lignito lavado con un intervalo de ebullición aproximado de 200 °C a 230 °C. Compuesto principalmente de *m*- y *p*-etilfenol así como cresoles y xilenoles.]
- DA: tjæresyrer, brunkuls-, C<sub>2</sub>-alkylphenolfraction; Fenoldestilleret  
[Destillatet fra syrebehandlingen af alkalisk vasket brunkulstjæredestillat, med kogesinterval omtrent fra 200 °C til 230 °C. Sammensat primært af *m*- og *p*-ethylphenol såvel som cresoler og xyleneoler.]
- DE: Teersäuren, Braunkohle, C<sub>2</sub>-Alkylphenol-Fraktion; Destillat- Phenole  
[Destillat aus der Ansäuerung von alkalisch gewaschenem Braunkohlenteerdestillat, das im Bereich von etwa 200 °C bis 230 °C siedet. Besteht in erster Linie aus *m*- und *p*-Ethylphenol wie auch aus Kresolen und Xylenolen.]
- EL: οξεία πίσσας λιγνίτη, κλάσμα C<sub>2</sub>-αλκυλοφαινόλης; Αποστάγμα φαινόλης  
[Το απόσταγμα από την οξύνιση κλυμένου με άλκαλι με άλκαλι αποστάγματος πίσσας λιγνίτη, που βράζει στην περιοχή από 200 °C ως 230 °C περίπου. Αποτελείται πρωτίστως από *m* και *p*-αιθυλοφαινόλη καθώς και κρεζόλες και ξυλενόλες.]
- EN: Tar acids, brown-coal, C<sub>2</sub>-alkylphenol fraction; Distillate Phenols  
[The distillate from the acidification of alkaline washed lignite tar distillate boiling in the range of approximately 200 °C to 230 °C (392 °F to 446 °F). Composed primarily of *m*- and *p*-ethylphenol as well as cresols and xylenols.]
- FR: huiles de goudron acides, lignite, fraction alkyl en C<sub>2</sub> phénol; Phénols distillés  
[Distillat issu de l'acidification du distillat de goudron de lignite lavé à la soude dont le point d'ébullition est approximativement compris entre 200 °C et 230 °C. Se compose principalement de *m*- et de *p*-éthylphénol, de crésols et de xylenols.]
- IT: acidi di catrame, carbone bruno, frazione C<sub>2</sub>-alchilfenolo; Fenoli distillati  
[Il distillato dall'acidificazione di distillato di catrame di lignite lavato con alcali con un intervallo di ebollizione 200 °C-230 °C ca. Costituito principalmente da *m*- e *p*-etilfenolo come pure cresoli e xilenoli.]
- NL: teerzuren, bruinkool, C<sub>2</sub>-alkylfenolfraction; Gedestilleerde fenolen  
[Het destillaat van de verzuring van met base gewassen bruinkoolteerdestillaat met een kooktraject van ongeveer 200 °C tot 230 °C. Bestaat voornamelijk uit *m*- en *p*-ethylfenol met tevens kresolen en xyleneolen.]
- PT: ácidos do alcatrão, lenhite, fracção de C<sub>2</sub>-alquilfenóis; Fenóis destilados  
[O destilado da acidificação de destilado de alcatrão de lenhite lavado com álcali que destila no intervalo de aproximadamente 200 °C a 230 °C. É constituído principalmente por *m*- e *p*-etilfenol bem como por cresóis e xilenóis.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45 S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90641-00-2

EEC No 292-623-1

No 648-130-00-2

NOTA H

NOTA J


NOTA M

- ES : aceites del extracto (hulla), aceites de naftaleno ; Extracto ácido  
[Extracto acuoso producido por un lavado ácido de aceite de naftaleno lavado con base. Compuesto principalmente de sales ácidas de diversas bases nitrogenadas aromáticas incluyendo pindina, quinolina y sus alquil derivados.]
- DA : ekstraktionsolier (stenkul), naphthalenolier ; Syreekstrakt  
[Det vandige ekstrakt fremstillet ved en sur vask af alkalivasket naphthalenolie. Sammensat primært af syresalte af forskellige aromatiske nitrogenbaser, inklusive pyridin, quinolin og deres alkylderivater.]
- DE : Extraktöle (Kohle), Naphthalinöle ; Säureextrakt  
[Wässriger Extrakt, den man durch saure Wäsche aus alkalisch gewaschenem Naphthalinöl erhält. Besteht in erster Linie aus sauren Salzen verschiedener aromatischer Stickstoffbasen einschließlich Pyridin, Chinolin und ihren Alkylderivaten.]
- EL : ελαίων εκχύλισματος (άνθρακα), έλαια ναφθαλίνης ; Όξινο εκχύλισμα  
[Το υδατικό εκχύλισμα που παράγεται με όξινη έκπλυση ελαίου ναφθαλίνης το οποίο έχει εκπλυθεί με άλκαλι. Αποτελείται πρωτίστως από όξινα άλατα διαφόρων αρωματικών αζωτούχων βάσεων συμπεριλαμβανομένων της πυριδίνης, κινολίνης και αλκυλο παραγώγων τους.]
- EN : Extract oils (coal), naphthalene oils ; Acid Extract  
[The aqueous extract produced by an acidic wash of alkali-washed naphthalene oil. Composed primarily of acid salts of various aromatic nitrogen bases including pyridine, quinoline and their alkyl derivatives.]
- FR : huiles d'extrait (charbon), huiles de naphthalène ; Extrait acide  
[Extrait aqueux produit par un lavage acide d'huile de naphthalène lavée aux alcalis. Se compose principalement des sels acides de différentes bases aromatiques azotées telles que la pyridine, la quinoline et leurs dérivés alkylés.]
- IT : olii di estrazione (carbone), olii naftalenici ; Estratto acido  
[Estratto acquoso prodotto mediante lavaggio acido di olio naftalenico lavato con alcali. Costituito prevalentemente da sali acidi di varie basi azotate aromatiche incluse piridina, chinolina e loro derivati alchilici.]
- NL : extract-bliën (kool, naftaleenoliën ; Zuur extract  
[Het waterige extract dat wordt gevormd door een zure spoeling van alkalisch gewassen naftaleenolie. Bestaat voornamelijk uit zure zouten van meerdere aromatische stikstofbasen met inbegrip van pyridine, chinoline en alkylderivaten daarvan.]
- PT : óleos de extracção (carvão), óleos de naftaleno ; Extractos ácidos  
[O extracto aquoso produzido por lavagem ácida de óleo de naftaleno lavado com álcali. É constituído principalmente por sais ácidos de várias bases azotadas aromáticas incluindo piridina, quinolina e seus derivados alquilo.]

*Classificacão, Klassificering, Einstufung, Ταξινόμηση, Classification, Clasificación, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 68513-87-1

EEC No 271-020-7

No 648-131-00-8

NOTA H

NOTA J

NOTA M

ES: bases de alquitrán, derivados de quinolina ; Bases destiladas

DA: tjære, quinolinderivater ; Basedestillater

DE: Teergrundstoffe, Chinolinderivate ; Destillat-Basen

EL: πίσσας βάσεις, κινολίνης παράγωγα· Βάσεις αποστάγματος

EN: Tar bases, quinoline derivs. ; Distillate Bases

FR: bases de goudron, dérivés quinoléiques ; Bases distillées

IT: basi di catrame, derivati chinolinici ; Basi distillate

NL: teerbasen, chinolinederivaten ; Gedestilleerde teerbasen

PT: bases do alcatrão, derivados de quinolina ; Bases destiladas

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 70321-67-4

EEC No 274-560-1

No 648-132-00-3

NOTA H

NOTA J

NOTA M

ES : bases de alquitrán, hulla, fracción de derivados de quinolina ; Bases destiladas

DA : tjærebaser, stenkul-, quinolinderivatfraktion ; Basedestillater

DE : Teerbaser, Kohle-, Chinolinderivatfraktion ; Destillat-Basen

EL : βάσεις λιθανθρακόπισσας, κλάσμα παραγώγων, κινολίνης· Βάσεις αποστάγματος

EN : Tar bases, coal, quinoline derivs. fraction ; Distillate Bases

FR : bases de goudron de houille, fraction dérivés quinoléiques ; Bases distillées

IT : basi di catrame, carbone, frazione derivati della chinolina ; Basi distillate

NL : teerbaser, kolen, fractie van chinolinederivaten ; Gedestilleerde teerbaseren

PT : bases do alcatrão, carvão, fracção de derivados de quinolina ; Bases destiladas

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92062-29-8

EEC No 295-544-0

No 648-133-00-9

NOTA H

NOTA J

NOTA M

- ES : bases de alquitrán, hulla, residuos de destilación ; Bases destiladas  
[Residuo de destilación que queda después de la destilación de las fracciones de alquitrán que contienen base extraída con ácido neutralizadas, obtenidas por la destilación de alquitranes de hulla. Contiene principalmente anilina, colidinas, quinolina y derivados de quinolina y toluidinas.]
- DA : tjærebaser, stenkuls-, destillationsrester ; Basedestillater  
[Den tilbageblevende destillationsrest efter destillationen af den neutraliserede, syreekstraherede, baseholdige tjærefraktion, opnået ved destillationen af stenkulstjærer. Den indeholder hovedsageligt anilin, collidiner, quinolinderivater og toluidiner.]
- DE : Teerbasen, Kohle-, Destillationsrückstände ; Destillat-Basen  
[Destillationsrückstand, der nach der Destillation der neutralisierten, durch Säure extrahierten, Basis-enthaltenden, Teer-Fractionen aus der Destillation von Kohlenteeren erhalten wird. Enthält hauptsächlich Anilin, Kollidine, Chinolin und Chinolinderivate und Toluidine.]
- EL : βάσεων πίσσας, άνθρακα υπολείμματα απόσταξης· Βάσεις αποστάγματος  
[Το υπόλειμμα απόσταξης που παραμένει μετά την απόσταξη των εξουδετερωμένων, εκχυλισμένων με οξύ κλασμάτων πίσσας τα οποία περιέχουν βάσεις και που λαμβάνονται με την απόσταξη λιθανθρακοπισσών. Περιέχει κυρίως ανιλίνη, κολλιδίνες, κινολίνη και παράγωγα κινολίνης, και τουλουιδίνες.]
- EN : Tar bases, coal, distn. residues ; Distillate Bases  
[The distillation residue remaining after the distillation of the neutralized, acid-extracted base-containing tar fractions obtained by the distillation of coal tars. It contains chiefly aniline, collidines, quinoline and quinoline derivatives and toluidines.]
- FR : bases de goudron de houille, résidus de distillation ; Bases distillées  
[Résidu de distillation restant après distillation de fractions de goudron contenant des bases obtenues par distillation de goudrons de houille, et soumises à une extraction acide et neutralisées. Contient principalement de l'aniline, des collidines, des toluidines, de la quinoléine et des dérivés quinoliniques.]
- IT : basi di catrame, carbone, residui della distillazione ; Basi distillate  
[Il residuo della distillazione rimanente dopo la distillazione delle frazioni di catrame, neutralizzate, estratte con acido, contenenti basi, ottenute dalla distillazione di catrami di carbone. Contiene principalmente anilina, collidine, chinolina e suoi derivati e toluidine.]
- NL : teerbasen, kolen, destillatierresiduen ; Gedestilleerde teerbasen  
[Het destillatierresidu dat resteert na de destillatie van de geneutraliseerde zuurgeëxtraheerde basebevattende teerfracties die worden verkregen door de destillatie van koolteren. Bevat voornamelijk aniline, collidinen, chinoline, chinolinederivaten en toluidinen.]
- PT : bases do alcatrão, resíduos da destilação ; Bases destiladas  
[O resíduo da destilação remanescente após a destilação de fracções de alcatrão contendo bases extraídas com ácido e neutralizadas obtidas a partir da destilação de alcatrões de carvão. É constituído sobretudo por anilina, colidinas, quinolina e derivados de quinolina e toluidinas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc.-Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 100801-63-6

EEC No 309-745-9

No 648-134-00-4

NOTA H

NOTA J

NOTA M

- ES: aceites hidrocarbonados, aromáticos, mezclados con polietileno y polipropileno, pirolizados, fracción ligera de aceite; Productos de tratamiento térmico  
[Aceite obtenido del tratamiento térmico de una mezcla de polietileno/polipropileno con brea de alquitrán de hulla o aceites aromáticos. Compuesto en su mayor parte de benceno y sus homólogos con un intervalo de ebullición aproximado de 70 °C a 120 °C.]
- DA: carbonhydridolier, aromatiske, blandet med polyethylen og polypropylen, pyrolyserede, let oliefraktion; Varmebehandlede produkter  
[Olien opnået ved varmebehandlingen af en polyethylen/polypropylenblanding med kultjærebeg eller aromatiske olier. Den består overvejende af benzen og dens homologer, med kogesinterval omtrent fra 70 °C til 120 °C.]
- DE: Kohlenwasserstofföle, aromatisch, gemischt mit Polyethylen und Polypropylen, pyrolysiert, Leichtöl-Fraktion; Wärmebehandlungsprodukte  
[Öl, das man aus der Wärmebehandlung eines Gemisches von Polyethylen/Polypropylen mit Kohleenteerpech oder aromatischen Ölen erhält. Besteht vorwiegend aus Benzol und seinen Homologen und siedet im Bereich von etwa 70 °C bis 120 °C.]
- EL: υδρογονανθράκων έλαια, αρωματικά, αναμειγμένα με πολυαιθυλένιο και πολυπροπυλένιο, πυρολυμένα, κλάσμα ελαφρού ελαίου. Προϊόντα θερμικής επεξεργασίας  
[Το έλαιο που λαμβάνεται από τη θερμική κατεργασία μείγματος πολυαιθυλενίου/πολυπροπυλενίου με πίσσα λιθανθρακόπισσας ή αρωματικά έλαια. Συνίσταται κυρίως από βενζόλιο και ομόλόγιά του που βράζουν στην περιοχή από 70 °C ως 120 °C περίπου.]
- EN: Hydrocarbon oils, arom., mixed with polyethylene and polypropylene, pyrolyzed, light oil fraction; Heat Treatment Products  
[The oil obtained from the heat treatment of a polyethylene/polypropylene mixture with coal tar pitch or aromatic oils. It consists predominantly of benzene and its homologs boiling in a range of approximately 70 °C to 120 °C (158 °F to 248 °F).]
- FR: huiles hydrocarbures aromatiques, mélangées à du polyéthylène et du polypropylène, pyrolysées, fraction huile légère; Produits traités thermiquement  
[Huile obtenue par traitement thermique d'un mélange de polyéthylène et de polypropylène avec du brai de houille ou des huiles aromatiques. Se compose principalement de benzène et de ses homologues, avec un point d'ébullition compris approximativement entre 70 °C et 120 °C.]
- IT: olii idrocarbonici, aromatici, miscelati con polietilene e polipropilene, pirolizzati, frazione olio leggero, Prodotti da trattamento termico  
[L'olio ottenuto dal trattamento a caldo di una miscela polietilene/polipropilene con pece di catrame di carbone o olii aromatici. È costituito prevalentemente da benzene e suoi omologhi con punto di ebollizione nell'intervallo 70 °C-120 °C ca.]
- NL: koolwaterstofoliën, aromatisch, gemengd met polyethyleen en polypropyleen, gepyrolyseerd, lichte oliefractie; Thermisch behandelde producten  
[De olie die wordt verkregen uit de warmtebehandeling van een mengsel van polyethyleen en polypropyleen met koolteerpek of aromatische oliën. Bestaat voornamelijk uit benzeen en homologen daarvan, met een kooktraject van ongeveer 70 °C tot 120 °C.]
- PT: oleos petrolíferos, aromáticos, misturados com polietileno e polipropileno, pirolizados, fracção de óleo leve; Produtos tratados termicamente  
[O óleo obtido do tratamento térmico de uma mistura de polietileno/polipropileno com breu de alcatrão de carvão ou óleos aromáticos. É constituído predominantemente por benzeno e seus homólogos que destilam no intervalo de aproximadamente 70 °C a 120 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Eichetatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 100801-65-8

EEC No 309-748-5

No 648-135-00-X

NOTA H

NOTA J


NOTA M

- ES: aceites hidrocarbonados, aromáticos, mezclados con polietileno, pirolizados, fracción ligera de aceite; Productos de tratamiento térmico  
[Aceite obtenido del tratamiento térmico de polietileno con brea de alquitrán de hulla o aceites aromáticos. Compuesto en su mayor parte de benceno y sus homólogos con un intervalo de ebullición de 70 °C a 120 °C.]
- DA: carbonhydridolier, aromatiske, blandet med polyethylen, pyrolyserede, let oliefraktion; Varmebehandlede produkter  
[Olien opnået ved varmebehandlingen af polyethylen med kulbjærebeg eller aromatiske olier. Den består overvejende af benzen og dens homologer, med koginterval omtrent fra 70 °C til 120 °C.]
- DE: Kohlenwasserstofföle, aromatisch, gemischt mit Polyethylen, pyrolysiert, Leichtöl-Fraktion; Wärmebehandlungsprodukte  
[Öl, das man aus der Wärmebehandlung von Polyethylen mit Kohlenteerpech oder aromatischen Ölen erhält. Besteht vorherrschend aus Benzol und seinen Homologen, und siedet im Bereich von etwa 70 °C bis 120 °C.]
- EL: υδρογονανθράκων έλαια, αρωματικά, αναμειγμένα με πολυαιθυλένιο, πυρολυμένα, κλάσμα ελαφρού ελαίου  
Προϊόντα θερμικής επεξεργασίας  
[Το έλαιο που λαμβάνεται από τη θερμική καταργασία πολυαιθυλενίου με πίσσα λαθανθρακόπισσας ή αρωματικά έλαια. Συνίσταται κυρίως από βενζόλιο και ομολογία του με περιοχή βρασμού από 70 °C ως 120 °C.]
- EN: Hydrocarbon oils, arom., mixed with polyethylene, pyrolyzed, light oil fraction; Heat Treatment Products  
[The oil obtained from the heat treatment of polyethylene with coal tar pitch or aromatic oils. It consists predominantly of benzene and its homologs boiling in a range of 70 °C to 120 °C (158 °F to 248 °F)]
- FR: huiles hydrocarbures aromatiques, mélangées à du polyéthylène, pyrolysées, fraction huile légère; Produits traités thermiquement  
[Huile obtenue par traitement thermique d'un mélange de polyéthylène avec du brai de houille ou des huiles aromatiques. Se compose principalement de benzène et d'homologues, avec un point d'ébullition compris entre 70 °C et 120 °C.]
- IT: olii idrocarburi, aromatici, miscelati con polietilene, pirolizzati, frazione olio leggero; Prodotti da trattamento termico  
[L'olio ottenuto dal trattamento a caldo di polietilene con pece di catrame di carbone o olii aromatici. È costituito prevalentemente da benzene e suoi omologhi con punto di ebollizione nell'intervallo 70 °C-120 °C ca.]
- NL: koolwaterstofoliën, aromatisch, gemengd met polyethyleen, gepyrolyseerd, lichte oliefractie; Thermisch behandelde producten  
[De olie die wordt verkregen uit de warmtebehandeling van polyethyleen met koolteerpek of aromatische oliën. Bestaat voornamelijk uit benzeen en homologen daarvan en heeft een kooktraject van ongeveer 70 °C tot 120 °C.]
- PT: oleos petrolíferos, aromáticos, misturados com polietileno, pirolizados, fracção de óleo leve; Produtos tratados termicamente  
[O óleo obtido do tratamento térmico de polietileno com breu de alcatrão de carvão ou óleos aromáticos. É constituído predominantemente por benzeno e seus homólogos que destilam no intervalo de 70 °C a 120 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 100801-66-9

EEC No 309-749-0

No 648-136-00-5

NOTA H

NOTA J

NOTA M

- ES : aceites hidrocarbonados, aromáticos, mezclados con poliestireno, pirolizados, fracción ligera de aceite ; Productos de tratamiento térmico  
[Aceite obtenido del tratamiento térmico de poliestireno con brea de alquitrán de hulla o aceites aromáticos. Compuesto en su mayor parte de benceno y sus homólogos con un intervalo de ebullición aproximado de 70 °C a 210 °C.]
- DA : carbonhydridolier, aromatiske, blandet med polystyren, pyrolyserede, let oliefraktion ; Varmedehandlede produkter  
[Olien opnået ved varmedehandling af polystyren med kulstjerebeg eller aromatiske olier. Den består overvejende af benzen og dens homologer, med kogesinterval omtrent fra 70 °C til 210 °C.]
- DE : Kohlenwasserstofföle, aromatisch, gemischt mit Polystyrol, pyrolysiert, Leichtöl-Fraktion ; Wärmebehandlungsprodukte  
[Öl, das man aus der Wärmebehandlung von Polystyrol mit Kohlesteerpech oder aromatischen Ölen erhält. Besteht vorherrschend aus Benzol und seinen Homologen und siedet im Bereich von etwa 70 °C bis 210 °C.]
- EL : έλαια υδρογονανθράκων, αρωματικά, μείγματα με πολυστυρέλιο, πυρολυμένα, κλάσματος ελαφρού ελαίου· Προϊόντα θερμικής επεξεργασίας  
[Το έλαιο που λαμβάνεται από τη θερμική κατεργασία πολυστυρολίου με πίσσα λιθάνθρακόςπισσας ή αρωματικά έλαια. Συνίσταται κυρίως από βενζόλιο και ομόλογά του με περιοχή βρασμού από 70 °C ως 210 °C περίπου.]
- EN : Hydrocarbon oils, arom., mixed with polystyrene, pyrolyzed, light oil fraction ; Heat Treatment Products  
[The oil obtained from the heat treatment of polystyrene with coal tar pitch or aromatic oils. It consists predominantly of benzene and its homologs boiling in a range of approximately 70 °C to 210 °C (158 °F to 410 °F).]
- FR : huiles hydrocarbures aromatiques, mélangées à du polystyrène, pyrolysées, fraction huile légère ; Produits traités thermiquement  
[Huile obtenue par traitement thermique d'un mélange de polystyrène avec du brai de houille ou des huiles aromatiques. Se compose principalement de benzène et d'homologues, avec un point d'ébullition compris approximativement entre 70 °C et 210 °C.]
- IT : olii idrocarburici, aromatici, miscelati con polistirene, pirolizzati, frazione olio leggero ; Prodotti da trattamento termico  
[L'olio ottenuto dal trattamento a caldo di polistirene con pece di catrame di carbone o olii aromatici. È costituito prevalentemente da benzene e suoi omologhi con punto di ebollizione nell'intervallo 70 °C-210 °C ca.]
- NL : koolwaterstofoliën, aromatisch, gemengd met polystyreen, gepyrolyseerd, lichte olietraction ; Thermisch behandelde producten  
[De olie die wordt verkregen uit de warmtebehandeling van polystyreen met koolsteerpek of aromatische oliën. Bestaat voornamelijk uit benzeen en homologen daarvan en heeft een kooktraject van ongeveer 70 °C tot 210 °C.]
- PT : óleos petrolíferos, aromáticos, misturados com poliestireno, pirolizados, fracção de óleo leve ; Produtos tratados termicamente  
[O óleo obtido do tratamento térmico de poliestireno com breu de alcatrão de carvão ou óleos aromáticos. É constituído predominantemente por benzeno e seus homólogos que destilam no intervalo de aproximadamente 70 °C a 210 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="367 461 389 486" data-label="Text">T</div> <div data-bbox="328 510 427 604" data-label="Image"> </div> <div data-bbox="935 510 1016 539" data-label="Text">R : 45</div> <div data-bbox="935 562 1050 591" data-label="Text">S : 53-45</div>
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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 73665-18-6

EEC No 277-567-8

No 648-137-00-0

NOTA H

NOTA J

NOTA M

- ES : residuos del extracto (hulla), aceite de alquitrán alcalino, residuos de destilación de naftaleno ; Extracto residuo aceite naftalina  
[Residuo obtenido del aceite químico extraído después de la separación del naftaleno por destilación y compuesto principalmente de hidrocarburos aromáticos con anillos condensados de dos a cuatro miembros y bases nitrogenadas aromáticas.]
- DA : ekstraktionsrester (kul), alkalisk tjæreolie, naphthalendestillationsrester ; Syrefri naftalinolie  
[Resten opnået fra kemisk olie ekstraheret efter fjernelsen af naphthalen ved destillation, består primært af aromatiske carbonhydrider med to til fire leddede kondenserede ringe og aromatiske nitrogenbaser.]
- DE : Extraktückstände (Erdöl), Teeröl alkalisch, Naphthalin-Destillationsrückstände ; Naphthalinölextrakt-Rückstand  
[Rückstand, erhalten aus chemischem Öl, extrahiert nach Entfernen von Naphthalin durch Destillation. Besteht in erster Linie aus aromatischen Kohlenwasserstoffen mit zwei- bis vier-gliedrigen kondensierten Ringen und aromatischen Stickstoffbasen.]
- EL : υπολείμματα εκχύλισης (άνθρακα), αλκαλικού πισελαίου, υπολείμματα απόσταξης ναφθαλίνης· Υπόλειμμα εκχύλισης ελαίων ναφθαλίνης  
[Το υπόλειμμα που λαμβάνεται από το χημικό έλαιο, που εξάγεται με απόσταξη, μετά από την απομάκρυνση ναφθαλίνης και συνίσταται πρωτίστως από αρωματικούς υδρογονάνθρακες με δύο ως τέσσερες συμπυκνωμένους δακτύλιους και αρωματικές βάσεις αζώτου.]
- EN : Extract residues (coal), tar oil alk., naphthalene distn. residues ; Naphthalene Oil Extract Residue  
[The residue obtained from chemical oil extracted after the removal of naphthalene by distillation composed primarily of two to four membered condensed ring aromatic hydrocarbons and aromatic nitrogen bases.]
- FR : résidus d'extraits alcalins d'huile de goudron (charbon), résidus de distillation du naphthalène ; Résidu d'extraction d'huile naphthalénique  
[Résidu obtenu à partir de l'huile chimique extraite après élimination du naphthalène par distillation. Se compose principalement d'hydrocarbures aromatiques à noyaux condensés comportant 2 à 4 cycles et de bases aromatiques azotées.]
- IT : residui di estrazione (carbone), olio di catrame alcalino, residui della distillazione del naftalene ; Olio naftalinoso lavato  
[Residuo ottenuto dall'olio chimico estratto dopo separazione di naftalene per distillazione. È composto principalmente da idrocarburi aromatici ad anelli condensati di 2-4 elementi e da basi azotate aromatiche.]
- NL : extractresiduen (kool), teerolie-alkalische, naftaleendestillatieresiduen ; Naftaline olie, extractieresidu  
[Het residu dat wordt verkregen uit chemische olie die geëxtraheerd is na verwijdering van naftaleen door destillatie, voornamelijk samengesteld uit aromatische koolwaterstoffen met twee- tot viervoudig gecondenseerde ringen en aromatische stikstofbasen.]
- PT : resíduos de extracção (carvão), alcalinos de óleo de alcatrão, resíduos da destilação de naftaleno ; Extracto de residuo de óleo naftaleno  
[O residuo obtido do óleo extraído após a remoção de naftaleno por destilação constituído principalmente por hidrocarbonetos aromáticos polinucleares com 2 a 4 membros e bases azotadas aromáticas.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 70321-80-1

EEC No 274-566-4

No 648-138-00-6

NOTA H

NOTA J


NOTA M

- ES:** aceite de creosota, destilado de bajo punto de ebullición ; Aceite de lavaje  
[Fracción de destilación de bajo punto de ebullición obtenida de la carbonización a elevada temperatura de hulla bituminosa, que se refina de nuevo para separar el exceso de sales cristallinas. Compuesta principalmente de aceite de creosota con algo de sales aromáticas polinucleares normales, que son componentes del destilado de alquitrán de hulla, separados. Está libre de cristales a aproximadamente 38 °C.]
- DA:** kresotolie, lavtkogende destillat ; Vaskeolie  
[Den lavtkogende destillationsfraktion opnået fra højtemperatur-forkulningen af bituminøse kul, som yderligere raffineres for at fjerne overskud af krystallinske salte. Den består overvejende af kresotolie samt nogle af de normale polycykliske aromatiske salte, som er komponenter af stenkulstjæredestillat, fjernede. Den er krystalfri ved omtrent 38 °C.]
- DE:** Kreosotöl, niedrigsiedendes Destillat ; Waschöl  
[Niedrigsiedender Destillationsbestandteil, erhalten aus der Hochtemperatur-Verkokung von Steinkohle, die weiter aufbereitet wird, um überschüssige kristalline Salze zu entfernen. Besteht in erster Linie aus Kreosotöl, aus dem einige der normalerweise vorkommenden polynuklearen aromatischen Salze, die Bestandteile von Kohlenteerdestillaten sind, entfernt sind. Ist bei etwa 38 °C kristallfrei.]
- EL:** κρεοζωτελαίου, αποστάγματα χαμηλής θερμοκρασίας δρασμού· Έλαια έκπλυσης  
[Το χαμηλής θερμοκρασίας δρασμού κλάσμα απόσταξης που λαμβάνεται από την εξανθράκωση σε υψηλή θερμοκρασία πύσσουχου άνθρακα, που εν συνεχεία καθαρίζεται για να απομακρυνθεί η περίσσεια των κρυσταλλικών αλατών. Συνίσταται πρωτίστως από κρεοζωτέλαιο από το οποίο έχουν απομακρυνθεί μερικά από τα κανονικά πολυκυκλικά αρωματικά αλατά, που είναι συστατικά αποσταγμάτων λιθανθρακόπισσας. Στους 38 °C περίπου είναι ελεύθερο κρυστάλλων.]
- EN:** Creosote oil, low-boiling distillate ; Wash Oil  
[The low-boiling distillation fraction obtained from the high temperature carbonization of bituminous coal, which is further refined to remove excess crystalline salts. It consists primarily of creosote oil with some of the normal polynuclear aromatic salts which are components of coal tar distillate, removed. It is crystal free at approximately 38 °C (100 °F).]
- FR:** huile de créosote, distillat à bas point d'ébullition ; Huile de lavage  
[Fraction de distillation, à bas point d'ébullition, obtenue par carbonisation à haute température de charbon bitumineux, puis raffinée en vue de séparer les sels cristallins en excès. Se compose principalement d'huile de créosote, une partie des sels aromatiques polycycliques entrant normalement dans la composition des distillats de goudron de houille ayant été éliminée. La fraction est exempte de cristaux à partir de 38 °C approximativement.]
- IT:** olio de cresoto, distillato bassobollente ; Olio lavaggio gas  
[Il taglio di distillazione bassobollente ottenuto dalla carbonizzazione ad alta temperatura di carbone bituminoso che viene ulteriormente raffinato per separare i sali cristallini in eccesso. È costituito principalmente da olio di cresoto da cui sono stati separati alcuni dei sali aromatici polinucleari normali che compongono i distillati del catrame di carbone. È privo di cristalli alla temperatura di 38 °C ca.]
- NL:** creosootolie, laagkokend destillaat ; Benzol-wasolie  
[De laag kokende destillatiefraction die wordt verkregen door de carbonisatie bij hoge temperatuur van bitumineuze kool, en die verder wordt gezuiverd om een overschot aan kristallijne zouten te verwijderen. Bestaat voornamelijk uit creosootolie, waarbij sommige van de normale polynucleaire aromatische zouten, die een bestanddeel vormen van koolteerdestillaat, zijn verwijderd. Het is kristalvrij bij ongeveer 38 °C.]
- PT:** óleo de creosote, destilado de ponto de ebulição baixo ; óleo de lavagem  
[A fração da destilação com ponto de ebulição baixo obtida da carbonização a temperatura elevada de carvão betuminoso, que é posteriormente refinada para remover o excesso de sais cristalinicos. É constituída principalmente por óleo de creosote com alguns dos sais normais aromáticos polinucleares, que são constituintes de destilados de alcatrão de carvão, removidos. Não apresenta cristais a aproximadamente 38 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68815-21-4

EEC No 272-361-4

No 648-139-00-1

NOTA H

NOTA J

NOTA M

ES : ácidos de alquitrán, cresílicos, sales de sodio, soluciones cáusticas ; Extracto alcalino

DA : tjæresyrer, cresyliske, natriumsalte, kaustiske opløsninger ; Alkaliske ekstrakter

DE : Teersäuren, cresylisch, Natriumsalze, kaustische Lösungen ; Laugenextrakt

EL : πίσσας οξέων, κρεζυλικών, άλατων νατρίου, καυστικά διαλύματα· Αλκαλικό εκχύλισμα

EN : Tar acids, cresylic, sodium salts, caustic solns. ; Alkaline Extract

FR : huiles de goudron acides crésyliques, sels de sodium, solutions caustiques ; Extrait basique

IT : acidi di catrame, cresilici, sali di sodio, soluzioni caustiche ; Estratto alcalinico

NL : teerzuren, cresyl-, natriumzouten, bijtende oplossingen ; Alkalisch extract

PT : ácidos do alcatrão, cresílicos, sais de sódio, soluções cáusticas ; Extractos alcalinos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etiketatura, Kenmerken, Roettagem*

T	
	R : 45 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-86-3

EEC No 266-020-9

No 648-140-00-7

NOTA H

NOTA J

NOTA M

- ES : aceites del extracto (hulla), base de alquitrán ; Extracto ácido  
[Extracto de un residuo del extracto alcalino del aceite de alquitrán de hulla producido por un lavado ácido como ácido sulfúrico acuoso después de la destilación para separar el naftaleno. Compuesto principalmente de las sales ácidas de diversas bases nitrogenadas aromáticas incluyendo la piridina, quinolina y sus derivados alquílicos.]
- DA : ekstraktionsolier (kul), tjærebase- ; Syreekstrakt  
[Ekstrakt fra alkalisk ekstraktionrest af stenkulstjæreolie fremstillet ved en sur vask, såsom vandig svovlsyre, efter destillation for at fjerne naphthalen. Sammensat primært af syresaltene af forskellige aromatiske nitrogenbaser, herunder pyridin, quinolin og deres alkylderivater.]
- DE : Extraktöle (Kohle), Teerbase- ; Säureextrakt  
[Extrakt aus dem Rückstand vom alkalischen Extrakt aus Kohlenteeröl, hergestellt durch saure Wäsche, zum Beispiel wässriger Schwefelsäure, nach der Destillation zum Entfernen von Naphthalin. Besteht in erster Linie aus den sauren Salzen verschiedener aromatischer Stickstoffbasen einschließlich Pyridin, Chinolin und ihren Alkylderivaten.]
- EL : έλαια εκχύλισματος (άνθρακα), βάσεως πίσσας Όξινο εκχύλισμα  
[Το εκχύλισμα από υπόλειμμα αλκαλικού εκχυλίσματος ελαίου λιθανθρακόπισσας που παράγεται με έκλυση με όξινο μέσο, όπως υδατικό θειικό οξύ μετά από απόσταξη για την απομάκρυνση της ναφθαλίνης, αποτελείται κυρίως από τα όξινα άλατα διαφόρων αρωματικών αζωτοδχων βάσεων συμπεριλαμβανομένων της πυριδίνης, κινολίνης και αλκυλοπαράγωγων τους.]
- EN : Extract oils (coal), tar base ; Acid Extract  
[The extract from coal tar oil alkaline extract residue produced by an acidic wash such as aqueous sulfuric acid after distillation to remove naphthalene. Composed primarily of the acid salts of various aromatic nitrogen bases including pyridine, quinoline, and their alkyl derivatives.]
- FR : huiles d'extrait de base de goudron (charbon) ; Extrait acide  
[Extrait du résidu de l'extraction alcaline d'huile de goudron de houille obtenue par un lavage acide avec, par exemple, de l'acide sulfurique aqueux, après distillation en vue d'éliminer le naphthalène. Se compose principalement de sels acides de différentes bases aromatiques azotées telles que la pyridine, la quinoline et leurs dérivés alkylés.]
- IT : olii di estrazione (carbone), basi del catrame ; Estratto acido  
[L'estratto del residuo di estrazione alcalina di olio di catrame di carbone prodotto per lavaggio acido, ad es. con acido solforico, dopo separazione del naftalene per distillazione. È composto principalmente dai sali acidi di varie basi azotate aromatiche comprendenti la piridina, la chinolina e i loro alchil-derivati.]
- NL : extractoliën (kool), teerbase ; Zuur extract  
[Het extract uit het residu van het alkalisch extract van koolteerolie dat wordt gevormd door een zure spoeling, zoals watrig zwavelzuur, na destillatie waarbij naftaleen wordt verwijderd. Voornamelijk samengesteld uit de zure zouten van meerdere aromatische stikstofbasen inclusief pyridine en chinoline en alkylderivaten daarvan.]
- PT : oleos de extracção (carvão), bases do alcatrão ; Extractos ácidos  
[O extracto do residuo de extracção alcalina do óleo de alcatrão de carvão produzido por lavagem com um ácido tal como o ácido sulfúrico aquoso após destilação para remover naftaleno. Compõe-se principalmente dos sais ácidos de várias bases azotada aromáticas incluindo piridina, quinolina, e os seus derivados alquilo.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-84-1

EEC No 266-018-8

No 648-141-00-2

NOTA H

NOTA J

NOTA M

- ES: bases de alquitrán, hulla, crudas; Bases pirídicas  
[Producto de reacción obtenido por neutralización del aceite extraído de la base del alquitrán de hulla con una solución alcalina, como el hidróxido de sodio acuoso para obtener las bases libres. Compuesto principalmente de bases orgánicas tales como la acridina, fenantridina, piridina, quinolina y sus derivados alquílicos.]
- DA: tjærebaser, stenkul-, rå; Rå-tjærebaser  
[Reaktionsprodukt opnået ved at neutralisere ekstraktionsolie fra stenkulstjærebaser med en alkalisk opløsning, såsom vandig natriumhydroxid, for at udvinde de frie baser. Sammensat primært af organiske baser, såsom acridin, phenanthridin, pyridin, quinolin og deres alkylderivater.]
- DE: Teerbasen, Kohlen-, rohe; Roh-Teerbasen  
[Reaktionsprodukt, erhalten durch Neutralisieren von Kohlenteerbaseextraktionsöl mit einer alkalischen Lösung, zum Beispiel wässrigem Natriumhydroxid, um die freie Basen zu erhalten. Besteht in erster Linie aus organischen Basen wie Acridin, Phenanthridin, Pyridin, Chinolin und ihren Alkylderivaten.]
- EL: βάσεις πίσσας, άνθρακα, ακατέργαστες; βάσεις ακατέργαστης πίσσας  
[Το προϊόν αντίδρασης που λαμβάνεται με εξουδετέρωση ελαίου εκχυλίσματος βάσεων λιθανθρακόπισσας με αλκαλικό διάλυμα, όπως υδροξείδιο νατρίου, ώστε να ληφθούν οι ελεύθερες βάσεις. Αποτελείται κυρίως από οργανικές βάσεις όπως ακριδίνη, φαινανθρίνη, πυριδίνη, κινολίνη και αλκυλο παράγωγά τους.]
- EN: Tar bases, coal, crude; Crude Tar Bases  
[The reaction product obtained by neutralizing coal tar base extract oil with an alkaline solution, such as aqueous sodium hydroxide, to obtain the free bases. Composed primarily of such organic bases as acridine, phenanthridine, pyridine, quinoline and their alkyl derivatives.]
- FR: bases de goudron de houille brutes (charbon); Bases brutes de goudron  
[Produit de réaction obtenu par neutralisation d'huile d'extrait basique de goudron de houille par une solution alcaline, telle que l'hydroxyde de sodium aqueux, pour obtenir des bases libres. Se compose principalement de bases organiques telles que l'acridine, la phénanthridine, la pyridine, la quinoléine et leurs dérivés alkylés.]
- IT: basi del catrame, carbone, grezze; Basi di catrame grezze  
[Il prodotto di reazione ottenuto neutralizzando con soluzione alcalina, ad es. idrato sodico in soluzione acquosa, il prodotto di estrazione con solvente delle basi di catrame di carbone, allo scopo di ottenere le basi libere. È composto principalmente da basi organiche quali l'acridina, la fenantridina, la piridina, la chinolina e i relativi alchilderivati.]
- NL: teerbasen, kool, ruw; Ruwe teerbasen  
[Het reactieproduct dat wordt verkregen door het neutraliseren van koolteerbase-extractolie met een alkalische oplossing zoals wateng natriumhydroxide, teneinde vrije basen te verkrijgen. Voornamelijk samengesteld uit organische basen zoals acridine, fenanthridine, pyridine, chinoline en hun alkylderivaten.]
- PT: bases do alcatrão, carvão, brutas; Bases de alcatrão bruto  
[O produto da reacção obtido por neutralização do óleo de extracção de bases do alcatrão de carvão com uma solução alcalina, como o hidróxido de sódio aquoso, para obter as bases livres. Compõe-se principalmente de bases orgânicas como acridina, fenantridina, piridina, quinolina e os seus derivados alquilo.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-46-2

EEC No 302-681-2

No 648-142-00-8

NOTA H

NOTA M

- ES: residuos (hulla), extracción con líquido disolvente ;  
[Polvo cohesivo compuesto de materia mineral de hulla y hulla insoluble que queda después de la extracción de hulla por un líquido disolvente.]
- DA: rester (kul), flydende solventekstraktions- ;  
[Et kohæsivt pulver sammensat af kulmineralsk stof og uopløst kul tilbageblevet efter ekstraktion af kul med et flydende solvent.]
- DE: Rückstände (Kohle), flüssige Lösungsmittelextraktion ;  
[Ein kohäsives Pulver, das sich aus Kohlemineralstoff und nicht aufgelöster Kohle nach Extraktion von Kohle durch ein flüssiges Lösungsmittel zusammensetzt.]
- EL: υπολείματα (άνθρακα), εκχύλισης με υγρό διαλύτη ;  
[Συνεκτική σκόνη που αποτελείται από ανόργανο υλικό άνθρακα και αδιάλυτο άνθρακα που παραμένουν μετά την εκχύλιση άνθρακα με υγρό διαλύτη.]
- EN: Residues (coal), liq. solvent extrn. ;  
[A cohesive powder composed of coal mineral matter and undissolved coal remaining after extraction of coal by a liquid solvent.]
- FR: résidus (charbon), extraction au solvant liquide ;  
[Poudre cohésive composée de matière minérale charbonneuse et de charbon non dissous après extraction au solvant liquide.]
- IT: residui (carbone), estrazione con solvente liquido ;  
[Polvere coesiva costituita da sostanza minerale del carbone e carbone indissolto dopo l'estrazione del carbone mediante un solvente liquido.]
- NL: residuen (kool), vloeibaar solvent extracten ;  
[Een coherent poeder, samengesteld uit minerale stoffen uit kool en onopgeloste kool overblijvend na extractie van kool met een vloeibaar solvent.]
- PT: residuos (carvão), da extracção com solvente líquido ;  
[Um pó coeso constituído por matéria mineral de carvão e carvão não dissolvido remanescente após extracção do carvão com um solvente líquido.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Catc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen. Limites de concentração*


Cas No 94114-47-3

EEC No 302-682-8

No 648-143-00-3

NOTA H

NOTA M

- ES : líquidos de hulla, solución de la extracción con líquido disolvente ;  
[Producto obtenido por filtración de materia mineral de hulla y hulla insoluble del extracto o solución de hulla producidos por extracción de hulla en un líquido disolvente. Combinación líquida altamente compleja, viscosa, negra, compuesta principalmente de hidrocarburos aromáticos y aromáticos parcialmente hidrogenados, compuestos aromáticos de nitrógeno, compuestos aromáticos de azufre, compuestos fenólicos y otros compuestos aromáticos de oxígeno y sus alquil derivados.]
- DA : kulvæsker, flydende solventekstraktionsopløsning ;  
[Produkt opnået ved filtrering af kulmineralsk stof og uopløst kul fra kulekstraktionsopløsning fremstillet ved at omsætte kul i et flydende solvent. En sort, viskøs og højkompleks væskeblanding sammensat primært af aromatiske og delvist hydrogenerede, aromatiske carbonhydrider, aromatiske nitrogenforbindelser, aromatiske svovlforbindelser, phenolske og andre aromatiske oxygenforbindelser og deres alkylderivater.]
- DE : Kohleflüssigkeiten, flüssige Lösungsmittelextraktion Lösung ;  
[Das Produkt, das man durch Filtration von Kohlenmineralsstoff und nicht aufgelöster Kohle aus einer Kohlenextraktlösung durch Aufschließen von Kohle in einem flüssigen Lösungsmittel erhält. Die schwarze, viskose, hoch komplexe flüssige Kombination besteht in erster Linie aus aromatischen und teilweise hydrierten aromatischen Kohlenwasserstoffen, aromatischen Stickstoffverbindungen, aromatischen Schwefelverbindungen, phenolhaltigen und anderen aromatischen Sauerstoffverbindungen und ihren Alkylderivaten.]
- EL : υγρά άνθρακα, διάλυμα εκχύλισης με υγρό διαλύτη.  
[Το προϊόν που λαμβάνεται με διήθηση ανόργανου υλικού άνθρακα και αδιάλυτου άνθρακα από διάλυμα εκχύλισης άνθρακα, που παράγεται με διάλυση άνθρακα σε υγρό διαλύτη. Μαύρο, παχύρευστο, πολύ πολύπλοκος υγρός συνδυασμός που αποτελείται πρωτίστως από αρωματικούς και μερικώς υδρογονωμένους αρωματικούς υδρογονάνθρακες, αρωματικές αζωτοενώσεις, αρωματικές θειοενώσεις, φαινολικές και άλλες αρωματικές οξυγονούχες ενώσεις και αλκυλικά παραγωγά τους.]
- EN : Coal liquids, liq. solvent extrn. soln. ;  
[The product obtained by filtration of coal mineral matter and undissolved coal from coal extract solution produced by digesting coal in a liquid solvent. A black, viscous, highly complex liquid combination composed primarily of aromatic and partly hydrogenated aromatic hydrocarbons, aromatic nitrogen compounds, aromatic sulfur compounds, phenolic and other aromatic oxygen compounds and their alkyl derivatives.]
- FR : charbon liquide, solution d'extraction au solvant liquide ;  
[Produit obtenu par filtration de la matière minérale charbonneuse et du charbon non dissous issus de la solution produite par décomposition du charbon dans un solvant liquide. Combinaison liquide très complexe, visqueuse et de couleur noire. Se compose principalement d'hydrocarbures aromatiques, non hydrogénés ou partiellement hydrogénés, de composés aromatiques azotés, de composés aromatiques soufrés, de composés phénoliques, de composés aromatiques oxygénés et de leurs dérivés alkylés.]
- IT : liquidi di carbone, soluzione di estrazione con solvente liquido ;  
[Il prodotto ottenuto per filtrazione di sostanza minerale del carbone e carbone indissolto da una soluzione di estratto di carbone prodotta da digestione di carbone in un solvente liquido. Combinazione liquida nera, viscosa, molto complessa, composta principalmente da idrocarburi aromatici ed aromatici parzialmente idrogenati, composti aromatici dell'azoto, composti aromatici dello zolfo, composti fenolici ed altri composti aromatici dell'ossigeno e loro alchil derivati.]
- NL : koolvloeistoffen, vloeibaar solventextractie oplossing ;  
[Het produkt verkregen na filtratie van minerale stoffen uit kool en onopgeloste kool, van een koolextract oplossing geproduceerd door kool op te lossen in een vloeibaar solvent. Een zwarte, viskeuze, zeer complexe vloeibare combinatie, voornamelijk samengesteld uit aromatische en gedeeltelijk gehydrogeneerde aromatische koolwaterstoffen, aromatische stikstofverbindingen aromatische zwavelverbindingen, fenolische en andere aromatische zuurstofverbindingen en de alkylderivaten daarvan.]
- PT : líquidos do carvão, solução de extracção com solvente líquido ;  
[O produto obtido por filtração de matéria mineral de carvão e carvão não dissolvido da solução de extracção de carvão produzida por digestão de carvão num solvente líquido. Um líquido muito complexo, negro, viscoso constituído principalmente por hidrocarbonetos aromáticos e aromáticos parcialmente hidrogenados, compostos de azoto aromáticos, compostos de enxofre aromáticos, compostos fenólicos e outros compostos de oxigénio aromáticos e os seus derivados alquilo.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-48-4

EEC No 302-683-3

No 648-144-00-9

NOTA H

NOTA M

- ES: líquidos de hulla, extracción con líquido disolvente ;  
[Producto sustancialmente libre de disolvente obtenido por la destilación del disolvente de la solución filtrada de extracto de hulla producida por extracción de hulla en un líquido disolvente. Semisólido negro, compuesto principalmente de una combinación compleja de hidrocarburos aromáticos con anillos condensados, compuestos aromáticos de nitrógeno, compuestos aromáticos de azufre, compuestos fenólicos y otros compuestos aromáticos de oxígeno y sus alquil derivados.]
- DA: kulvæsker, flydende solventekstraktion ;  
[Det substantielle solventfrie produkt opnået ved destillation af solventet fra filtreret kulekstraktionsopløsning fremstillet ved at omsætte kul i et flydende solvent. Et sort, halvfast stof, bestående primært af en sammensat blanding af ringkondenserede, aromatiske carbonhydrider, aromatiske nitrogenforbindelser, aromatiske svovlforbindelser, phenolforbindelser og andre aromatiske oxygenforbindelser og deres alkylderivater.]
- DE: Kohleflüssigkeiten, flüssige Lösungsmittlextraktion ;  
[Das im wesentlichen Lösungsmittel-freie Produkt, das man durch Destillation des Lösungsmittels aus abgefilterter Kohlenextrakt-lösung aus dem Aufschließen von Kohle in einem flüssigen Lösungsmittel erhält. Der schwarze Semifeststoff besteht in erster Linie aus einer komplexen Kombination von aromatischen Kohlenwasserstoffen mit kondensierten Ringen, aromatischen Stickstoffverbindungen, aromatischen Schwefelverbindungen, phenolhaltigen und anderen aromatischen Sauerstoffverbindungen und ihren Alkylderivaten.]
- EL: υγρά άνθρακα, εκχύλισης με υγρό διαλύτη ;  
[Το πρακτικά ελεύθερο-διαλύτη προϊόν που λαμβάνεται με την απόσταξη του διαλύτη από διηθημένο διάλυμα εκχύλισης άνθρακα που παραγεται με διάλυση άνθρακα σε υγρό διαλύτη. Μαύρο συμπυκνωμένων δακτυλίων ημιστερεό, αποτελούμενο πρωτίστως από πολύπλοκο συνδυασμό αρωματικών υδρογονανθράκων, αρωματικές αζωτοενώσεις, αρωματικές θειοενώσεις, φαινολικές και άλλες αρωματικές οξυγονούχες ενώσεις και αλκυλικά παράγωγά τους.]
- EN: Coal liquids, liq. solvent extn. ;  
[The substantially solvent-free product obtained by the distillation of the solvent from filtered coal extract solution produced by digesting coal in a liquid solvent. A black semi-solid, composed primarily of a complex combination of condensed-ring aromatic hydrocarbons, aromatic nitrogen compounds, aromatic sulfur compounds, phenolic compounds and other aromatic oxygen compounds, and their alkyl derivatives.]
- FR: charbon liquide, extraction au solvant liquide ;  
[Produit pratiquement exempt de solvant obtenu par distillation du solvant issu de la solution d'extrait de charbon filtrée produite par décomposition du charbon dans un solvant liquide. Semi-solide de couleur noire composé principalement d'une combinaison complexe d'hydrocarbures aromatiques à noyaux condensés, de composés aromatiques azotés, de composés aromatiques soufrés, de composés phénoliques, de composés aromatiques oxygénés et de leurs dérivés alkylés.]
- IT: liquidi di carbone, estrazione con solvente liquido ;  
[Il prodotto sostanzialmente priva di solvente ottenuto dalla distillazione del solvente dalla soluzione filtrata dell'estratto di carbone prodotta per digestione del carbone in un solvente liquido. Un semisolido nero, costituito principalmente da una combinazione complessa di idrocarburi aromatici ad anelli condensati, composti aromatici dell'azoto, composti aromatici dello zolfo, composti fenolici ed altri composti aromatici dell'ossigeno, e loro alchil dervati.]
- NL: koolvloeistoffen, vloeibaar solvent-extracten ;  
[Het in wezen solvent-vrije produkt, verkregen bij de destillatie van het solvent van een gefilterde koolextractie oplossing, geproduceerd door kool op te lossen in een vloeibaar solvent. Een zwarte halfvaste stof, voornamelijk samengesteld uit een complexe verzameling aromatische koolwaterstoffen met gecondenseerde ringsystemen, aromatische stikstofverbindingen, fenolachtige verbindingen en andere aromatische zuurstofverbindingen en de alkylderivaten daarvan.]
- PT: líquidos do carvão, da extracção com solvente líquido ;  
[O produto substancialmente livre de solvente obtido pela destilação do solvente de solução de extracção do carvão filtrada produzida por digestão de carvão num solvente líquido. Um semi-sólido negro, constituído principalmente por uma combinação complexa de hidrocarbonetos aromáticos polinucleares, compostos de azoto aromáticos, compostos de enxofre aromáticos, compostos fenólicos e outros compostos de oxigénio aromáticos, e os seus derivados alquilo.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limit.,  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101316-83-0

EEC No 309-885-0

No 648-145-00-4


## NOTA H

- ES: alquitrán, lignito ;  
[Destilado de petróleo de alquitrán de lignito. Compuesto principalmente de hidrocarburos aromáticos de uno a tres anillos, alifáticos nafténicos, sus alquil derivados, heteroaromáticos y fenoles de uno y dos anillos con un intervalo de ebullición aproximado de 150 °C a 360 °C.]
- DA: tjære, brunkuls- ;  
[En olie destilleret fra brunkulstjære. Sammensat primært af aliphatiske, naphthenske og bi- til tricycliske aromatiske carbonhydrider, deres alkylderivater, heteroaromater og en- og to ringede phenoler, med kogesinterval omtrent fra 150 °C til 360 °C.]
- DE: Teer, Braunkohle ;  
[Öl aus Braunkohlenteer destilliert. Besteht in erster Linie aus aliphatischen, naphthenhaltigen und aromatischen Kohlenwasserstoffen mit einem bis drei Ringen, ihren Alkylderivaten, Heteroaromaten und Phenolen mit einem und zwei Ringen und siedet im Bereich von etwa 150 °C bis 360 °C.]
- EL: πίσσα, λιγνίτη  
[Έλαιο που απωτάσσεται από πίσσα λιγνίτη. Αποτελείται κυρίως από αλειφατικούς, ναφθενικούς και αρωματικούς υδρογονάνθρακες με ένα ως τρεις δακτύλιους, αλκυλοπαράγωγα τους, ετεροαρωματικά και φαινόλες με ένα και δύο δακτύλιους με περιοχή θρασμού από 150 °C ως 360 °C περίπου.]
- EN: Tar brown-coal ;  
[An oil distilled from brown-coal tar. Composed primarily of aliphatic, naphthenic and one- to three-ring aromatic hydrocarbons, their alkyl derivatives, heteroaromatics and one- and two-ring phenols boiling in the range of approximately 150 °C to 360 °C (302 °F to 680 °F).]
- FR: goudron de lignite, distillat ;  
[Huile obtenue par distillation de goudron de lignite. Se compose principalement d'hydrocarbures aliphatiques, d'hydrocarbures naphthéniques et d'hydrocarbures aromatiques comportant un à trois cycles, de leurs dérivés alkylés, d'hétéroaromatiques et de phénols mono-ou bicycliques dont le point d'ébullition est compris approximativement entre 150 °C et 360 °C.]
- IT: catrame, carbone bruno ;  
[Olio distillato da catrame di carbone bruno. Costituito principalmente da idrocarburi alifatici, naftenici e aromatici con numero di anelli da uno a tre, loro alchil derivati, eteroaromatici e fenoli con uno e due anelli con punto di ebollizione nell'intervallo 150 °C-360 °C ca.]
- NL: teer, bruinkool ;  
[Een olie die is gedestilleerd uit bruinkoolteer. Voornamelijk samengesteld uit alifatische, naftenische en één- tot drie-rings aromatische koolwaterstoffen, de alkylderivaten daarvan, heteroaromaten en één- en twee-rings fenolen, met een kooktraject van ongeveer 150 °C tot 360 °C.]
- PT: alcatrão, de lenhite ;  
[Um óleo destilado do alcatrão de lenhite é constituído principalmente por hidrocarbonetos alifáticos, nafténicos e aromáticos com um a três anéis, os seus derivados alquilo, heteroaromáticos e fenóis com um e dois anéis e destila no intervalo de aproximadamente 150 °C a 360 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 1 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T		R : 45
		S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101316-84-1

EEC No 309-886-6

No 648-146-00-X

## NOTA H


- ES : alquitrán, lignito, baja temperatura ;  
[Alquitrán obtenido de la carbonización a baja temperatura y gasificación a baja temperatura de lignito. Compuesto principalmente de hidrocarburos aromáticos cíclicos, nafténicos, alifáticos, hidrocarburos heteroaromáticos y fenoles cíclicos.]
- DA : tjære, brunkuls-, lavtemperaturs- ;  
[En tjære, opnået ved lavtemperatursforkulning og lavtemperatursforgasning af brunkul. Sammensat primært af aliphatiske, naphtheniske og cykliske aromatiske carbonhydrider, heteroaromatiske carbonhydrider og cykliske phenoler.]
- DE : Teer, Braunkohle, Niedrigtemperatur ;  
[Teer, den man aus der Niedrigtemperatur-Verkokung und Niedrigtemperatur-Vergasung von Braunkohlenteer erhält. Besteht in erster Linie aus aliphatischen, naphthenhaltigen und cyclischen aromatischen Kohlenwasserstoffen, heteroaromatischen Kohlenwasserstoffen und cyclischen Phenolen.]
- EL : πίσσα, λιγνίτη, χαμηλής θερμοκρασίας ;  
[Πίσσα που λαμβάνεται από εξανθράκωση σε χαμηλή θερμοκρασία και αεριοποίηση σε χαμηλή θερμοκρασία λιγνίτη. Αποτελείται κυρίως από αλειφατικούς, ναφθενικούς και κυκλικούς αρωματικούς υδρογονάνθρακες, ετεροαρωματικούς υδρογονάνθρακες και κυκλικές φαινόλες.]
- EN : Tar, brown-coal, low-temp. ;  
[A tar obtained from low temperature carbonization and low temperature gasification of brown coal. Composed primarily of aliphatic, naphthenic and cyclic aromatic hydrocarbons, heteroaromatic hydrocarbons and cyclic phenols.]
- FR : goudron de lignite à basse température ;  
[Goudron obtenu par carbonisation et gazéification de lignite à basse température. Se compose principalement d'hydrocarbures aliphatiques, d'hydrocarbures naphthéniques, d'hydrocarbures aromatiques cycliques, d'hydrocarbures hétéroaromatiques et de phénols cycliques.]
- IT : catrame, carbone bruno, bassa temperatura ;  
[Catrame ottenuto dalla carbonizzazione a bassa temperatura e gasificazione a bassa temperatura di carbone bruno. Costituito principalmente da idrocarburi alifatici, naftenici e aromatici ciclici, idrocarburi eteroaromatici e fenoli ciclici.]
- NL : teer, bruinkool, lage temperatuur ;  
[Een teer die wordt verkregen uit de carbonisatie bij lage temperatuur en vergassing bij lage temperatuur van bruinkool. Voornamelijk samengesteld uit alifatische, naftenische en cyclische aromatische koolwaterstoffen, heteroaromatische koolwaterstoffen en cyclische fenolen.]
- PT : alcatrão, de lenhite, de temperatura baixa ;  
[Um alcatrão obtido da carbonização a temperatura baixa e da gaseificação a temperatura baixa de lenhite. É constituído principalmente por hidrocarbonetos alifáticos, nafténicos e aromáticos cíclicos, compostos heteroaromáticos e fenóis cíclicos.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 65996-78-3

EEC No 266-012-5

No 648-147-00-5

NOTA H

NOTA J

- ES : aceite ligero (hulla), horno de coque ; Benzol bruto  
[Líquido orgánico volátil extraído del gas desprendido en la destilación destructiva de hulla a elevada temperatura (mayor de 700 °C). Compuesto principalmente de benceno, tolueno y xilenos. Puede contener otros constituyentes hidrocarbonados minoritarios.]
- DA : letolie (kul), koksovn- ; Rå benzol  
[Den flygtige, organiske væske ekstraheret fra gassen udviklet ved tørdestillation af kul ved høj temperatur (højere end 700 °C). Sammensat primært af benzen, toluen og xylener. Kan indeholde andre mindre carbonhydridkomponenter.]
- DE : Leichtöl (Kohle), Koksofen- ; Rohbenzol  
[Flüchtige organische Flüssigkeit, extrahiert aus dem Gas, das bei der Hochtemperatur- (größer als 700 °C) -Entgasung von Kohle anfällt. Besteht in erster Linie aus Benzol, Toluol und Xylenen. Kann andere kleine Kohlenwasserstoffbestandteile enthalten.]
- EL : ελαφρό έλαιο (άνθρακα), κλιβάνου παραγωγής κοκ· Ακάθαρτη βενζόλη  
[Το πτητικό οργανικό υγρό που εξάγεται από το αέριο το οποίο εκλύεται κατά την ξηρά απόσταξη άνθρακα σε υψηλή θερμοκρασία (πάνω από 700 °C). Αποτελείται πρωτίστως από βενζόλιο, τολουόλιο και ξυλόλια. Μπορεί να περιέχει και άλλους, μικρότερης σημασίας υδρογονάνθρακες.]
- EN : Light oil (coal), coke-oven ; Crude benzole  
[The volatile organic liquid extracted from the gas evolved in the high temperature (greater than 700 °C (1 292 °F)) destructive distillation of coal. Composed primarily of benzene, toluene, and xylenes. May contain other minor hydrocarbon constituents.]
- FR : huile légère (charbon), four à coke ; Benzol brut  
[Liquide organique volatil extrait du gaz issu de la distillation destructive du charbon à haute température (au-dessus de 700 °C). Se compose principalement de benzène, de toluène et de xylènes. Peut également contenir de petites quantités d'autres hydrocarbures.]
- IT : olio leggero (carbone), forno da coke ; Benzene grezzi  
[Liquido organico volatile estratto dal gas che si sviluppa nella distillazione distruttiva ad alta temperatura (superiore a 700 °C) del carbone. È composto principalmente da benzolo, toluolo e xiloli. Può contenere altri costituenti idrocarburici minori.]
- NL : lichte olie (kool), cokesoven ; Ruwe benzol  
[De vluchtige organische vloeistof die wordt geëxtraheerd uit het gas dat vrijkomt bij de destructieve destillatie van kool bij hoge temperatuur (hoger dan 700 °C). Voornamelijk samengesteld uit benzeen, toluen en xylenen. Kan andere ondergeschikte koolwaterstofbestanddelen bevatten.]
- PT : óleo leve (carvão), alto forno ; Benzol bruto  
[O líquido orgânico volátil extraído do gás libertado na destilação destrutiva do carvão a temperatura (superior a 700 °C). Compõe-se principalmente de benzeno, tolueno, e xilenos. Pode conter outros hidrocarbonetos minoritários.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	.
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-52-0

EEC No 302-688-0

No 648-148-00-0

NOTA H

NOTA J

- ES** destilados (hulla), primarios de la extracción con líquido disolvente ;  
 [Producto líquido de la condensación de vapores emitidos durante la extracción de hulla en un líquido disolvente y con un intervalo de ebullición aproximado de 30 °C a 300 °C. Compuesto principalmente de hidrocarburos aromáticos con anillos condensados hidrogenados parcialmente, compuestos aromáticos con nitrógeno, oxígeno y azufre y sus alquil derivados con un número de carbonos en su mayor parte dentro del intervalo de C<sub>4</sub> a C<sub>14</sub>.]
- DA** destillater (kul), flydende solventekstraktion primære ;  
 [Det flydende produkt fra kondensation af dampe afgivet under omsætningen af kul i et flydende solvent, med kogesinterval omtrent fra 30 °C til 300 °C. Sammensat primært af delvist hydrogenerede, ringkondenserede, aromatiske carbonhydrider, aromatiske forbindelser indeholdende nitrogen, oxygen og svovl og deres alkylderivater, med carbonantal overvejende i området fra C<sub>4</sub> til og med C<sub>14</sub>.]
- DE** Destillate (Kohle), flüssige Lösungsmittel-extraktion primär ;  
 [Flüssiges Produkt der Kondensation von Dämpfen, die während des Aufschließens von Kohle in einem flüssigen Lösungsmittel austreten und in einem Bereich von etwa 30 °C bis 300 °C sieden. Besteht in erster Linie aus teilweise hydrierten aromatischen Kohlenwasserstoffen mit kondensierten Ringen, aromatischen Verbindungen, die Stickstoff, Sauerstoff und Schwefel enthalten, und ihren Alkylderivaten mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>4</sub> bis C<sub>14</sub>.]
- EL** αποσταγμάτα (άνθρακα), εκχύλισης με υγρό διαλύτη κύρια ;  
 [Το υγρό προϊόν της συμπύκνωσης ατμών που εκλύονται κατά την διάλυση άνθρακα είναι σε υγρό διαλύτη και το οποίο δράζει στην περιοχή από 30 °C ως 300 °C περίπου. Αποτελείται πρωτίστως από μερικώς υδρογονωμένους αρωματικούς υδρογονάνθρακες με συμπυκνωμένους δακτύλιους, αρωματικές ενώσεις που περιέχουν άζωτο, οξυγόνο και θείο και αλκυλο παράγωγά τους, με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>4</sub> ως C<sub>14</sub>.]
- EN** Distillates (coal), liq. solvent extn., primary ;  
 [The liquid product of condensation of vapors emitted during the digestion of coal in a liquid solvent and boiling in the range of approximately 30 °C to 300 °C (86 °F to 572 °F). Composed primarily of partly hydrogenated condensed-ring aromatic hydrocarbons, aromatic compounds containing nitrogen, oxygen and sulfur, and their alkyl derivatives having carbon numbers predominantly in the range of C<sub>4</sub> through C<sub>14</sub>.]
- FR** distillats primaires (charbon), extraction au solvant liquide ;  
 [Liquide produit par la condensation des vapeurs émises au cours de la décomposition du charbon dans un solvant liquide. Son point d'ébullition est approximativement compris entre 30 °C et 300 °C. Se compose principalement d'hydrocarbures aromatiques à noyaux condensés partiellement hydrogénés, de composés aromatiques contenant de l'azote, de l'oxygène et du soufre, et de leurs dérivés alkyles, dont le nombre de carbonnes se situe en majorité dans la gamme C<sub>4</sub>-C<sub>14</sub>.]
- IT** distillati (carbone), estrazione con solvente liquido, primaria ;  
 [Il prodotto liquido di condensazione dei vapori emessi durante la digestione del carbone in un solvente liquido e con un intervallo di ebollizione 30 °C-300 °C ca. Costituito principalmente da idrocarburi aromatici ad anelli condensati parzialmente idrogenati, composti aromatici contenenti azoto, ossigeno e zolfo, e loro alchil derivati con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>4</sub>-C<sub>14</sub>.]
- NL** destillaten (kool), primaire vloeibaar solvent-extractie ;  
 [Het vloeibare produkt van de condensatie van tijdens het oplossen van kool in een vloeibaar solvent uitgestote damp, met een kooktraject van ongeveer 30 °C tot 300 °C. Bestaat voornamelijk uit gedeeltelijk gehydrogeneerde aromatische koolwaterstoffen met gecondenseerde ringssystemen, aromatische verbindingen met stikstof, zuurstof en zwavel en de alkylderivaten daarvan, overwegend C<sub>4</sub> tot en met C<sub>14</sub>.]
- PT** destilados (carvão), primários da extracção com solvente ;  
 [O produto líquido da condensação de vapores libertos durante a digestão de carvão num solvente líquido e que destila no intervalo de aproximadamente 30 °C a 300 °C. É constituído principalmente por hidrocarbonetos aromáticos polinucleares hidrogenados, compostos aromáticos contendo azoto, oxigénio e enxofre, e seus derivados alquilo com números de átomos de carbono predominantemente na gama de C<sub>4</sub> ate C<sub>14</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


No 94114-53-1

EEC No 302-689-6

No 648-149-00-6

NOTA II

NOTA J

- ES: destilados (hulla), hidrocrackeados de la extracción con disolvente ;  
[Destilado obtenido por hidrocrackeo del extracto o solución de hulla producidos por la extracción con líquido disolvente o procesos de extracción con gas supercrítico y con un intervalo de ebullición aproximado de 30 °C a 300 °C. Compuesto principalmente de compuestos aromáticos, aromáticos hidrogenados y nafténicos, sus alquil derivados y alcanos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>6</sub> a C<sub>14</sub>. También están presentes compuestos aromáticos hidrogenados y compuestos aromáticos con nitrógeno, azufre y oxígeno.]
- DA: destillater (kul), solventekstraktion hydrokrakket ;  
[Destillat opnået ved hydrokrakning af kul-extrakt eller opløsning fremstillet ved flyende solventekstraktions- eller superkritisk gasekstraktionsprocesser, med koginterval omtrent fra 30 °C til 300 °C. Sammensat primært af aromatiske, hydrogenerede aromatiske og naphthenske forbindelser, deres alkylderivater og alkaner, overvejende C<sub>6</sub> til og med C<sub>14</sub>. Nitrogen-, svovl- og oxygenholdige aromatiske og hydrogenerede aromatiske forbindelser er også tilstede.]
- DE: Destillate (Kohle), flüssige Lösungsmittel-extraktion hydrogekrakkt ;  
[Destillat, das man durch Hydrokracken von Kohlenextrakt oder der Lösung erhält, die durch flüssige Lösungsmittel-extraktions- oder überkritische Gasekstraktionsverfahren entsteht und in einem Bereich von etwa 30 °C bis 300 °C siedet. Besteht in erster Linie aus aromatischen, hydrierten aromatischen und naphthenhaltigen Verbindungen, ihren Alkylderivaten und Alkanen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>6</sub> bis C<sub>14</sub>. Stickstoff-, Schwefel- und Sauerstoff -enthaltende aromatische und hydrierte aromatische Verbindungen sind auch vorhanden.]
- EL: απόσταγματα (άνθρακα), εκχύλισης με διαλύτη υδρογονοπυρολυμένα ;  
[Απόσταγμα που λαμβάνεται με υδρογονοπύρωση εκχυλίσματος ή διαλύματος άνθρακα το οποίο παράγεται με τη μέθοδο εκχύλισης με υγρό διαλύτη ή εκχύλισης με υπερκρίσιμο αέριο, και το οποίο θράζει στην περιοχή από 30 °C ως 300 °C περίπου. Αποτελείται πρωτίστως από αρωματικές υδρογονωμένες αρωματικές και ναφθενικές ενώσεις αλκυλο παραγωγά τους και αλκάνια με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>6</sub> ως και C<sub>14</sub>. Ενυπάρχουν, επίσης αρωματικές και υδρογονωμένες αρωματικές ενώσεις που περιέχουν άζωτο, θείο και οξυγόνο.]
- EN: Distillates (coal), solvent extn., hydrocracked ;  
[Distillate obtained by hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction process and boiling in the range of approximately 30 °C to 300 °C (86 °F to 572 °F). Composed primarily of aromatic, hydrogenated aromatic and naphthenic compounds, their alkyl derivatives and alkanes with carbon numbers predominantly in the range of C<sub>6</sub> through C<sub>14</sub>. Nitrogen, sulfur and oxygen-containing aromatic and hydrogenated aromatic compounds are also present.]
- FR: distillats d'hydrocraquage (charbon), extraction au solvant ;  
[Distillat obtenu par hydrocraquage d'extrait de charbon ou de la solution issue de l'extraction au solvant liquide ou au fluide supercritique. Son point d'ébullition est approximativement compris entre 30 °C et 300 °C. Se compose principalement de composés aromatiques, de composés nafténiques et aromatiques hydrogénés, de leurs dérivés alkylés et d'alcane dont le nombre de carbones se situe en majorité dans la gamme C<sub>6</sub> - C<sub>14</sub>. Contient également des composés aromatiques renfermant de l'azote, du soufre et de l'oxygène, et des composés aromatiques hydrogénés.]
- IT: distillati (carbone), idrocracking di estrazione con solvente ;  
[Distillati ottenuti per idrocracking di estratto di carbone o soluzione prodotta dai processi di estrazione con solvente liquido o di estrazione con gas supercritico e con un intervallo di ebollizione 30 °C-300 °C ca. Costituiti principalmente da composti aromatici, aromatici idrogenati e naftenici, loro alchil derivati ed alcani, os seus derivados alquilo e alcanos com números de átomos de carbono predominantemente na gama de C<sub>6</sub> até C<sub>14</sub>. Também estão presentes compostos aromáticos e aromático hidrogenados contendo azoto, enxofre e oxigênio.]
- NL: destillaten (kool) solvent-extractie met waterstof gekraakt ;  
[Destillaat, verkregen door het met waterstof kraken van kool-extrakt of de oplossing geproduceerd door het vloeibaar solvent extractie- of het superkritisch gas extractieproces met een kooktraject van ongeveer 30 °C tot 300 °C. Bestaat voornamelijk uit aromatische, gehydrogeneerde aromatische en naftenische verbindingen en alkylderivaten daarvan en alkanen, overwegend C<sub>6</sub> tot en met C<sub>14</sub>. Stikstof, zwavel en zuurstofbevattende aromatische en gehydrogeneerde aromatische verbindingen zijn eveneens aanwezig.]
- PT: destilados (carvão), do hidrocracking da extracção com solvente ;  
[Destilado obido por hidrocracking de extracto ou solução de carvão produzidos pelos processos de extracção com solvente líquido ou extracção com fluído supercrítico e que destila no intervalo de aproximadamente 30 °C a 300 °C. É constituído principalmente por compostos aromáticos, aromáticos hidrogenados e nafténicos, os seus derivados alquilo e alcanos com números de átomos de carbono predominantemente na gama de C<sub>6</sub> até C<sub>14</sub>. Também estão presentes compostos aromáticos e aromático hidrogenados contendo azoto, enxofre e oxigénio.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-34-2

EEC No 302-690-1

No 648-150-00-1

NOTA H

NOTA I


- ES:** nafta (hulla), hidrocrackeada de la extracción con disolvente ;  
[Fracción del destilado obtenido por hidrocrackeo del extracto o solución de hulla producidos por la extracción con líquido disolvente o por procesos de extracción con gas supercrítico y con un intervalo de ebullición aproximado de 30 °C a 180 °C. Compuesta principalmente de compuestos aromáticos, aromáticos hidrogenados y nafténicos, sus alquil derivados y alcanos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_9$ . También están presentes compuestos aromáticos hidrogenados y compuestos aromáticos con nitrógeno, azufre y oxígeno.]
- DA:** naphta (kul), solventekstraktion hydrokrakket ;  
[Fraktion af destillater opnået ved hydrokrækning af kul-ekstrakt eller opløsning fremstillet ved flydende solventekstraktions- eller superkritisk gasextraktionsprocesser, med koginterval omkring fra 30 °C til 180 °C. Sammensat primært af aromatiske, hydrogenerede aromatiske og naphtheniske forbindelser, deres alkylderivater og alkaner, overvejende  $C_4$  til  $C_9$ . Nitrogen-, svovl- og oxygenholdige aromatiske og hydrogenerede aromatiske forbindelser er også tilstede.]
- DE:** Naphtha (Kohle), Lösungsmittelextraktion hydrogekrakkt ;  
[Fraktion des Destillates, das man durch Hydrokracken von Kohlenextrakt oder der Lösung erhält, die durch flüssige Lösungsmittelextraktions- oder überkritische Gasextraktionsverfahren entsteht und in einem Bereich von etwa 30 °C bis 180 °C siedet. Besteht in erster Linie aus aromatischen, hydrierten aromatischen und naphthenhaltigen Verbindungen, ihren Alkylderivaten und Alkanen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_9$ . Stickstoff-, Schwefel- und Sauerstoff-enhaltende aromatische und hydrierte aromatische Verbindungen sind auch vorhanden.]
- EL:** ναφθα (άνθρακας), εκχύλισης με διαλύτη υδρογονοπυρολυμένη ;  
[Κλάσμα του αποστάγματος που λαμβάνεται με υδρογονοπυρόλυση εκχύλισματος ή διαλύματος άνθρακα το οποίο παράγεται με μέθοδο εκχύλισης με υγρό διαλύτη ή εκχύλισης με υπερκρίσιμο αέριο και το οποίο θράβει στην περιοχή από 30 °C ως 180 °C περίπου. Αποτελείται πρωτίστως από αρωματικές, υδρογονομένες αρωματικές και ναφθενικές ενώσεις, αλκυλο παραγωγά τους και αλκάνια με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_9$ . Ενυπάρχουν, επίσης, αρωματικές και υδρογονωμένες αρωματικές ενώσεις που περιέχουν άζωτο, θείο και οξυγόνο.]
- EN:** Naphtha (coal), solvent extn., hydrocracked ;  
[Fraction of the distillate obtained by hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 30 °C to 180 °C (86 °F to 356 °F). Composed primarily of aromatic, hydrogenated aromatic and naphthenic compounds, their alkyl derivatives and alkanes with carbon numbers predominantly in the range of  $C_4$  to  $C_9$ . Nitrogen, sulfur and oxygen-containing aromatic and hydrogenated aromatic compounds are also present.]
- FR:** naphta d'hydrocraquage (charbon), extraction au solvant ;  
[Fraction du distillat obtenue par hydronafrage de l'extrait de charbon ou de la solution issue de l'extraction au solvant liquide ou au fluide supercritique. Son point d'ébullition est approximativement compris entre 30 °C et 180 °C. Se compose principalement de composés aromatiques, hydrogénés ou non, de composés naphthéniques, de leurs dérivés alkylés et d'alcane dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_9$ . Contient également des composés aromatiques hydrogénés et des composés aromatiques renfermant de l'azote, du soufre et de l'oxygène.]
- IT:** nafta (carbone), estrazione con solvente da idrocracking ;  
[Frazione del distillato ottenuto per idrocracking di estratto di carbone o soluzione prodotta dai processi di estrazione con solvente liquido o di estrazione con gas supercritico e con un intervallo di ebollizione 30 °C-180 °C ca. Costituita principalmente da composti aromatici, aromatici idrogenati e naftenici, loro alchil derivati ed alcani con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_9$ . Sono anche presenti composti aromatici ed aromatici idrogenati contenenti azoto, zolfo e ossigeno.]
- NL:** nafta (kool), solventextractie met waterstof gekraakt ;  
[Fractie van het destillaat verkregen door het met waterstof kraken van koolextract of de oplossing geproduceerd door het vloeibaar solvent extractie- of het superkritisch gas extractieproces met een kooktraject van ongeveer 30 °C tot 180 °C. Bestaat voornamelijk uit aromatische, gehydrogeneerde aromatische en naftenische verbindingen en alkylderivaten daarvan en alkanen, overwegend  $C_4$  tot en met  $C_9$ . Stikstof, zwavel en zuurstofbevattende aromatische en gehydrogeneerde aromatische verbindingen zijn eveneens aanwezig.]
- PT:** nafta (carvão), do hidrocracking da extração com solvente ;  
[Fracção do destilado obtido por hidrocracking de extracto ou solução de carvão produzidos pelos processos de extração com solvente líquido ou extração com fluido supercrítico e que destila no intervalo de aproximadamente 30 °C a 180 °C. É constituída principalmente por compostos aromáticos, aromáticos hidrogenados e nafténicos, os seus derivados alquílo e alcanos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_9$ . Também estão presentes compostos aromáticos e aromáticos hidrogenados contendo azoto, enxofre e oxigénio.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-55-3

EEC No 302-691-7

No 648-151-00-7

NOTA H

NOTA J

- ES: gasolina, extracción de hulla con disolvente, nafta hidrocraqueada ;  
[Combustible de motor producido por el reformado de la fracción de nafta refinada de los productos del hidrocrqueo del extracto o solución de hulla producidos por la extracción con liquido disolvente o por procesos de extracción con gas supercrítico y con un intervalo de ebullición aproximado de 30 °C a 180 °C. Compuesto principalmente de hidrocarburos aromáticos y nafténicos, sus alquil derivados e hidrocarburos alquílicos con un número de carbonos dentro del intervalo de C<sub>4</sub> a C<sub>12</sub>.]
- DA: benzin, kul solventekstraktion, hydrokrakket naphtha ;  
[Motorbrændstof fremstillet ved reformering af den raffinerede naphthafraktion fra produkterne fra hydrokrakning af kulekstrakt eller opløsning, fremstillet ved flydende solventekstraktions- eller superkritisk gasekstraktionsprocesser, med koginterval omtrent fra 30 °C til 180 °C. Sammenlæt primært af aromatiske og naphtheniske carbonhydrider, deres alkylderivater og alkylcarbonhydrider, C<sub>4</sub> til og med C<sub>12</sub>.]
- DE: Benzin, Kohle Lösungsmittel-extraktion, hydrogekrackte Naphtha ;  
[Motorbrennstoff, der durch Reformieren der aufbereiteten Naphtha-Fraktion der Produkte aus dem Hydrokracken von Kohlenextrakt oder der Lösung entsteht, die durch flüssige Lösungsmittel-extraktions- oder überkritische Gasextraktionsverfahren entsteht und in einem Bereich von etwa 30 °C bis 180 °C siedet. Besteht in erster Linie aus aromatischen und naphthenhaltigen Kohlenwasserstoffen, ihren Alkylderivaten und aus Alkylkohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von C<sub>4</sub> bis C<sub>12</sub>.]
- EL: βενζίνη, εκχύλισης άνθρακα με διαλύτη, υδρογονοκατεργασμένης νάφθας ;  
[Καύσιμο κινητήρα που παράγεται από την αναμόρφωση του κλάσματος διλλισμένης νάφθας των προϊόντων υδρογονοπυρόλυσης διαλύματος ή εκχύλισης άνθρακα που παράγονται με μεθόδους εκχύλισης με υγρό διαλύτη ή εκχύλισης με υπερκρίσιμο αέριο και το οποίο βράζει στην περιοχή από 30 °C ως 180 °C περίπου. Αποτελείται πρωτίστως από αρωματικούς και ναφθενικούς υδρογονάνθρακες, αλκυλο παραγωγά τους και αλκυλο υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από C<sub>4</sub> ως και C<sub>12</sub>.]
- EN: Gasoline, coal solvent extn., hydrocracked naphtha ;  
[Motor fuel produced by the reforming of the refined naphtha fraction of the products of hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 30 °C to 180 °C (86 °F to 356 °F). Composed primarily of aromatic and naphthenic hydrocarbons, their alkyl derivatives and alkyl hydrocarbons having carbon numbers in the range of C<sub>4</sub> through C<sub>12</sub>.]
- FR: essence, extraction au solvant de charbon, naphtha d'hydrocraquage ;  
[Carburant produit par reformage de la fraction naphtha raffinée des produits d'hydrocraquage de l'extrait de charbon ou de la solution issue de l'extraction au solvant liquide ou au fluide supercritique. Son point d'ébullition est approximativement compris entre 30 °C et 180 °C. Se compose principalement d'hydrocarbures aromatiques et naphthéniques, de leurs dérivés alkylés et d'hydrocarbures alkylés dont le nombre de carbones se situe en majorité dans la gamme C<sub>4</sub>-C<sub>12</sub>.]
- IT: benzina, estrazione del carbone con solvente, nafta da idrocracking ;  
[Carburante per motori prodotto da reforming della frazione nafta raffinata dei prodotti da idrocracking di estratto di carbone o soluzione prodotta dai processi di estrazione con solvente liquido o di estrazione con gas supercritico e con un intervallo di ebollizione 30 °C-180 °C ca. Costituiti principalmente da idrocarburi aromatici e naftenici, loro alchil derivati ed alchil idrocarburi con un numero di atomi di carbonio nell'intervallo C<sub>4</sub>-C<sub>12</sub>.]
- JL: gasolie, kool solventextractie, met waterstof gekraakte nafta ;  
[Motorbrandstof, geproduceerd door het omvormen van de gezuiverde naftafractie van de produkten van het met waterstof kraken van koolextract of de oplossing geproduceerd door het vloeibaar solvent extractie- of het superkritisch gas extractieproces, met een kooktraject van ongeveer 30 °C tot 180 °C. Bestaat voornamelijk uit aromatische en naftenische verbindingen en alkylderivaten daarvan en alkylkoolwaterstoffen, overwegend C<sub>4</sub> tot en met C<sub>12</sub>.]
- P: gasolina, da extracção de carvão com solvente, da nafta do hidrocracking ;  
[Combustível para motores produzido pelo reforming da fracção de nafta refinada dos produtos do hidrocracking de extracto ou solução de carvão produzidos pelos processos de extracção com solvente liquido ou extracção com fluido supercrítico e que destila no intervalo de aproximadamente 30 °C a 180 °C. É constituído principalmente por hidrocarbonetos aromáticos e nafténicos, os seus derivados alquilo e alquil hidrocarbonetos com números de átomos de carbono predominantemente na gama de C<sub>4</sub> até C<sub>12</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-56-4

EEC No 302-692-2

No 648-152-00-2

NOTA H

NOTA I

- ES: destilados (hulla), fracción intermedia hidrocraqueada de la extracción con disolvente ;  
[Destilado obtenido del hidrocrackeo del extracto o solución de hulla producidos por la extracción con líquido disolvente o por procesos de extracción con gas supercrítico y con un intervalo de ebullición aproximado de 180 °C a 300 °C. Compuesto principalmente de compuestos aromáticos con dos anillos, aromáticos hidrogenados y nafténicos, sus alquil derivados y alcanos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{14}$ . También están presentes compuestos con nitrógeno, azufre y oxígeno.]
- DA: destillater (kul), solventekstraktion hydrokrakkede middeltinge ;  
[Destillat opnået ved hydrokraking af kul-ekstrakt eller opløsning, fremstillet ved flydende solventekstraktions- eller superkritisk gasextraktionsprocesser, med koginterval omtrent fra 180 °C til 300 °C. Sammesat primært af bicycliske aromatiske, hydrogenerede aromatiske og naphtheniske forbindelser, deres alkylderivater og alkaner, overvejende  $C_6$  til og med  $C_{14}$ . Nitrogen-, svovl- og oxygenholdige forbindelser er også tilstede.]
- DE: Destillate (Kohle), Lösungsmittelextraktion hydrogekrackte mittlere ;  
[Destillat, das man durch Hydrokracken von Kohlenextrakt oder der Lösung erhält, die durch flüssige Lösungsmittelextraktions- oder überkritische Gasextraktionsverfahren entsteht und in einem Bereich von etwa 180 °C bis 300 °C siedet. Besteht in erster Linie aus aromatischen Verbindungen mit zwei Ringen, hydrierten aromatischen und naphthenhaltigen Verbindungen, ihren Alkylderivaten und Alkanen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{14}$ . Stickstoff-, Schwefel- und Sauerstoff-enthaltende Verbindungen sind auch vorhanden.]
- EL: αποστάγματα (άνθρακα), εκχύλισης με διαλύτη υδρογονοπυρολυμένα μεσαία ;  
[Απόσταγμα που λαμβάνεται από την υδρογονοπυρόλυση διαλύματος ή εκχύλισματος άνθρακα που παράγεται με μεθόδους εκχύλισης με υγρό διαλύτη ή εκχύλισης με υπερκρίσιμο αέριο και το οποίο δράζει στην περιοχή από 180 °C ως 300 °C περίπου. Αποτελείται πρωτίστως από αρωματικές με δύο δακτυλίους, υδρογονωμένες αρωματικές και ναφθενικές ενώσεις, αλκύλιο παράγωγά τους και αλκάνια, που έχουν αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  και  $C_{14}$ . Ενυπάρχουν επίσης ενώσεις που περιέχουν άζωτο, θείο και οξυγόνο.]
- EN: Distillates (coal), solvent extn., hydrocracked middle ;  
[Distilla obtained from the hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 180 °C to 300 °C (356 °F to 572 °F). Composed primarily of two-ring aromatic, hydrogenated aromatic and naphthenic compounds, their alkyl derivatives and alkanes having carbon numbers predominantly in the range of  $C_6$  through  $C_{14}$ . Nitrogen, sulfur and oxygen-containing compounds are also present.]
- FR: distillats moyens d'hydrocraquage (charbon), extraction au solvant ;  
[Distillat obtenu par hydrocraquage de l'extract de charbon ou de la solution issue de l'extraction au solvant liquide ou au fluide supercritique. Son point d'ébullition est approximativement compris entre 180 °C et 300 °C. Se compose principalement de composés aromatiques bicycliques, de composés naphthéniques et aromatiques hydrogénés, de leurs dérivés alkylés et d'alcane dont le nombre de carbones se situe en majorité dans la gamme  $C_6$  -  $C_{14}$ . Contient également des composés azotés, soufrés et oxygénés.]
- IT: distillati (carbone), frazione intermedia di idrocracking di estrazione con solvente ;  
[Distillato ottenuto per idrocracking di estratto di carbone o soluzione prodotta dai processi di estrazione con solvente liquido o di estrazione con gas supercritico e con un intervallo di ebollizione 180 °C-300 °C ca. Costituito principalmente da aromatici a due anelli, aromatici idrogenati e naftenici, loro alchil derivati ed alcani con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$  -  $C_{14}$ . Sono anche presenti composti contenenti azoto, zolfo e ossigeno.]
- NL: destillaten (kool), solventextractie met waterstof gekraakte middenfractie ;  
[Destillaat, verkregen door het met waterstof kraken van koolextract of de oplossing geproduceerd door het vloeibaar solvent extractie- of het superkritisch gas extractieproces, met een kooktraject van ongeveer 180 °C tot 300 °C. Bestaat voornamelijk uit aromatische verbindingen met twee ringen, gehydrogeneerde aromatische en naftenische verbindingen en alkylderivaten daarvan en alkanen, overwegend  $C_6$  tot en met  $C_{14}$ . Stikstof, zwavel en zuurstof bevattende verbindingen zijn eveneens aanwezig.]
- PT: destilados (carvão), médios do hidrocracking da extração com solvente ;  
[Destilado obtido do hidrocracking de extracto ou solução de carvão produzidos pelos processos de extração com solvente líquido ou extração com fluido supercrítico e que destila no intervalo de aproximadamente 180 °C a 300 °C. É constituído principalmente por compostos aromáticos bicíclicos, aromáticos hidrogenados e nafténicos, os seus derivados alquílo e alcanos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{14}$ . Também estão presentes compostos contendo azoto, enxofre e oxigénio.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-57-5

EEC No 302-693-8

No 648-153-00-8

NOTA H

NOTA J

- ES: destilados (hulla), fracción intermedia hidrogenada hidrocraqueada de la extracción con disolvente ;  
[Destilado de la hidrogenación del destilado intermedio hidrocraqueado del extracto o solución de hulla producidos por la extracción con líquido disolvente o por procesos de extracción con gas supercrítico y con un intervalo de ebullición aproximado de 180 °C a 280 °C. Compuesto principalmente de compuestos carbonados hidrogenados con dos anillos y sus alquil derivados con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{14}$ .]
- DA: destillater (kul), solventekstraktion hydrokrakkede hydrogenerede middeltunge ;  
[Destillat fra hydrogeneringen af et hydrokrakket middeltungt destillat fra kul-ekstrakt eller opløsning, fremstillet ved flydende solventekstraktions- eller superkritisk gasextraktionsprocesser, med koginterval omtrent fra 180 °C til 280 °C. Sammensat primært af hydrogenerede, bicycliske carbonforbindelser og deres alkylderivater, overvejende  $C_6$  til og med  $C_{14}$ .]
- DE: Destillate (Kohle), Lösungsmittelextraktion hydrogekrackte hydrierte mittlere ;  
[Destillat aus der Hydrierung von hydrogekracktem mittleren Destillat aus Kohlenextrakt oder der Lösung, die durch flüssige Lösungsmittelextraktions- oder überkritische Gasextraktionsverfahren entsteht und in einem Bereich von etwa 180 °C bis 280 °C siedet. Besteht in erster Linie aus hydrierten Kohlenstoffverbindungen mit zwei Ringen und ihren Alkylderivaten mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{14}$ .]
- EL: αποστάγματα (άνθρακα), εκχύλισης με διαλύτη υδρογονοπυρολυμένα υδρογονωμένα μεσαία·  
[Αποστάγμα από την υδρογόνωση υδρογονοπυρολυμένου μεσαίου αποστάγματος από εκχύλισμα ή διάλυμα άνθρακα που παράγεται με μεθόδους εκχύλισης με υγρό διαλύτη ή εκχύλισης με υπερκρίσιμο αέριο, και το οποίο βράζει στην περιοχή από 180 °C ως 280 °C περίπου. Αποτελείται πρωτίστως από υδρογονωμένους υδρογονάνθρακες με δύο δακτυλίους και άλκυλο παραγωγά τους με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  ως και  $C_{14}$ .]
- EN: Distillates (coal), solvent extn., hydrocracked hydrogenated middle ;  
[Distillate from the hydrogenation of hydrocracked middle distillate from coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 180 °C to 280 °C (356 °F to 536 °F). Composed primarily of hydrogenated two- ring carbon compounds and their alkyl derivatives having carbon numbers predominantly in the range of  $C_6$  through  $C_{14}$ .]
- FR: distillats moyens d'hydrocraquage (charbon), extraction au solvant, hydrogénés ;  
[Produit issu de l'hydrogénation du distillat moyen d'hydrocraquage de l'extrait de charbon ou de la solution issue de l'extraction au solvant liquide ou au fluide supercritique. Son point d'ébullition est approximativement compris entre 180 °C et 280 °C. Se compose principalement de composés bicycliques hydrogénés du carbone et de leurs dérivés alkylés dont le nombre de carbones se situe en majorité dans la gamme  $C_6$ - $C_{14}$ .]
- IT: distillati (carbone), frazione intermedia idrogenata di idrocracking di estrazione con solvente ;  
[Distillato dall'idrogenazione del distillato intermedio da idrocracking da estratto di carbone o soluzione prodotta dai processi di estrazione con solvente liquido o di estrazione con gas supercritico e con un intervallo di ebollizione 180 °C-280 °C ca. Costituito principalmente da composti idrogenati a due anelli e loro alchil derivati con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{14}$ .]
- NL: destillaten (kool), solventextractie met waterstof gekraakte gehydrogeneerde middenfractie ;  
[Destillaat, verkregen door de hydrogenering van de met waterstof gekraakte middenfractie van koolextract of de oplossing geproduceerd door het vloeibaar solvent extractie- of het superkritisch gas extractieproces, met een kooktraject van ongeveer 180 °C tot 280 °C. Bestaat voornamelijk uit gehydrogeneerde aromatische verbindingen met twee ringen en alkylderivaten daarvan en alkanen, overwegend  $C_6$  tot en met  $C_{14}$ .]
- PT: destilados (carvão), médios hidrogenados do hidrocracking da extração com solvente ;  
[Destilado da hidrogenação do destilado médio do hidrocracking do extracto ou solução de carvão produzidos pelos processos de extração com solvente líquido ou extração com fluido supercrítico e que destila no intervalo de aproximadamente 180 °C a 280 °C. É constituído principalmente por compostos de carbono bicíclicos hidrogenados e pelos seus derivados alquila com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{14}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 94114-58-6

EEC No 302-694-3

No 648-154-00-3

## NOTA H


- ES: combustibles, avión a reacción, extracción de hulla con disolvente, hidrogenados hidrocracados ;  
[Combustible de motor a reacción producido por hidrogenación de la fracción intermedia del destilado de los productos del hidrocrackeo del extracto o solución de hulla producidos por la extracción con líquido disolvente o por procesos de extracción con gas supercrítico y con un intervalo de ebullición aproximado de 180 °C a 225 °C. Compuesto principalmente de hidrocarburos hidrogenados con dos anillos y sus alquil derivados con un número de carbonos en su mayor parte dentro del intervalo de C<sub>10</sub> a C<sub>12</sub>.]
- DA: brændstoffer, jettfly, kulsolventekstraktion, hydrokrakkede hydrogenerede ;  
[Jetmotorbrændstof fremstillet ved hydrogenering af den middeltunge destillationsfraktion fra produkterne fra hydrokrakning af kul-ekstrakt eller opløsning, fremstillet ved flydende solventekstraktions- eller superkritisk gasekstraktionsprocesser, med koges- interval omtrent fra 180 °C til 225 °C. Sammensat primært af hydrogenerede, bicycliske carbonhydrider og deres alkylderivater, overvejende C<sub>10</sub> til og med C<sub>12</sub>.]
- DE: Brennstoffe, Düsenflugzeug, Kohle Lösungsmittlextraktion, hydrogekrackte hydrierte ;  
[Düsenantriebsbrennstoff, hergestellt durch Hydrierung der Mitteldestillat-Fraktion der Hydrokrackprodukte von Kohlenextrakt oder der Lösung, die durch flüssige Lösungsmittlextraktions- oder überkritische Gasextraktionsverfahren entsteht und in einem Bereich von etwa 180 °C bis 225 °C siedet. Besteht in erster Linie aus hydrierten Kohlenstoffverbindungen mit zwei Ringen und ihren Alkylderivaten mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>10</sub> bis C<sub>12</sub>.]
- EL: καυσίμοι, αεριωθούμενων αεροπλάνων, εκχύλισης άνθρακα με διαλύτη, υδρογονοπυρολυμένα υδρογονωμένα ;  
[Καύσιμο μηχανής αεριωθούμενου που παράγεται με υδρογόνωση του κλάσματος μεσαίου αποστάγματος των προϊόντων υδρογονοπυρόλυσης εκχυλίσματος ή διαλύματος άνθρακα που παράγεται με μεθόδους εκχύλισης με υγρό διαλύτη ή εκχύλισης με υπερκρίσιμο αέριο, και το οποίο βρίσκεται στην περιοχή από 180 °C ως 225 °C περίπου. Αποτελείται πρωτίστως από υδρογονωμένους υδρογονάνθρακες με δύο δακτύλιους και αλκυλο παράγωγά τους με αριθμό ατόμων άνθρακα στην περιοχή από C<sub>10</sub> ως C<sub>12</sub>.]
- EN: Fuels, jet aircraft, coal solvent extrn., hydrocracked hydrogenated ;  
[Jet engine fuel produced by hydrogenation of the middle distillate fraction of the products of hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 180 °C to 225 °C (356 °F to 473 °F). Composed primarily of hydrogenated two-ring hydrocarbons and their alkyl derivatives having carbon numbers predominantly in the range of C<sub>10</sub> through C<sub>12</sub>.]
- FR: carburéacteurs pour avion, extraction au solvant de charbon, hydrocraquage, hydrogénation ;  
[Carburéacteur produit par hydrogénation de la fraction distillat moyen des produits d'hydrocraquage de l'extract de charbon ou de la solution issue de l'extraction au solvant liquide ou au fluide supercritique. Son point d'ébullition est approximativement compris entre 180 °C et 225 °C. Se compose principalement d'hydrocarbures bicycliques hydrogénés et de leurs dérivés alkylés dont le nombre de carbones se situe en majorité dans la gamme C<sub>10</sub>-C<sub>12</sub>.]
- IT: carburanti, aerei a reazione, estrazione del carbone con solvente, idrogenati da idrocracking ;  
[Carburante per motori a reazione prodotto per idrogenazione della frazione intermedia del distillato dei prodotti di idrocracking da estratto di carbone o soluzione prodotta dai processi di estrazione con solvente liquido o di estrazione con gas supercritico e con un intervallo di ebollizione 180 °C-225 °C ca. Costituito principalmente da idrocarburi idrogenati a due anelli e loro alchil derivati con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>10</sub>-C<sub>12</sub>.]
- NL: brandstoffen, straaltvliegtuig, kool solventextractie, met waterstof gekraakt gehydrogeneerd ;  
[Straalmotorbrandstof, geproduceerd door hydrogenering van de destillatmiddenfractie van de produkten van het met waterstof kraken van een koolextract, of de oplossing geproduceerd door een vloeibaar solventextractie- of een superkritisch gasextractie-proces, met een kooktraject van ongeveer 180 °C tot 225 °C. Bestaat voornamelijk uit gehydrogeneerde koolwaterstoffen met twee ringen en alkylderivaten daarvan, overwegend C<sub>10</sub> tot en met C<sub>12</sub>.]
- PT: combustíveis, aviões a jacto, da extração do carvão com solvente, hidrogenados do hidrocracking ;  
[Combustível para motores a jacto produzido por hidrogenação da fração de destilado média dos produtos do hidrocracking de extracto ou solução de carvão produzidos pelos processos de extração com solvente líquido ou extração com fluido e supercrítico que destila no intervalo de aproximadamente 180 °C a 225 °C. É constituído principalmente por hidrocarbonetos binucleares hidrogenados e seus derivados alquilo com números de carbono predominantemente na gama de C<sub>10</sub> até C<sub>12</sub>.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 3 ; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 40 S : (2-)36/37

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 94114-59-7

EEC No 302-695-9

No 648-155-00-9

## NOTA H

- ES: combustibles, diesel, extracción de hulla con disolvente, hidrogenados, hidrocraqueados ;  
[Combustible de motor diesel producido por la hidrogenación de la fracción intermedia del destilado de los productos del hidrocrackeo del extracto o solución de hulla producidos por la extracción con líquido disolvente o por procesos de extracción con gas supercrítico y con un intervalo de ebullición aproximado de 200 °C a 280 °C. Compuesto principalmente de hidrocarburos hidrogenados con dos anillos y sus alquil derivados con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{14}$ .]
- DA: brændstoffer, diesel- kul solventekstraktion, hydrokrakkede hydrogenerede ;  
[Dieselmotorbrændstof fremstillet ved hydrogenering af den middeltunge destillationsfraktion fra produkterne fra hydrokrakning af kulekstrakt eller opløsning, fremstillet ved flydende solventekstraktions- eller superkritisk gasekstraktionsprocesser, med koges- interval omtrent fra 200 °C til 280 °C. Sammensat primært af hydrogenerede, bicycliske carbonhydrider og deres alkylderivater, overvejende  $C_{11}$  til og med  $C_{14}$ .]
- DE: Brennstoffe, Diesel, Kohle Lösungsmittelextraktion, hydrogekrackte hydrierte ;  
[Dieselmotorsbrennstoff, hergestellt durch Hydrierung der Mitteldestillat-Fraktion der Hydrokrackprodukte von Kohlenextrakt oder der Lösung, die durch flüssige Lösungsmittelextraktions- oder überkritische Gasextraktionsverfahren entsteht und in einem Bereich von etwa 200 °C bis 280 °C siedet. Besteht in erster Linie aus hydrierten Kohlenstoffverbindungen mit zwei Ringen und ihren Alkylderivaten mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{14}$ .]
- EL: καύσιμα, ντίζελ, εκχύλισης άνθρακα με διαλύτη, υδρογονοπυρολυμένα υδρογονωμένα ;  
[Καύσιμο μηχανής ντίζελ που παράγεται με την υδρογόνωση του κλάσματος μεσαίου αποστάγματος των προϊόντων υδρογονοπύρωσης εκχυλίσματος ή διαλύματος άνθρακα που παράγεται με μεθόδους εκχύλισης με υγρό διαλύτη ή εκχύλισης με υπερκρίσιμο αέριο, και το οποίο βράζει στην περιοχή από 200 °C ως 280 °C περίπου. Αποτελείται πρωτίστως από υδρογονωμένους υδρογονάνθρακες με δύο δακτυλίους και αλκύλο παράγωγά τους με αριθμό ατόμων άνθρακα κυρίως, στην περιοχή από  $C_{11}$  ως και  $C_{14}$ .]
- EN: Fuels, diesel, coal solvent extrn., hydrocracked hydrogenated ;  
[Diesel engine fuel produced by the hydrogenation of the middle distillate fraction of the products of hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 200 °C to 280 °C (392 °F to 536 °F). Composed primarily of hydrogenated two-ring hydrocarbons and their alkyl derivatives having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{14}$ .]
- FR: combustibles diesels, extraction au solvant de charbon, hydrocraquage, hydrogénation ;  
[Combustible diesel produit par hydrogénation de la fraction distillat moyen des produits d'hydrocraquage de l'extrait de charbon ou de la solution issue de l'extraction au solvant liquide ou au fluide supercritique. Son point d'ébullition est approximativement compris entre 200 °C et 280 °C. Se compose principalement d'hydrocarbures bicycliques hydrogénés et de leurs dérivés alkylés dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{14}$ .]
- IT: carburanti, diesel, estrazione del carbone con solvente, idrogenati da idrocracking ;  
[Carburante per motori diesel prodotto per idrogenazione della frazione intermedia del distillato dei prodotti di idrocracking da estratto di carbone o soluzione prodotta dai processi di estrazione con solvente liquido o di estrazione con gas supercritico e con un intervallo di ebollizione 200 °C-280 °C ca. Costituito principalmente da idrocarburi idrogenati a due anelli e loro alchil derivati con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{14}$ .]
- NL: brandstoffen, diesel, kool solventextractie, met waterstof gekraakt gehydrogeneerd ;  
[Dieselmotorbrandstof, geproduceerd door hydrogenering van de destillatiemiddenfractie van de produkten van het met waterstof kraken van een koolextract, of de oplossing geproduceerd door een vloeibaar solventextractie- of een superkritisch gasextractie-proces, met een kooktraject van ongeveer 200 °C tot 280 °C. Bestaat voornamelijk uit gehydrogeneerde koolwaterstoffen met twee ringen en alkylderivaten daarvan, overwegend  $C_{11}$  tot en met  $C_{14}$ .]
- PT: combustíveis, diesel, da extracção do carvão com solvente, hidrogenados do hidrocracking ;  
[Combustível para motores diesel produzido pela hidrogenação da fracção de destilado média dos produtos do hidrocracking de extracto ou solução de carvão produzido pelos processos de extracção com solvente líquido ou extracção com fluido supercrítico e que destila no intervalo de aproximadamente 200 °C a 280 °C. É constituído principalmente por hidrocarbonetos bicíclicos hidrogenados e os seus derivados alquila com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{14}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 3 ; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Kotulagem*

Xn



R : 40

S : (2-)36/37

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90641-11-5

EEC No 292-635-7

No 648-156-00-4

NOTA H

NOTA J

- ES aceite ligero (hulla), proceso de semi-coquización ; Aceite ligero  
[Líquido orgánico volátil condensado del gas desprendido en la destilación destructiva de hulla a baja temperatura (menos de 700 °C). Compuesto principalmente de hidrocarburos de  $C_{6-10}$ .]
- DA letolie (kul), halvforkokningsproces ; Frisk olie  
[Den flygtige organiske væske kondenseret fra gassen udviklet ved lavtemperatur (lavere end 700 °C) destruktiv destillation af kul. Sammensat primært af  $C_{6-10}$ -carbonhydrider.]
- DE Leichtöl (Kohle), Halbverkokungsverfahren ; Leichtöl  
[Flüchtige organische Flüssigkeit, die aus dem bei der Niedrigtemperatur-(weniger als 700 °C)- Entgasung ausströmenden Gas kondensiert. Besteht in erster Linie aus  $C_{6-10}$ -Kohlenwasserstoffen.]
- EL ελαφό έλαιο (άνθρακα), κατεργασίας ημικοκποίησης ; Καθαρό πετρέλαιο  
[Το πτητικό οργανικό υγρό που συμπυκνώνεται από το αέριο το οποίο εκλύεται κατά την ξηρά απόσπαση άνθρακα σε χαμηλή θερμοκρασία (μικρότερη από 700 °C). Αποτελείται κυρίως από υδρογονάνθρακες με  $C_{6-10}$ .]
- EN Light oil (coal), semi-coking process ; Fresh oil  
[The volatile organic liquid condensed from the gas evolved in the low temperature (less than 700 °C (1 292 °F) destructive distillation of coal. Composed primarily of  $C_{6-10}$  hydrocarbons.]
- FR huile légère (charbon), semi-cokéfaction ; Huile fraîche  
[Liquide organique volatil obtenu par condensation des gaz dégagés par la distillation destructive du charbon à basse température (au-dessous de 700 °C). Se compose principalement d'hydrocarbures en  $C_{6-10}$ .]
- IT olio leggero (carbone), processo semi-coking ; Olio fresco  
[Liquido organico volatile condensato dal gas evoluto nella distillazione distruttiva del carbone a bassa temperatura (meno di 700 °C). Costituito prevalentemente da idrocarburi  $C_{6-10}$ .]
- NL lichte olie (kool), semi-verkooksing-proces ; Lichte olie  
[De vluchtige organische vloeistof die wordt gecondenseerd uit het gas dat vrijkomt bij de destructieve destillatie van kool bij lage temperatuur (minder dan 700 °C). Voornamelijk samengesteld uit  $C_{6-10}$ -koolwaterstoffen.]
- PT óleo leve (carvão), processo de semi-coking ; Óleo fresco  
[O líquido orgânico volátil condensado do gás libertado na destilação destrutiva do carvão a temperatura baixa (inferior a 700 °C). É constituído principalmente por hidrocarbonicos em  $C_{6-10}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-03-6

EEC No 265-102-1

No 649-001-00-3

ES extractos (petróleo), destilado nafténico ligero extraído con disolventes

DA ekstrakter (råolie), let naphthendestillat solvent

DE Extrakte (Erdöl), leichte naphthenhaltige Destillat-Lösungsmittel

EL εκχυλίσματα (πετρελαίου), ελαφρύ ναφθενικό απόσταγμα εκχυλισμένο με διαλύτη

EN Extracts (petroleum), light naphthenic distillate solvent

FR extraits au solvant (pétrole), distillat naphthénique léger

IT estratti (petrolio), frazione naftenica leggera distillata con solvente

NL extracten (aardolie), licht naftenen. bodend destillaat-solvent

PT extractos (petróleo), de solvente de destilado nafténico leve

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem



Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 64742-04-7

EEC No 265-103-7

No 649-002-00-9

ES: extractos (petróleo), destilado parafínico pesado extraído con disolvente  
 DA: ekstrakter (råolie), tungt paraffindestillat solvent  
 DE: Extrakte (Erdöl), schwere paraffinhaltige Destillat-Lösungsmittel  
 EL: εκχυλίσματα (πετρελαίου), βαρύ παραφινικό απόσταγμα εκχυλισμένο με διαλύτη  
 EN: Extracts (petroleum), heavy paraffinic distillate solvent  
 FR: extraits au solvant (pétrole), distillat paraffinique lourd  
 IT: estratti (petrolio), frazione paraffinica pesante distillata con solvente  
 NL: extracten (aardolie), zwaar paraffinehoudend destillaat-solvent  
 PT: extractos (petróleo), de solvente de destilado parafínico pesado

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 64742-05-8

EEC No 265-104-2


No 649-003-00-4

ES: extractos (petróleo), destilado parafínico ligero ligero extraído con disolvente  
 DA: ekstrakter (råolie), let paraffindestillat solvent  
 DE: Extrakte (Erdöl), leichte paraffinhaltige Destillat-Lösungsmittel  
 EL: εκχυλίσματα (πετρελαίου), ελαφρύ παραφινικό απόσταγμα εκχυλισμένο με διαλύτη  
 EN: Extracts (petroleum), light paraffinic distillate solvent  
 FR: extraits au solvant (pétrole), distillat paraffinique léger  
 IT: estratti (petrolio), frazione paraffinica leggera distillata con solvente  
 NL: extracten (aardolie), lichte paraffinehoudend destillaat-solvent  
 PT: extractos (petróleo), de solvente de destilado parafínico leve

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits.  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 64742-11-6

EEC No 265-111-0

No 649-004-00-X

ES: extractos (petróleo), destilado nafténico pesado estraido con disolvente

DA: ekstrakter (råolie), tungt naphthendestillat solvent

DE: Extrakte (Erdöl), schwere naphthenhaltige Destillat-Lösungsmittel

EL: εκχυλίσματα (πετρελαίου), από βαρύ ναφθενικό απόσταγμα εκχυλισμένο με διαλύτη

EN: Extracts (petroleum), heavy naphthenic distillate solvent

FR: extraits au solvant (pétrole), distillat naphthénique lourd

IT: estratti (petrolio), distillato naftenico pesante da solvente

NL: extracten (aardolie), zwaar nafteenhoudend destillaat-solvent

PT: extractos (petróleo), de solvente de destilado nafténico pesado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 91995-78-7

EEC No 295-341-7

No 649-005-00-5

ES: extractos (petróleo), disolvente de gasóleo ligero obtenido a vacío  
 DA: ekstrakter (råolie), let vakuumgasolie solvent  
 DE: Extrakte (Erdöl), leichtes Vakuum Gasöl Lösungsmittel  
 EL: εκχυλίσματα (πετρελαίου), ελαφρού ακάθαρτου πετρελαίου κενού εκχυλισμένου με διαλύτη  
 EN: Extracts (petroleum), light vacuum gas oil solvent  
 FR: extraits au solvant (pétrole), gazole léger sous vide  
 IT: estratti (petrolio), solvente gasolio leggero sotto vuoto  
 NL: extracten (aardolie), lichte vacuümgasoliesolvent  
 PT: extractos (petróleo), de solvente de gasóleo leve de vácuo

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45 S : 53-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 97722-04-8

EEC No 307-753-7

No 649-006-00-0

ES: hidrocarburos, C26-55, ricos en aromáticos

DA: carbonhydridr, C26-55-, aromatrige

DE: Kohlenwasserstoffe, C26-55-, Aromaten-reich

EL: υδρογονάνθρακες, C26-55, πλούσιοι σε αρωματικά

EN: Hydrocarbons C26-55, arom-rich

FR: hydrocarbures en C26-55, riches en aromatiques

IT: idrocarburi, C26-55, ricchi di aromatici

NL: koolwaterstoffen, C26-55-, rijk aan aromaten

PT: hidrocarbonetos, C26-55, ricos em aromaticos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken Rotulagem

T	
	R : 45
	S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçãu


Cas No

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EEC No 400-160-5

No 649-007-00-6

ES: ácidos grasos, aceite de resina, productos de reacción con iminodietanol y ácido bórico

DA: fedtsyrer, tallolie, reaktionsprodukter med iminodiethanol og borsyre

DE: Fettsäuren, Tallöl, Reaktionsprodukte mit Iminodiethanol und Borsäure

EL: λιπαρά οξέα, ταλειαίο, προϊόντα αντίδρασης με ιμινοδιαιθανόλη και βορικό οξύ

EN: fatty acids, tall-oil, reaction products with iminodiethanol and boric acid

FR: acides gras, tallol, produits de réaction avec l'iminodiéthanol et l'acide borique

IT: acidi grassi, tallolio, prodotti di reazione con iminodietanolo e acido bórico

NL: vetzuren, tall-olie, reaktieprodukten met iminodiethanol en boorzuur

PT: ácidos gordos, tall-oil, produtos de reacção com iminodietanol e ácido bórico

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Xi: R 38

N: R 51-53

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xi	N	
		R: 38-51/53 S: (2-)28-37-61

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 64741-45-3

EEC No 265-045-2

No 649-008-00-1

NOTA H

- ES:** residuos (petróleo), torre atmosférica ; Fuelóleo pesado  
[Residuo complejo de la destilación atmosférica de petróleo crudo. Compuesto de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{20}$  y con un punto de ebullición aproximado por encima de 350 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA:** rester (råolie), atmosfærisk tårn ; Fuelolie  
[En sammensat remanens fra atmosfærisk destillation af råolie. Den består af carbonhydrider, overvejende større end  $C_{20}$ , og koger omtrent over 350 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserede ringe.]
- DE:** Rückstände (Erdöl), offener Turm ; Heizöl schwer  
[Komplexer Rückstand aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$  und siedet über etwa 350 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprocente oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen.]
- EL:** υπολείμματα (πετρελαίου), ατμοσφαιρικής στήλης Βαρύ μαζούτ  
[Πολύπλοκο υπόλειμμα από την ατμοσφαιρική απόσταξη αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων ανθρακα σημαντικά μεγαλύτερο από  $C_{20}$  και που βράζει πάνω από 350 °C περίπου. Το ρεύμα αυτό είναι πιθανό να περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN:** Residues (petroleum), atm. tower ; Heavy Fuel oil  
[A complex residuum from the atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{20}$  and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR:** résidus (pétrole), tour atmosphérique ; Fioul lourd  
[Résidu complexe de la distillation atmosphérique du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones est en majeure partie supérieur à  $C_{20}$  et dont le point d'ébullition est approximativement supérieur à 350 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT:** residui (petrolio), torre di distillazione atmosferica ; Olio combustibile denso  
[Residuo complesso proveniente dalla distillazione atmosferica dell'olio grezzo. È costituito da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{20}$  e punto di ebollizione superiore a 350 °C ca. Questa corrente di distillati contiene probabilmente il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4 a 6 elementi.]
- NL:** residuen (aardolie), atmosferische destillatietoren ; Stookolie  
[Een complex residu, verkregen door atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{20}$  en kokend boven ongeveer 350 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT:** residuos (petróleo), da coluna atmosférica ; Fuelóleo  
[Um residuo complexo da destilação atmosférica de petróleo bruto. É constituído de hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{20}$  e destila acima de aproximadamente 350 °C. Este produto contém geralmente 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc.: Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 64741-57-7

EEC No 265-058-3

No 649-009-00-7

## NOTA H

- ES:** gasoleos (petróleo), fracción pesada obtenida a vacío; Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida por la destilación a vacío del residuo de la destilación atmosférica de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{30}$  a  $C_{50}$  y con un intervalo de ebullición aproximado de 350 °C a 600 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA:** gasolier (råolie), tunge vakuum; Fuelolie  
[En sammensat blanding af carbonhydrider fremstillet ved vakuumdestillation af remanensen fra atmosfærisk destillation af råolie. Den består af carbonhydrider, overvejende  $C_{30}$  til og med  $C_{50}$ , med koginterval omtrent fra 350 °C til 600 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserede ringe.]
- DE:** Gasöle (Erdöl), schwere Vakuum-; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{30}$  bis  $C_{50}$  und siedet im Bereich von etwa 350 °C bis 600 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprocente oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen.]
- EL:** ακαθαρτα πετρελαιο (πετρελαιο), βαρεα κενού· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με την απόσταξη του υπολείμματος ατμοσφαιρικής απόσταξης αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{30}$  ως και  $C_{50}$  και με περιοχή βρασμού από 350 °C ως 600 °C περίπου. Το ρεύμα αυτό είναι δυνατό να περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN:** Gas oils (petroleum), heavy vacuum; Heavy Fuel oil  
[A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{30}$  through  $C_{50}$  and boiling in the range of approximately 350 °C to 600 °C (662 °F to 1112 °F). This stream is likely to contain 5 wt. % or more of 4-to 6-membered condensed ring aromatic hydrocarbons.]
- FR:** gazoles lourds (pétrole), distillation sous vide; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par distillation sous vide du résidu de distillation atmosphérique du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{30}$ - $C_{50}$  et dont le point d'ébullition est compris approximativement entre 350 °C et 600 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT:** gasoli (petrolio), frazioni pesanti sotto vuoto; Olio combustibile denso  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo proveniente dalla distillazione atmosferica del petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{30}$ - $C_{50}$  e punto di ebollizione nell'intervallo 350 °C - 600 °C ca. Essa contiene probabilmente il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL:** gasoliën (aardolie), zware vacuümdestillatiefactie; Stookolie  
[Een complexe verzameling koolwaterstoffen, geproduceerd door vacuümdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_{30}$  tot en met  $C_{50}$ , met een kooktraject van ongeveer 350 °C tot 600 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT:** gasoleos (petróleo), pesados de vácuo; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vácuo de residuo da destilação atmosférica de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{30}$  até  $C_{50}$  e destila no intervalo de aproximadamente 350 °C a 600 °C. Este produto contém geralmente 5 % em peso ou mais de hidrocarbonetos aromaticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 64741-61-3

EEC No 265-063-0

No 649-010-00-2


NOTA H

- ES: destilados (petróleo), fracción pesada craqueada catalíticamente; *Fuélleo pesado*  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{31}$  y con un intervalo de ebullición aproximado de 260 °C a 500 °C. Esta corriente es probable que contenga un 5 % en peso ó más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA: destillater (råolie), tunge katalytisk krakkede; *Fuelolie*  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkter fra en katalytisk krakningsproces. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{31}$ , med koginterval omtrent fra 260 °C til 500 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserede ringe.]
- DE: Destillate (Erdöl), schwere katalytisch gekrackte; *Heizöl schwer*  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Crackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{31}$  und siedet im Bereich von etwa 260 °C bis 500 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen.]
- EL: αποσταγματα (πετρελαίου) θαρέα καταλυτικά πυρολυμένα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με την απόσταξη προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{31}$  και με περιοχή. Το ρεύμα αυτό είναι πιθανό να περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονάνθρακες τετραμελείς ως εξαμελείς συμπεκνωμένους, δακτύλιους.]
- EN: Distillates (petroleum), heavy catalytic cracked; *Heavy Fuel oil*  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{31}$  and boiling in the range of approximately 260 °C to 500 °C (500 °F to 932 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR: distillats lourds (pétrole), craquage catalytique; *Fioul lourd*  
[Combinaison complexe d'hydrocarbures obtenue par distillation: des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{31}$  et dont le point d'ébullition est compris approximativement entre 260 °C et 500 °C. Cette fraction peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT: distillati (petrolio), frazioni pesanti di cracking catalitico; *Olio combustibile denso*  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{31}$  e punto di ebollizione nell'intervallo 260 °C - 500 °C ca. Questo taglio di distillazione contiene probabilmente il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL: destillaten (aardolie), zwaar katalytisch gekraakt; *Stookolie*  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van producten van een katalytisch kreakproces. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{31}$ , met een kooktraject van ongeveer 260 °C tot 500 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT: destilados (petróleo), pesados do cracking catalítico; *Fuelóleo*  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{31}$  e destila no intervalo de aproximadamente 260 °C a 500 °C. Esta fracção contém geralmente 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-62-4

EEC No 265-064-6

No 649 011-00 8

## NOTA H

- ES** aceites clarificados (petróleo), craqueados catalíticamente, Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida como la fracción residual de la destilación de los productos de un proceso de craqueo catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{20}$  y con un punto de ebullición aproximado por encima de 350 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA** klarede olier (råolie), katalytisk krakkede; Fuelolie  
[En sammensat blanding af carbonhydnder fremstillet som restfraktionen fra destillation af produkter fra en katalytisk kraknings proces. Den består af carbonhydnder, overvejende større end  $C_{20}$ , og koger omtrent over 350 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydnder, bestående af 4- til 6-leddede kondenserede ringe.]
- DE** Gereinigte Öle (Erdöl), katalytisch gekrackte, Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraction durch Destillation von Produkten aus einem katalytischen Crackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorwiegend größer als  $C_{20}$  und siedet über etwa 350 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen.]
- EL** διαυγασμένα έλαια (πετρελαιο), καταλυτικά πυρολυμένα Βαρύ μαζούτ  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που παράγεται σαν υπολειμματικό κλάσμα από πύρωση των προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{20}$  και βράζει πάνω από 350 °C περίπου. Το ρεύμα αυτό είναι πιθανό να περιέχει 5 % κατά βάρος ή περισσότερη αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN** Clarified oils (petroleum), catalytic cracked; Heavy Fuel oil  
[A complex combination of hydrocarbons produced as the residual fraction from distillation of the products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{20}$  and boiling at or approximately 350 °C (662 °F). This stream is likely to contain 5 wt % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR** huiles clarifiées (pétrole), craquage catalytique, Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue comme fraction résiduelle de la distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{20}$  et dont le point d'ébullition est approximativement supérieur à 350 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT** residui purificati (petrolio), cracking catalitico, Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta come frazione residua della distillazione dei prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente maggiore di  $C_{20}$  e punto di ebollizione superiore a circa 350 °C. Questa frazione di distillazione contiene probabilmente il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL** geklaarde oliën (aardolie), katalytisch gekraakt, Stookolie  
[Een complexe verzameling koolwaterstoffen geproduceerd als de residu-fractie van de destillatie van producten uit een katalytisch kraakproces. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{20}$ , kokend boven ongeveer 350 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT** óleos clarificados (petróleo), do cracking catalítico · Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida como a fracção residual da destilação dos produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos com numero de átomos de carbono superiores a  $C_{20}$  e destila acima de aproximadamente 350 °C. Esta fracção contém geralmente 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Ετιοσηµασία, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 64741-75-9

EEC No 265-076-1

No 649-012-00-3

## NOTA H

- ES : residuos (petróleo), hidrocraqueados ; Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida como la fracción residual de la destilación de los productos de un proceso de hidrocrqueo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{20}$  y con un punto de ebullición aproximado por encima de 350 °C.]
- DA : rester (råolie), hydrokrakkede ; Fuelolie  
[En sammensat blanding af carbonhydrider fremstillet som restfraktionen fra destillation af produkterne fra en hydrokrakningsproces. Den består af carbonhydrider, overvejende større end  $C_{20}$ , og koger omtrent over 350 °C.]
- DE : Rückstände (Erdöl), hydrogekracki ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraction aus der Destillation von Produkten aus einem Hydrokrackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$  und siedet über etwa 350 °C.]
- EL : υπολείμματα (πετρελαίου), υδρογονοπυρολυμένα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται σαν το υπολειμματικό κλάσμα απόσταξης των προϊόντων υδρογονπυρόλυσης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά πάνω από  $C_{20}$  και δράζει πάνω από 350 °C περίπου.]
- EN : Residues (petroleum), hydrocracked ; Heavy Fuel oil  
[A complex combination of hydrocarbons produced as the residual fraction from distillation of the products of a hydrocracking process. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{20}$  and boiling above approximately 350 °C (662 °F).]
- FR : résidu (pétrole), hydrocraquage ; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue comme fraction résiduelle de la distillation des produits résultant d'un hydrocraquage. Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{20}$  et dont le point d'ébullition est approximativement supérieur à 350 °C.]
- IT : residui (petrolio), frazioni di idrocracking ; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuti come frazione residua dalla distillazione dei prodotti di un processo di idrocracking. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{20}$  e punto di ebollizione superiore a circa 350 °C.]
- NL : residuen (aardolie), waterstofgekraakt ; Stookolie  
[Een complexe verzameling koolwaterstoffen verkregen als de residu-fractie uit de destillatie van de produkten van een waterstofkraakproces. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{20}$ , kokend boven ongeveer 350 °C.]
- PT : residuos (petróleo), do hidrocracking ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida como a fracção residual da destilação dos produtos de um processo de hidrocracking. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{20}$  e destila acima de aproximadamente 350 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-80-6

EEC No 265-081-9

No 649-013-00-9

## NOTA H

- ES:** residuos (petróleo), craqueados térmicamente; Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida como la fracción residual de la destilación del producto de un proceso de craqueo térmico. Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte superior a  $C_{10}$  y con un punto de ebullición aproximado por encima de 350 °C. Esta corriente es probable que contenga un 5 % en peso o mas de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA:** rester (råolie), termisk krakke; Fuelolie  
[En sammensat blanding af carbonhydrider fremstillet som restfraktionen fra destillation af produkterne fra en termisk krakningsproces. Den består overvejende af umættede carbonhydrider, overvejende større end  $C_{10}$ , og koger omtrent over 350 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserede ringe.]
- DE:** Rückstände (Erdöl), thermisch gekrackt; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraktion durch Destillation des Produktes aus einem thermischen Krackverfahren. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{10}$  und siedet über etwa 350 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- oder 6-gliedrigen kondensierten Ringen.]
- EL:** υπολείμματα (πετρελαίου), θερμικά πυρολιμένα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται σαν το υπολειμματικό κλάσμα απόσταξης του προϊόντος θερμικής πυρόλυσης. Συνίσταται κυρίως από ακόρεστους υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{10}$  και βράζει πάνω από 350 °C περίπου. Το ρεύμα αυτό είναι πιθανό να περιέχει 5 % κατά βάρος 3' και περισσότερο αρωματικούς υδρογονάνθρακες με τετραμελείς έως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN:** Residues (petroleum), thermal cracked; Heavy Fuel oil  
[A complex combination of hydrocarbons produced as the residual fraction from distillation of the product from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly greater than  $C_{10}$  and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR:** résidu (pétrole), craquage thermique; Fioul lourd  
[Combinaison complexe d'hydrocarbures produite comme fraction résiduelle dans la distillation du produit résultant d'un craquage thermique. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones est en majorité supérieur à  $C_{10}$  et dont le point d'ébullition est approximativement supérieur à 350 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT:** residui (petrolio), da cracking termico; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta come frazione residua della distillazione del prodotto di un processo di cracking termico. È costituita prevalentemente da idrocarburi insaturi con numero di atomi di carbonio prevalentemente maggiore di  $C_{10}$  e punto di ebollizione superiore a circa 350 °C. Essa può anche contenere il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL:** residuen (aardolie), thermisch gekraakt; Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen als de residu fractie van de destillatie van het produkt van een thermisch kraakproces. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend groter dan  $C_{10}$ , kokend boven ongeveer 350 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6- voudig gecondenseerde ringen.]
- PT:** resíduos (petróleo), do cracking térmico; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida como a fracção residual da destilação do produto de um processo de cracking térmico. É constituída predominantemente por hidrocarbonetos insaturados com números de átomos de carbono predominantemente superiores a  $C_{10}$  e destila acima de aproximadamente 350 °C. Esta fracção pode conter 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="371 436 395 465" data-label="Text">T</div> <div data-bbox="335 486 430 580" data-label="Image"> </div> <div data-bbox="938 486 1019 515" data-label="Text">R : 45</div> <div data-bbox="938 537 1050 566" data-label="Text">S : 53-45</div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*




Cas No 64741-81-7

EEC No 265-082-4

No 649-014-00-4

## NOTA H

- ES destilados (petróleo), fracción pesada craqueada térmicamente ; Fuelóleo pesado  
[Combinación compleja de hidrocarburos de la destilación de los productos de un proceso de craqueo termico. Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{26}$  y con un intervalo de ebullición aproximado de 260 °C a 480 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA destillater (råolie), tunge termisk krakkede , Fuelolie  
[En sammensat blanding af carbonhydrier fra destillation af produkterne fra en termisk krakningsproces. Den består overvejende af umættede carbonhydrier, overvejende  $C_{11}$  til og med  $C_{26}$ , med kogesinterval omtrent fra 260 °C til 480 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrier, bestående, af 4 til 6-leddede kondenserede ringe.]
- DE Destillate (Erdöl), schwere thermisch gekrackte ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem thermischen Crackverfahren. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{26}$  und siedet im Bereich von etwa 260 °C bis 480 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen.]
- EL αποσταγματα (πετρελαίου), βαρέα θερμικά πυρολυμένα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων από την απόσταξη των προϊόντων θερμικής πυρόλυσης. Συνίσταται κυρίως από ακόρεστους υδρογονάνθρακες και αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{26}$  και με περιοχή βρασμού από 260 °C ως 480 °C περίπου. Το ρεύμα αυτό είναι πιθανό να περιέχει 5 % κατά βάρος ή περισσότερο, αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN Distillates (petroleum), heavy thermal cracked , Heavy Fuel oil  
[A complex combination of hydrocarbons from the distillation of the products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{26}$  and boiling in the range of approximately 260 °C to 480 °C (500 °F to 896 °F). This stream is likely to contain 5 wt % or more of 4 to 6 membered condensed ring aromatic hydrocarbons.]
- FR distillats lourds (pétrole), craquage thermique , Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage thermique. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{26}$  et dont le point d'ébullition est compris approximativement entre 260 °C et 480 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT distillati (petrolio), frazioni pesanti di cracking termico , Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione dei prodotti provenienti da un processo di cracking termico. È costituita prevalentemente da idrocarburi insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{26}$  e punto di ebollizione nell'intervallo 260 °C - 480 °C. Essa può contenere il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL destillaten (aardolie), zwaar thermisch gekraakt , Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de producten van een thermisch kraakproces. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{26}$ , met een kooktraject van ongeveer 260 °C tot 480 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6 voudig gecondenseerde ringen.]
- PT destilados (petróleo), pesados do cracking térmico , Fuelóleo  
[Uma combinação complexa de hidrocarbonetos da destilação dos produtos de um processo de cracking termico. É constituída predominantemente por hidrocarbonetos insaturados com números de átomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{26}$  e destila no intervalo de aproximadamente 260 °C a 480 °C. Esta fracção pode conter 5 % em peso ou mais de hidrocarbonetos aromaticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetsatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 64742-59-2

EEC No 265-162-9

No 649-015-00-X

NOTA H

- ES: gasoleos (petróleo), fracción obtenida a vacío tratada con hidrógeno; Fuelóleo pesado  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrógeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y con un intervalo de ebullición aproximado de 230 °C a 600 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA: gasolier (råolie), hydrogenbehandlede vakuum-; Fuelolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$ , med koginterval omtrent fra 230 °C til 600 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserede ringe.]
- DE: Gasöle (Erdöl), mit Wasserstoff behandelte Vakuum-; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und siedet im Bereich von etwa 230 °C bis 600 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen.]
- EL: ακαθαρτο πετρέλαιο (πετρελαίον), κενού κατεργασμένο με υδρογόνο· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία κλάσματος πετρελαίου με υδρογόνο παρουσία καταλύτη. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{30}$  και με περιοχή βρασμού από 230 °C ως 600 °C περίπου. Το ρεύμα αυτό πιθανόν να περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονανθράκες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN: Gas oils (petroleum), hydrotreated vacuum; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and boiling in the range of approximately 230 °C to 600 °C (446 °F to 1 112 °F). This stream is likely to contain 5 wt % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR: gazoles sous vide (pétrole), hydrotraités; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{30}$  et dont le point d'ébullition est compris approximativement entre 230 °C et 600 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT: gasoli (petrolio), da « hydrotreating » sotto vuoto; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore. E costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e punto di ebollizione nell'intervallo 230 °C-600 °C ca. Questa combinazione può probabilmente contenere il 5 % in peso o più di idrocarburi a nuclei aromatici condensati di 4-6 membri.]
- NL: gasoliën (aardolie), met waterstof behandelde vacuümdestillatietractie, Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , met een kooktraject van ongeveer 230 °C tot 600 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT: gasoleos (petróleo), de vácuo tratados com hidrogénio; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e destila no intervalo de aproximadamente 230 °C a 600 °C. Este produto pode conter 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-78-5

EEC No 265-181-2

No 649-016-00-5

NOTA H

- ES : residuos (petróleo), de la torre atmosférica hidrodesulfurados ; Fuelóleo pesado  
[Combinación compleja de hidrocarburos obtenida por tratamiento de un residuo de la torre atmosférica con hidrógeno en presencia de un catalizador en condiciones idóneas para separar compuestos orgánicos de azufre. Compuesta de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{30}$  y con un punto de ebullición aproximado por encima de 350 °C. Esta comente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA : rester (råolie), hydroafsvovlede atmosfærisk tårn ; Fuelolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle en remanens fra et atmosfærisk tårn med hydrogen i tilstedeværelse af en katalysator, under betingelser primært for at fjerne organiske svovlforbindelser. Den består af carbonhydrider, overvejende større end  $C_{30}$  og koger omtrent over 350 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserende ringe.]
- DE : Rückstände (Erdöl), hydrodesulfurierte Offene- Turm- ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln eines Offenen- Turmrückstandes mit Wasserstoff in Gegenwart eines Katalysators unter Bedingungen zum Entfernen organischer Schwefelverbindungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{30}$  und siedet über etwa 350 °C bis 220 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen.]
- EL : υπολείμματα (πετρελαίου), υδρογονοαποβειωμένα στήλης ατμοσφαιρικής απόσταξης· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία υπολείμματος στήλης ατμοσφαιρικής απόσταξης με υδρογόνο παρουσία καταλύτη και σε συνθήκες τέτοιες ώστε να απομακρυνθούν πρωτίστως οι οργανικές θειούχες ενώσεις. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{30}$  και βράζει πάνω από κατά βάρος 350 °C περίπου. Το ρεύμα αυτό συνήθως περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN : Residues (petroleum), hydrodesulfurized atmospheric tower ; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by treating an atmospheric tower residuum with hydrogen in the presence of a catalyst under conditions primarily to remove organic sulfur compounds. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{30}$  and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR : résidu de tour atmosphérique (pétrole), hydrodésulfurés ; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'un résidu de tour atmosphérique à l'hydrogène en présence d'un catalyseur, sous des conditions destinées essentiellement à l'élimination des composés organiques de soufre. Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{30}$  et dont le point d'ébullition est approximativement supérieur à 350 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT : residui (petrolio), idrodesolforati torre di distillazione atmosferica ; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta trattando con idrogeno in presenza di un catalizzatore un residuo di distillazione in torre atmosferica, in condizioni volte principalmente all'eliminazione dei composti organici solforati. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{30}$  e punto di ebollizione superiore a circa 350 °C. Questa combinazione può contenere il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL : residuen (aardolie), met waterstof onttwaveld atmosferische destillatietoren ; Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een residu uit een atmosferische destillatietoren met waterstof in de aanwezigheid van een katalysator onder omstandigheden primair bedoeld om organische zwavelverbindingen te verwijderen. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{30}$ , kokend boven ongeveer 350 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT : resíduos (petróleo), atmosféricos hidrogenodessulfurizados ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de um residuo atmosférico com hidrogenio na presença de um catalisador em condições para remover principalmente compostos orgânicos de enxofre. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente superiores a  $C_{30}$  e destila acima de aproximadamente 350 °C. Este produto geralmente contém 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-86-5

EEC No 265-189-6

No 649-017-00-0

## NOTA H

- ES. *gasoleos (petróleo), fracción pesada obtenida a vacío hidrodesulfurada ; Fuéoleo pesado*  
[Combinación compleja de hidrocarburos obtenida de un proceso de hidrodesulfuración catalítica. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{30}$  y con un intervalo de ebullición aproximado de 350 °C a 600 °C. Esta corriente es probable que contenga un 5 % de peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros]
- DA. *gasolier (råolie), hydroafsvovlede tunge vakuum-, Fuelolie*  
[En sammensat blanding af carbonhydrider opnået ved en katalytisk hydroafsvovningsproces. Den består af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{30}$  med koginterval omtrent fra 350 °C til 600 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserede ringe]
- DE. *Gasöl (Erdöl), hydrodesulfurierte schwere Vakuum-, Heizöl schwer*  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem katalytischen Hydrodesulfurierungsverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{30}$  und siedet im Bereich von etwa 350 °C bis 600 °C. Dieser Lauf enthält wahrscheinlich 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit kondensierten Ringen]
- EL. *ακαθάρτα (πετρέλαιου), υδρογονοαποθειωμένα θαρέα κενού· Βαρύ μαζούτ*  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από καταλυτική υδρογονοαποθειώση. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{30}$  και βράζει στην περιοχή από 350 °C ως 600 °C περίπου. Το ρεύμα αυτό συνήθως περιέχει 5 % κατά βάρος ή και περισσότερο, αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN. *Gas oils (petroleum), hydrodesulfurized heavy vacuum, Heavy Fuel oil*  
[A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{30}$  and boiling in the range of approximately 350 °C to 600 °C (662 °F to 1112 °F). This stream is likely to contain 5 wt % or more of 4- to 6 membered condensed ring aromatic hydrocarbons.]
- FR. *gazoles lourds sous vide (pétrole), hydrodésulfurés, Fioul lourd*  
[Combinaison complexe d'hydrocarbures obtenue par un procédé d'hydrodésulfuration catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{20}$ - $C_{30}$  et dont le point d'ébullition est compris approximativement entre 350 °C et 600 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles]
- IT. *gasoli (petrolio), pesanti idrodesolforati sotto vuoto, Olio combustibile denso*  
[Combinazione complessa di idrocarburi ottenuta da un processo di idrodesolforazione catalitica. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{30}$  e punto di ebollizione nell'intervallo 350 °C-600 °C ca. Questa frazione può contenere il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi]
- NL. *gasoliën (aardolie), met waterstof ontzwaveld zwaar vacuümdestillatiefractie, Stookolie*  
[Een complexe verzameling koolwaterstoffen, verkregen uit een katalytisch waterstofontzwavelingsproces. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{30}$ , met een kooktraject van ongeveer 350 °C tot 600 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen]
- PT. *gasoleos (petróleo), de vácuo pesados hidrogenodessulfurizados ; Fuelóleo*  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de hidrogenodessulfuração catalítica. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{30}$  e destila no intervalo de aproximadamente 350 °C a 600 °C. Este produto geralmente contém 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 64742 90 1

EEC No 265-193-8

No 649 018 00 6

NOTA H

- ES** residuos (petroleo), craqueados a vapor, Fueloleo pesado  
[Combinación compleja de hidrocarburos obtenida como la fracción residual de la destilación de los productos de un proceso de craqueo a vapor (incluyendo craqueo por vapor para producir etileno). Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte superior a  $C_{14}$  y con un punto de ebullición aproximado por encima de  $260^{\circ}\text{C}$ . Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA** rester (råolie) dampkrakkede, Fuelolie  
[En sammensat blanding af carbonhydrier opnået som restfraktionen fra destillation af produkterne fra en dampkrakningsproces (herunder dampkrakning for at fremstille ethylen). Den består overvejende af umættede carbonhydrier overvejende større end  $C_{14}$  og koger omtrent over  $260^{\circ}\text{C}$ . Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere aromatiske carbonhydrier, bestående af 4 til 6 leddede kondenserede ringe.]
- DE** Rückstände (Erdöl), Dampf-gekrackte, Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Rückstandsfraction aus der Destillation der Produkte eines Dampfkrackverfahrens (einschließlich Dampfkracken zur Herstellung von Ethylen). Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{14}$  und siedet über etwa  $260^{\circ}\text{C}$ . Dieser Lauf enthält wahrscheinlich 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6 gliedrigen kondensierten Ringen.]
- EL** υπολειμματα (πετρελαίου), ατμοπυρολυμένα, βαρύ μαζούτ  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται ως το υπολειμματικό κλάσμα από την απόσταξη των προϊόντων ατμοπυρόλυσης (συμπεριλαμβανομένης της ατμοπυρόλυσης για παραγωγή αιθυλενίου). Συνίσταται κυρίως από ακόρεστα υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{14}$  και βράζει πάνω από  $260^{\circ}\text{C}$  περίπου. Το ρεύμα αυτό συνήθως περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονάνθρακες με 4 τετραμελείς, ως, εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN** Residues (petroleum), steam cracked, Heavy Fuel oil  
[A complex combination of hydrocarbons obtained as the residual fraction from the distillation of the products of a steam cracking process (including steam cracking to produce ethylene). It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly greater than  $C_{14}$  and boiling above approximately  $260^{\circ}\text{C}$  ( $500^{\circ}\text{F}$ ). This stream is likely to contain 5 wt % or more of 4 to 6 membered condensed ring aromatic hydrocarbons.]
- FR** résidu (pétrole), vapocraquage, Fioul lourd  
[Combinaison complexe d'hydrocarbures produite comme fraction résiduelle dans la distillation du produit résultant d'un vapocraquage (y compris le vapocraquage destiné à la production d'éthylène). Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones est en majeure partie supérieur à  $C_{14}$  et dont le point d'ébullition est approximativement supérieur à  $260^{\circ}\text{C}$ . Peut contenir 5 % ou plus en poids d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT** residui (petrolio), crackizzati con vapor d'acqua, Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta come frazione residua della distillazione dei prodotti di un processo di cracking con vapore acqueo (compreso il processo con vapor d'acqua per la produzione di etilene). È costituita prevalentemente da idrocarburi insaturi con numero di atomi di carbonio prevalentemente maggiore di  $C_{14}$  e punto di ebollizione superiore a  $260^{\circ}\text{C}$ . Questa combinazione può contenere il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NI** residuen (aardolie), stoomgekraakt, Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen als de residu-fractie van de destillatie van de producten van een stoomkraakproces (inclusief stoomkraken voor de productie van ethyleen). Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend groter dan  $C_{14}$ , kokend boven ongeveer  $260^{\circ}\text{C}$ . Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4 tot 6 voudig gecondenseerde ringen.]
- PT** resíduos (petróleo), do steam cracking, Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida como a fracção residual da destilação dos produtos de um processo de steam cracking (incluindo o steam cracking para produção de etileno). É constituída predominantemente por hidrocarbonetos insaturados com números de átomos de carbono predominantemente superiores a  $C_{14}$  e destilam a uma temperatura de aproximadamente  $260^{\circ}\text{C}$ . Este produto geralmente contém 5 % em peso ou mais de hidrocarbonetos aromáticos poliméricos com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45 S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68333-22-2

EEC No 269-777-3

No 649-019-00-1

## NOTA II

- ES residuos (petróleo), atmosféricos ; Fuelóleo pesado  
[Residuo complejo de la destilación atmosférica del petróleo crudo. Compuesto de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{11}$ , con un punto de ebullición aproximado por encima de 200 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA · rester (råolie), atmosfæriske , Fuelolie  
[En sammensat remanens fra atmosfærisk destillation af råolie. Den består af carbonhydrier, overvejende større end  $C_{11}$ , og koger omtrent over 200 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrier, bestående af 4 til 6-leddede kondenserede ringe.]
- DE · Rückstände (Erdöl), offene , Heizöl schwer  
[Komplexer Rückstand aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{11}$  und siedet über etwa 200 °C. Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen enthalten.]
- EL υπολείμματα (πετρελαίου), ατμοσφαιρικής απόσταξης· Βαρύ μαζούτ  
[Πολύπλοκο υπόλειμμα από την ατμοσφαιρική απόσταξη του αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{11}$  και που βράζει πάνω από 200 °C περίπου. Το ρεύμα αυτό μπορεί να περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονάνθρακες με τετραμελείς έως εξαμελείς συμπυκνωμένους δακτυλίους.]
- EN Residues (petroleum), atmospheric ; Heavy Fuel oil  
[A complex residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{11}$  and boiling above approximately 200 °C (392 °F). This stream is likely to contain 5 wt % or more of 4 to 6 membered condensed ring aromatic hydrocarbons.]
- FR résidu de distillation atmosphérique (pétrole) , Fioul lourd  
[Résidu complexe de la distillation atmosphérique du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones est en majeure partie supérieur à  $C_{11}$  et dont le point d'ébullition est approximativement supérieur à 200 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT : residui (petrolio), atmosferici , Olio combustibile denso  
[Residuo complesso della distillazione atmosferica del greggio. È costituito da idrocarburi con numero di atomi di carbonio prevalentemente maggiore di  $C_{11}$  e punto di ebollizione superiore a 200 °C ca. Questa corrente contiene probabilmente il 5 % o più di idrocarburi con nuclei aromatici condensati di 4-6 elementi.]
- NL residuen (aardolie), atmosferische destillatie , Stookolie  
[Een complex residu, verkregen uit de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{11}$ , die koken boven ongeveer 200 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT resíduos (petróleo), atmosféricos , Fuelóleo  
[Um resíduo complexo da destilação atmosférica de petróleo bruto. É constituído por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{11}$  e destila acima de aproximadamente 200 °C. Este produto pode conter 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassifizierung, Einstufung, Ταξινόηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R. 45
	S: 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68333-26-6

EEC No 269-782-0

N<sup>o</sup> 649-020-00-7


## NOTA H

- ES: aceites clarificados (petróleo), productos craqueados catalíticamente hidrodesulfurados; Fuelóleo pesado  
[Combinación compleja de hidrocarburos obtenida por tratamiento con hidrógeno de aceite clarificado craqueado catalíticamente para transformar el azufre orgánico en sulfuro de hidrógeno que se separa. Compuesta de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{20}$  y con un punto de ebullición aproximado por encima de 350 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA: klarede olier (råolie), hydroafsvovlede katalytisk krakkede; Fuelolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle katalytisk krakkede, klarede olier med hydrogen for at omdanne organisk svovl til hydrogensulfid, som fjernes. Den består af carbonhydrider, overvejende større end  $C_{20}$ , og koger omtrent over 350 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, af aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserende ringe.]
- DE: Gereinigte Öle (Erdöl), hydrodesulfurierte katalytisch gekrackte; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln von katalytisch gekracktem gereinigtem Öl mit Wasserstoff, um organischen Schwefel in Schwefelwasserstoff zu überführen, der entfernt wird. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$  und siedet über etwa 350 °C. Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen enthalten.]
- EL: διαυγασμένα έλαια (πετρελαίου), υδρογονοαποθειωμένα καταλυτικά πυρολυμένα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία καταλυτικά πυρολυμένου διαυγασμένου ελαίου με υδρογόνο για να μετατραπεί το οργανικό θείο σε υδρόθειο που απομακρύνεται. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{20}$  και που δράζει πάνω από 350 °C περίπου. Αυτό το ρεύμα μπορεί να περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN: Clarified oils (petroleum), hydrodesulfurized catalytic cracked; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by treating catalytic cracked clarified oil with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{20}$  and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt. % or more of 4-to 6-membered condensed ring aromatic hydrocarbons.]
- FR: huiles clarifiées (pétrole), craquage catalytique, hydrodésulfuration; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue en traitant à l'hydrogène des huiles clarifiées de craquage catalytique afin de convertir le soufre organique en hydrogène sulfuré, qui est ensuite éliminé. Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{20}$  et dont le point d'ébullition est approximativement supérieur à 350 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT: olii purificati (petrolio), idrodesolforati crackizzati cataliticamente; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta trattando con idrogeno l'olio schiarito del cracking catalitico per trasformare lo zolfo organico in idrogeno solforato che viene eliminato. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{20}$  e punto di ebollizione 350 °C ca. Questa corrente contiene probabilmente il 5 % o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL: geklaarde oliën (aardolie), met waterstof ontzwavelde katalytisch gekraakte; Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen door de behandeling van katalytisch gekraakte geklaarde olie met waterstof, om organisch zwavel om te zetten in waterstofsulfide dat verwijderd wordt. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{20}$ , die koken boven ongeveer 350 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen, samengesteld uit 4- tot 6-voudig gecondenseerde ringen.]
- PT: oleos clarificados (petróleo), do cracking catalítico hidrogenodessulfurizados; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de óleo clarificado do cracking catalítico com hidrogénio para converter enxofre orgânico em sulfureto de hidrogénio que é removido. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{20}$  e destila acima de aproximadamente 350 °C. Este produto pode conter 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68333-27-7

EEC No 269-783-6

No 649-021-00-2

## NOTA H

- ES :** destilados (petróleo), fracción intermedia craqueada catalíticamente hidrosulfurada ; Fuelóleo pesado  
[Combinación compleja de hidrocarburos obtenida por tratamiento con hidrógeno de destilados intermedios craqueados catalíticamente para transformar el azufre orgánico en sulfuro de hidrógeno que se separa. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y con un intervalo de ebullición aproximado de 205 °C a 450 °C. Contiene una proporción relativamente grande de hidrocarburos aromáticos tricíclicos.]
- DA :** destillater (råolie), hydroafsvovlede intermediære katalytisk krakkede ; Fuelolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle intermediære katalytisk krakkede destillater med hydrogen for at omdanne organisk svovl til hydrogensulfid, som fjernes. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$ , med koginterval omtrent fra 205 °C til 450 °C. Den indeholder en forholdsvis stor del tricycliske, aromatiske carbonhydrider.]
- DE :** Destillate (Erdöl), hydrodesulfurierte intermediäre katalytisch gekrackte ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln von katalytisch gekrackten Destillaten mit Wasserstoff, um organischen Schwefel in Schwefelwasserstoff zu überführen, der entfernt wird. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und siedet im Bereich von etwa 205 °C bis 450 °C. Enthält eine relativ große Menge tricyclischer aromatischer Kohlenwasserstoffe.]
- EL :** αποστάγματα (πετρελαίου), υδρογονοαποθειωμένα ενδιάμεσα καταλυτικά πυρολυμένα· Βαρύ μαζούτ  
[Πόλυπλοκος συνδιασμός υδρογονανθράκων που λαμβάνεται με καταργασία ενδιάμεσων καταλυτικά πυρολυμένων αποσταγμάτων με υδρογόνο για να μετατραπεί το οργανικό θείο σε υδρόθειο που απομακρύνεται. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{30}$  και με περιοχή βρασμού από 205 °C ως 450 °C περίπου. Περιέχει σχετικά μεγάλη αναλογία τρικυκλικών αρωματικών υδρογονανθράκων.]
- EN :** Distillates (petroleum), hydrodesulfurized intermediate catalytic cracked ; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by treating intermediate catalytic cracked distillates with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and boiling in the range of approximately 205 °C to 450 °C (401 °F to 842 °F). It contains a relatively large proportion of tricyclic aromatic hydrocarbons.]
- FR :** distillats intermédiaires (pétrole), craquage catalytique, hydrodésulfuration ; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue en traitant à l'hydrogène des distillats intermédiaires de craquage catalytique afin de convertir le soufre organique en hydrogène sulfure, qui est ensuite éliminé. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$  et dont le point d'ébullition est compris approximativement entre 205 °C et 450 °C. Contient une proportion relativement importante d'hydrocarbures aromatiques tricycliques.]
- IT :** distillati (petrolio), intermedi idrodesolforati crackizzati cataliticamente ; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta trattando con idrogeno distillati intermedi crackizzati cataliticamente, per trasformare lo zolfo organico in idrogeno solforato che viene eliminato. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e punto di ebollizione nell'intervallo 205 °C - 450 °C ca. Contiene una percentuale relativamente alta di idrocarburi aromatici triciclici.]
- NL :** destillaten (aardolie), met waterstof ontzwavelde katalytisch gekraakte tussenfractie ; Stookolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van de katalytisch gekraakte destillaattussenfracties met waterstof om organisch zwavel om te zetten in waterstofsulfide dat verwijderd wordt. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , met een kooktraject van ongeveer 205 °C tot 450 °C. Bevat een relatief grote hoeveelheid tricyclische aromatische koolwaterstoffen.]
- PT :** destilados (petróleo), médios do cracking catalítico hidrogenodessulfurizados ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de destilados médios do cracking catalítico com hidrogénio para converter enxofre orgânico em sulfureto de hidrogénio que é removido. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e destila no intervalo de aproximadamente 205 °C a 450 °C. Contém uma proporção relativamente elevada de hidrocarbonetos aromáticos tricíclicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68333-28-8

EEC No 269-784-1

No 649-022-00-8

NOTA H

- ES: destilados (petróleo), fracción pesada craqueada catalíticamente hidrodesulfurada; Fuelóleo pesado  
[Combinación compleja de hidrocarburos obtenida por tratamiento con hidrógeno de destilados pesados craqueados catalíticamente para transformar el azufre orgánico en sulfuro de hidrógeno que se separa. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{31}$  y con un intervalo de ebullición aproximado de 260 °C a 500 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA: destillater (råolie), hydroafsvoviede tunge katalytisk krakkede; Fuelolie  
[En sammensat blanding af carbonhydrider opnået ved behandling af tunge katalytisk krakkede destillater med hydrogen for at omdanne organisk svovl til hydrogensulfid, som fjernes. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{31}$ , med kogesinterval omtrent fra 260 °C til 500 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserede ringe.]
- DE: Destillate (Erdöl), hydrodesulfurierte schwere katalytisch gekrackte; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln von schweren katalytisch gekrackten Destillaten mit Wasserstoff, um organischen Schwefel in Schwefelwasserstoff zu überführen, der entfernt wird. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{31}$  und siedet im Bereich von etwa 260 °C bis 500 °C. Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen enthalten.]
- EL: αποστάγματα (πετρελαίου), υδρογονοαποδεδειγμένα βαρέα καταλυτικά πυρολυμένα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με καταργασία βαρέων αποσταγμάτων καταλυτικής πυρόλυσης με υδρογόνο για τη μετατροπή του οργανικού θείου σε υδρόθειο το οποίο απομακρύνεται. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως  $C_{31}$  και δράζει στην περιοχή από 260 °C ως 500 °C περίπου. Το ρεύμα αυτό πιθανόν να περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονάνθρακες τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN: Distillates (petroleum), hydrodesulfurized heavy catalytic cracked; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by treatment of heavy catalytic cracked distillates with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{31}$  and boiling in the range of approximately 260 °C to 500 °C (500 °F to 932 °F). This stream is likely to contain 5 wt-% or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR: distillats lourds (pétrole), craquage catalytique, hydrodésulfuration; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue en traitant à l'hydrogène des distillats lourds de craquage catalytique afin de convertir le soufre organique en hydrogène sulfuré, qui est ensuite éliminé. Se compose d'hydrocarbures dont le nombre de carbonos se situe en majorité dans la gamme  $C_{11}$ - $C_{31}$ , et dont le point d'ébullition est compris approximativement entre 260 °C et 500 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT: distillati (petrolio), idrodesolforati pesanti crackizzati cataliticamente; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta trattando con idrogeno i distillati pesanti del cracking catalitico per trasformare lo zolfo organico in idrogeno solforato che viene eliminato. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{31}$  e punto di ebollizione nell'intervallo 260 °C-500 °C ca. Questa corrente contiene probabilmente il 5 % o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL: destillaten (aardolie), met waterstof ontzwavelde zware katalytisch gekraakte fractie; Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen uit de behandeling van zware katalytisch gekraakte destillaten met waterstof, waarbij organisch zwavel wordt omgezet in waterstofsulfide dat verwijderd wordt. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{31}$ , met een kooktraject van ongeveer 260 °C tot 500 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT: destilados (petróleo), pesados do cracking catalítico hidrogenodessulfurizados; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de destilados pesados do cracking catalítico com hidrogénio para converter enxofre orgânico em sulfureto de hidrogénio que é removido. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{31}$ , e destila no intervalo de aproximadamente 260 °C a 500 °C. Este produto pode conter 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etschettatura, Kenmerken, Rotulagem*

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*Ímítes de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 68476-32-4

EEC No 270-674-0

No 649-023-00-3

NOTA H

ES : petróleo combustible, residuos-gasóleos de primera destilación, alta proporción de azufre ; Fuelóleo pesado

DA : brændselolie, rester-straight-run gasolier, med højt indhold af svovl ; Fuelolie

DE : Brennöl, Öle aus Rückständen von straight-run Benzin, hochschwefelhaltig ; Heizöl schwer

EL : καυσίμο ελαιο, υπολείμματα απευθείας απόσταξης ακάθαρτων πετρελαίων, υψηλής περιεκτικότητας σε θείο Βαρύ μαζούτ

EN : Fuel oil, residues-straight-run gas oils, high-sulfur ; Heavy Fuel oil

FR : fuel-oil, résidus-gazoles de distillation directe, à haute teneur en soufre ; Fioul lourd

IT : olio combustibile, olii di prima distillazione da residui, ad alto contenuto di zolfo ; Olio combustibile denso

NL : stookolie, gasoliën verkregen uit residuen van direkte destillatie, hoog zwavelgehalte ; Stookolie

PT : fuel óleo, resíduos dos gasóleos de destilação directa, ricos em enxofre ; Fuelóleo

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichetatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68476-33-5

EEC No 270-675-6

No 649-024-00-9

NOTA H

- ES: petroleo combustible, residual; **Fuelóleo pesado**  
[Producto líquido de diversas corrientes de refinería, normalmente residuos. La composición es compleja y varía con el origen del petróleo crudo.]
- DA: brændselsolie, rest-; **Fuelolie**  
[Væskeproduktet fra forskellige raffinaderistømme, sædvanligvis rester. Sammensætningen er kompleks og varierer med råolie-kilden.]
- DE: Brennöl; Rückstand; Heizöl schwer  
[Flüssiges Produkt aus verschiedenen Raffinerieläufen, gewöhnlich Rückstände. Die Zusammensetzung ist komplex und variiert mit der Rohölquelle.]
- EL: καυσίμο έλαιο, υπολειμματικό· **Βαρύ μαζούτ**  
[Είναι το υγρό προϊόν διαφόρων ρευμάτων διυλιστηρίου, συνήθως υπολειμμάτων. Η σύνθεσή του είναι πολύπλοκη και μεταβάλλεται ανάλογα με την προέλευση του αργού πετρελαίου.]
- EN: Fuel oil, residual; **Heavy Fuel oil**  
[The liquid product from various refinery streams, usually residues. The composition is complex and varies with the source of the crude oil.]
- FR: fuel-oil résiduel; **Fioul lourd**  
[Produit liquide issu de diverses fractions de raffinerie, généralement des résidus. Sa composition est complexe et varie selon la provenance du pétrole brut.]
- IT: olio combustibile, residuo; **Olio combustibile denso**  
[Prodotto liquido derivante da varie correnti di raffineria, solitamente residui. La composizione è complessa e varia con la fonte del grezzo.]
- NL: brandstofolie, residuaal; **Stookolie**  
[Het vloeibare produkt dat wordt verkregen uit verscheidene raffineringstroom, gewoonlijk residuen. De samenstelling is ingewikkeld, en varieert met de herkomst van de ruwe olie.]
- PT: fuel-oil, residual; **Fuelóleo**  
[O produto líquido de várias fracções de refinaria, normalmente resíduos. A composição é complexa e varia com a origem do petróleo bruto.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-13-7

EEC No 270-792-2

No 649-825-00-4


## NOTA H

- ES : residuos (petróleo), destilación del residuo del fraccionador y reformador catalítico ; **Fuelóleo pesado**  
[Residuo complejo de la destilación del residuo del fraccionador y reformador catalítico. Con un punto de ebullición aproximado por encima de 399 °C.]
- DA : rester (råolie), katalytisk reformer fraktioneringskolonnerest, destillations- ; **Fuelolie**  
[En sammensat remanens fra destillationen af katalytisk reformer-fraktioneringskolonnerest. Den koger omkring over 399 °C.]
- DE : Rückstände (Brööl), katalytische Reformer Fraktionator Rückstandsdestillation ; **Heizöl schwer**  
[Komplexer Rückstand aus der Destillation eines katalytischen Reformer Fraktionator Rückstandes. Siedet etwa über 399 °C.]
- EL : υπολείμματα (πετρελαίου), απόσταξης υπολείμματος μονάδας κλασμάτωσης καταλυτικού αναμορφωτήρα ; **Βαρέ μαζούτ**  
[Πολύπλοκο υπόλειμμα από την απόσταξη υπολείμματος μονάδας κλασμάτωσης καταλυτικού αναμορφωτήρα. Βράζει πάνω από 399 °C περίπου.]
- EN : Residues (petroleum), catalytic reformer fractionator residue distn. ; **Heavy Fuel oil**  
[A complex residuum from the distillation of catalytic reformer fractionator residue. It boils approximately above 399 °C (750 °F).]
- FR : résidu de distillation (pétrole), résidu de fractionnement du reformage catalytique ; **Fioul lourd**  
[Résidu complexe de la distillation d'un résidu de fractionnement du reformage catalytique. Son point d'ébullition est approximativement supérieur à 399 °C.]
- IT : residui (petrolio), distillazione residui frazionatore impianto di reforming catalitico ; **Olio combustibile denso**  
[Residuo complesso della distillazione di un residuo del frazionatore dell'impianto di reforming catalitico. Bolle a temperatura superiore a 399 °C ca.]
- NL : residuen (aardolie), katalytische reformator-fractioneerder-residu destillatie- ; **Stookolie**  
[Een complex residu, afkomstig uit de destillatie van katalytische reformator-fractioneerderresidu. Kookt boven ongeveer 399 °C.]
- PT : residuos (petróleo), da destilação do residuo da coluna de fraccionamento do reformer catalítico ; **Fuelóleo**  
[Um residuo complexo da destilação do residuo da coluna de fraccionamento do reformer catalítico. Destila acima de aproximadamente 399 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-17-1

EEC No 270-796-4

No 649-026-00-X

## NOTA H

- ES: residuos (petróleo), coquizador de **gasóleo pesado** y **gasóleo** obtenido a vacío; **Fuelóleo pesado**  
[Combinación compleja de hidrocarburos producida como la fracción residual de la destilación en el coquizador de **gasóleo pesado** y **gasóleo** obtenido a vacío. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{13}$  y con un intervalo de ebullición aproximado por encima de 230 °C.]
- DA: rester (råolie), tung coker-gasolie og vakuumgasolie; Fuelolie  
[En sammensat blanding af carbonhydrider fremstillet som restfraktionen fra destillationen af tung coker-gasolie og vakuumgasolie. Den består overvejende af carbonhydrider, overvejende større end  $C_{13}$ , og koger omtrent over 230 °C.]
- DE: Rückstände (Erdöl), schweres Kokereigasöl und Vakuumgasöl; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraktion aus der Destillation von schwerem Kokereigasöl und Vakuumgasöl. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{13}$  und siedet über etwa 230 °C.]
- EL: υπολείμματα (πετρελαίου), βαρέος ακαθάρτου πετρελαίου κωκερίας και ακαθάρτου πετρελαίου κενού· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται σαν το υπολειμματικό κλάσμα από την απόσταξη βαρέος ακαθάρτου πετρελαίου κωκερίας και ακαθάρτου πετρελαίου κενού. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{13}$  και βράζει πάνω από τους 230 °C περίπου.]
- EN: Residues (petroleum), heavy coker gas oil and vacuum gas oil; Heavy Fuel oil  
[A complex combination of hydrocarbons produced as the residual fraction from the distillation of heavy coker gas oil and vacuum gas oil. It predominantly consists of hydrocarbons having carbon numbers predominantly greater than  $C_{13}$  and boiling above approximately 230 °C (446 °F).]
- FR: résidus (pétrole), gazole lourd de cokéfaction et gazole sous vide; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue comme fraction résiduelle dans la distillation de gazole lourd de cokéfaction et de gazole sous vide. Se compose principalement d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{13}$  et dont le point d'ébullition est approximativement supérieur à 230 °C.]
- IT: residui (petrolio), gasolio pesante di coking e gasolio sotto vuoto; Olio combustibile denso  
[Combinazione complessa di idrocarburi prodotta come frazione residua della distillazione di **gasolio pesante di coking** e **gasolio sotto vuoto**. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{13}$  e punto di ebollizione superiore a 230 °C ca.]
- NL: residuen (aardolie), zware uit verkookser afkomstige gasolie- en vacuümgasolie-; Stookolie  
[Een complexe verzameling koolwaterstoffen, gevormd als de residufractie uit de destillatie van **zware gasolie** uit een verkookser en **vacuümgasolie**. Bestaat voornamelijk uit koolwaterstoffen, overwegend groter dan  $C_{13}$ , en kookt boven ongeveer 230 °C.]
- PT: residuo (petróleo), do **gasóleo pesado do coker** e do **gasóleo de vácuo**; **Fuelóleo**  
[Uma combinação complexa de hidrocarbonetos produzida como a fracção da destilação de **gasóleo pesado do coker** e **gasóleo de vácuo**. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{13}$  e destila acima de aproximadamente 230 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68512-61-8

EEC No 270-983-0

No 649-027-00-5

## NOTA H

- ES : residuos (petróleo), coquizador de fracciones pesadas y fracciones ligeras obtenidas a vacío ; Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida como la fracción residual de la destilación en el coquizador de gasóleo pesado y gasóleo ligero obtenido a vacío. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{11}$  y con un punto de ebullición aproximado por encima de 230 °C.]
- DA : rester (råolie), tunge coker- og lette vakuum- ; Fuelolie  
[En sammensat blanding af carbonhydrider fremstillet som restfraktionen fra destillationen af tung coker-gasolie og let vakuumgasolie. Den består overvejende af carbonhydrider, overvejende større end  $C_{11}$ , og koger omtrent over 230 °C.]
- DE : Rückstände (Erdöl), schwere Kokerei und leichte Vakuum ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraction aus der Destillation von schwerem Kokereigasöl und leichtem Vakuumgasöl. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{11}$  und siedet über etwa 230 °C.]
- EL : υπολειμματα (πετρελαίου), βαρέα εξανθρακωτή και ελαφρά κενού· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται σαν το υπολειμματικό κλάσμα από την απόσταξη ακάθαρτου πετρελαίου βαρέος εξανθρακωτή και ελαφρύ ακάθαρτο πετρέλαιο κενού. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{11}$  και που βράζουν πάνω από 230 °C περίπου.]
- EN : Residues (petroleum), heavy coker and light vacuum , Heavy Fuel oil  
[A complex combination of hydrocarbons produced as the residual fraction from the distillation of heavy coker gas oil and light vacuum gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than  $C_{11}$  and boiling above approximately 230 °C (446 °F).]
- FR : résidus lourds de cokéfaction et résidus légers sous vide (pétrole) , Fioul lourd  
[Combinaison complexe d'hydrocarbures produite comme fraction résiduelle lors de la distillation de gazole lourd de cokéfaction et de gazole léger sous vide. Se compose principalement d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{11}$  et dont le point d'ébullition est approximativement supérieur à 230 °C.]
- IT : residui (petrolio), tagli pesanti di coking e frazioni leggere sotto vuoto , Olio combustibile denso  
[Combinazione complessa di idrocarburi prodotta come frazione residua della distillazione di gasolio pesante di coking e gasolio leggero sotto vuoto. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{11}$  e punto di ebollizione superiore a 230 °C ca.]
- NL : residuen (aardolie), zware verkookser- en lichte vacuüm- ; Stookolie  
[Een complexe verzameling koolwaterstoffen, gevormd als de residufractie uit de destillatie van zware verkookser-gasolie en lichte vacuümgasolie. Bestaat voornamelijk uit koolwaterstoffen, overwegend groter dan  $C_{11}$ , kokend boven ongeveer 230 °C.]
- PT : residuos (petróleo), pesados do coker e leves de vácuo ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida como a fracção residual da destilação do gasóleo pesado do coker e gasóleo leve de vácuo. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{11}$  e destila acima de aproximadamente de 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68512-62-9

EEC No 270-984-6

No 649-028-00-0


## NOTA H

- ES residuo (petróleo), fracciones ligeras obtenidas a vacío : **Fuelóleo pesado**  
[Residuo complejo de la destilación a vacío del residuo de la destilación atmosférica de petróleo crudo. Compuesto de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{13}$  y con un punto de ebullición aproximado por encima de 230 °C.]
- DA rester (råolie, lette vakuum- ; Fuelolie  
[En sammensat remanens fra vakuumdestillation af remanensen fra den atmosfæriske destillation af råolie. Den består af carbonhydrider, overvejende større end  $C_{13}$ , og koger omtrent over 230 °C.]
- DE : Rückstände (Erdöl), leichte Vakuum ; Heizöl schwer  
[Komplexer Rückstand aus der Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{13}$  und siedet über etwa 230 °C.]
- EL : υπολείμματα (πετρελαίου), ελαφρά κενού· Βαρύ μαζούτ  
[Πολύπλοκο υπόλειμμα από την απόσταξη σε κενό του υπολείμματος από την ατμοσφαιρική απόσταξη αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{13}$  και που βράζουν πάνω από 230 °C περίπου.]
- EN : Residues (petroleum), light vacuum ; Heavy Fuel oil  
[A complex residuum from the vacuum distillation of the residuum from the atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{13}$  and boiling above approximately 230 °C (446 °F).]
- FR : résidus légers sous vide (pétrole) ; Fioul lourd  
[Résidu complexe de la distillation sous vide du résidu de distillation atmosphérique du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{13}$  et dont le point d'ébullition est approximativement supérieur à 230 °C.]
- IT : residui (petrolio), frazione leggera sotto vuoto ; Olio combustibile denso  
[Residuo complesso della distillazione sotto vuoto del residuo della distillazione atmosferica di petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{13}$  e punto di ebollizione superiore a 230 °C ca.]
- NL : residuen (aardolie), lichte vacuüm- ; Stookolie  
[Een complex residu, afkomstig uit de vacuümdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{13}$ , kokend boven ongeveer 230 °C.]
- PT : resíduos (petróleo), leves de vácuo ; Fuelóleo  
[Um residuo complexo da destilação de vácuo de residuo da destilação de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{13}$  e destila acima de aproximadamente 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68513-69-9

EEC No 271-013-9

No 649-029-00-6


## NOTA H

- ES: residuos (petróleo), fracciones ligeras craqueadas a vapor; **Fuélóleo pesado**  
[Residuo complejo de la destilación de productos de un proceso de craqueo a vapor. Compuesto en su mayor parte de hidrocarburos aromáticos e insaturados con un número de carbonos mayor que C<sub>7</sub> y con un intervalo de ebullición aproximado de 101 °C a 555 °C.]
- DA: rester (råolie), dampkrakkede lette; **Fuelolie**  
[En sammensat remanens fra destillation af produkterne fra en dampkrakningsproces. Den består overvejende af aromatiske og umættede carbonhydrider, større end C<sub>7</sub>, med koginterval omtrent fra 101 °C til 555 °C.]
- DE: Rückstände (Erdöl), Dampf- gekrackte leichte; **Heizöl schwer**  
[Komplexer Rückstand aus der Destillation von Produkten aus einem Dampfkrackverfahren. Besteht vorherrschend aus aromatischen und ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen größer als C<sub>7</sub> und siedet im Bereich von etwa 101 °C bis 555 °C.]
- EL: υπολείμματα (πετρελαίου), ελαφρά ατμοπυρλούμενα· **Βαρύ μαζούτ**  
[Πολύπλοκο υπόλειμμα από την απόσταξη των προϊόντων ατμοπυρόλυσης. Συνίσταται κυρίως από αρωματικούς και ακόρεστους υδρογονάνθρακες με αριθμό ατόμων άνθρακα μεγαλύτερο από C<sub>7</sub> και με περιοχή βρασμού από 101 °C ως 555 °C περίπου.]
- FN: Residues (petroleum), steam-cracked light; **Heavy Fuel oil**  
[A complex residuum from the distillation of the products from a steam-cracking process. It consists predominantly of aromatic and unsaturated hydrocarbons having carbon numbers greater than C<sub>7</sub> and boiling in the range of approximately 101 °C to 555 °C (214 °F to 1 030 °F).]
- FR: résidus légers de vapocraquage (pétrole); **Fioul lourd**  
[Résidu complexe de la distillation des produits résultant d'un vapocraquage. Se compose principalement d'hydrocarbures aromatiques et insaturés dont le nombre de carbones est supérieur à C<sub>7</sub> et dont le point d'ébullition varie approximativement entre 101 °C et 555 °C.]
- IT: residui (petrolio), leggeri crackizzati con vapore; **Olio combustibile denso**  
[Residuo complesso proveniente dalla distillazione dei prodotti di un processo di cracking con vapore. È costituito principalmente da idrocarburi aromatici e insaturi con numero di atomi di carbonio superiore a C<sub>7</sub> e punto di ebollizione nell'intervallo 101 °C - 555 °C ca.]
- NL: residuen (aardolie), stoomgekraakte lichte; **Stookolie**  
[Een complex residu, afkomstig uit de destillatie van de producten uit een stoomkraakproces. Bestaat voornamelijk uit aromatische en onverzadigde koolwaterstoffen, overwegend groter dan C<sub>7</sub>, met een kooktraject van ongeveer 101 °C tot 555 °C.]
- PT: resíduos (petróleo), leves do steam-cracking; **Fuelóleo**  
[Um residuo complexo da destilação dos produtos de um processo de steam-cracking. É constituído predominantemente por hidrocarbonetos insaturados e aromáticos com números de átomos de carbono superiores a C<sub>7</sub> e destila no intervalo de aproximadamente 101 °C a 555 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	<p>R : 45</p> <p>S : 53-45</p>

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68553-00-4

EEC No 271-384-7

No 649-000-00-1

NOTA H

- ES: petróleo combustible, número 6; Fuelóleo pesado  
[Petróleo combustible con una viscosidad mínima de 900 SUS a 37,7 °C y un máximo de 9000 SUS a 37,7 °C.]
- DA: brændselolie, nr. 6; Fuelolie  
[En brændselolie med en minimumviskositet på 900cSt og en maximumviskositet på 9000cSt ved 37,7 °C.]
- DE: Brennöl, no. 6; Heizöl schwer  
[Brennöl mit einer minimalen Viskosität von 900 SUS bei 37,7 °C und einer maximalen Viskosität von 9000 SUS bei 37,7 °C.]
- EL: καυσίμο έλαιο, No 6· Βαρύ μαζούτ  
[καύσιμο έλαιο με ελάχιστο ιξώδες 900 SUS σε 37,7 °C και μέγιστο ιξώδες 9000 SUS σε 37,7 °C.]
- EN: Fuel oil, No 6; Heavy Fuel oil  
[A distillate oil having a minimum viscosity of 900 SUS at 37.7 °C (100 °F) to a maximum of 9000 SUS at 37.7 °C (100 °F).]
- FR: fuel-oil, n° 6; Fioul lourd  
[Fuel-oil dont la viscosité est comprise entre 900 SUS et 9000 SUS à 37,7 °C.]
- IT: olio combustibile, n. 6; Olio combustibile denso  
[olio combustibile con viscosità minima di 900 SUS a 37,7 °C e viscosità massima di 9000 SUS a 37,7 °C.]
- NL: brandstofolie, nr. 6; Stookolie  
[Een stookolie met een minimale viscositeit van 900 SUS bij 37,7 °C en een maximale viscositeit van 9000 SUS bij 37,7 °C.]
- PT: fuel-oil, nº 6; Fuelóleo  
[Fuel-oil com uma viscosidade a 37,7 °C compreendida entre um mínimo de 900 SUS e um máximo de 9000 SUS.]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào




Cas No 68607-30-7

EEC No 271-763-7

No 649-031-00-7


NOTA H

- ES : residuos (petróleo), planta de destilación primaria, baja proporción de azufre ; *Fuelóleo pesado*  
[Combinación compleja de hidrocarburos con baja proporción de azufre producida como la fracción a partir de la planta de destilación primaria de la destilación del crudo de petróleo. Residuo después de la separación de la fracción de primera destilación de gasolina, queroseno y gasóleo.]
- DA : rester (råolie, topanlægs-, sovl-fattige ; *Fuelolie*  
[En sammensat, svovlfattig blanding af carbonhydrider fremstillet som restfraktionen fra topanlægsdestillation af råolie. Den udgør resten, efter at straight-run benzinfraktionen, petroleumfraktionen og gasoliefraktionen er blevet fjernet.]
- DE : Rückstände (Erdöl), Topanlage, niedrig-Schwefel ; *Heizöl schwer*  
[Eine wenig Schwefel enthaltende komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraktion aus der Topanlagendestillation von Rohöl. Es ist der Rückstand nach dem Entfernen von straight-run Benzinschnitt, Kerosinschnitt und Gasölschnitt.]
- EL : υπολείμματα (πετρελαίου), μονάδας ατμοσφαιρικής απόσταξης, χαμηλής περιεκτικότητας σε θείο· *Βαρύ μαζούτ*  
[Πολύπλοκος συνδυασμός υδρογονανθράκων, χαμηλής περιεκτικότητας σε θείο, που παράγεται σαν το υπολειμματικό κλάσμα απόσταξης αργού πετρελαίου σε μονάδα ατμοσφαιρικής απόσταξης. Είναι το υπόλειμμα, μετά την απομάκρυνση του κλάσματος της απευθείας απόσταξης βενζίνης, του κλάσματος κηροζίνης και του κλάσματος του ακαθάρτου πετρελαίου.]
- EN : Residues (petroleum), topping plant, low-sulfur ; *Heavy Fuel oil*  
[A low-sulfur complex combination of hydrocarbons produced as the residual fraction from the topping plant distillation of crude oil. It is the residuum after the straight-run gasoline cut, kerosene cut and gas oil cut have been removed.]
- FR : résidu à basse teneur en soufre (pétrole), unité de fractionnement ; *Fioul lourd*  
[Combinaison complexe d'hydrocarbures, à basse teneur en soufre, produite comme fraction résiduelle, dans la distillation fractionnée du pétrole brut, après séparation des coupes essence, kérosène et gazole de distillation directe.]
- IT : residui (petrolio), impianto di topping, basso tenore di zolfo ; *Olio combustibile denso*  
[Combinazione complessa di idrocarburi a basso contenuto di zolfo ottenuta come frazione residua di distillazione del grezzo nell'impianto di topping. È il residuo che rimane dopo separazione dei tagli di benzina di prima distillazione, cherosene e gasolio.]
- NL : residuen (aardolie), aftopinrichting, laag zwavelgehalte ; *Stookolie*  
[Een complexe verzameling koolwaterstoffen met laag zwavelgehalte, gevormd als de residufractie uit de destillatie in de aftopinrichting van ruwe olie. Dit residu wordt gevormd na verwijdering van de aftap van direct door fractionering verkregen gasoline, kerosine en gasolie.]
- PT : residuos (petróleo), da unidade de topping, com baixo teor em enxofre ; *Fuelóleo*  
[Uma mistura complexa de hidrocarbonetos com baixo teor em enxofre produzida como a fracção residual da destilação na unidade de topping do petróleo bruto. É o resíduo após a remoção dos cortes gasolina de destilação directa, petróleo e gasóleo.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68783-08-4

EEC No 272-184-2

No 649-032-00-2

## NOTA H

- ES : gasoleos (petróleo), fracción pesada atmosférica ; Fuelóleo pesado  
[Combinación compleja de hidrocarburos obtenida por la destilación de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{31}$ , y con un intervalo de ebullición aproximado de 121 °C a 510 °C.]
- DA : gasolier (råolie), tunge atomsfæriske ; Fuelolie  
[En sammensat blanding af carbonhydrider opnået ved destillationen af råolie. Den består af carbonhydrider, overvejende  $C_7$  en  $C_{31}$ , med koginterval omtrent fra 121 °C til 510 °C.]
- DE : Gase (Erdöl), schwere offene ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{31}$  und siedet im Bereich von etwa 121 °C bis 510 °C.]
- EL : ακαθάρτα πετρέλαια (πετρελαίου), βαρέα ατμοσφαιρικής απόσταξης· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων, που λαμβάνεται με την απόσταξη αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  ως και  $C_{31}$ , και με περιοχή βρασμού από 121 °C ως 510°C περίπου.]
- EN : Gas oils (petroleum), heavy atmospheric ; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{31}$  and boiling in the range of approximately 121 °C to 510 °C (250 °F to 950 °F).]
- FR : gazoles atmosphériques lourds (pétrole) ; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_7$ -  $C_{31}$ , et dont le point d'ébullition est compris approximativement entre 121 °C et 510 °C.]
- IT : gasoli (petrolio), pesanti, distillazione atmosferica ; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta per distillazione del petrolio grezzo. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{31}$ , e punto di ebollizione nell'intervallo 121 °C-510 °C ca.]
- NL : gasoliën (aardolie), zwaar atmosferische destillatie ; Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_7$ , tot en met  $C_{31}$ , met een kooktraject van ongeveer 121 °C tot 510 °C.]
- PT : gasoleos (petróleo), atmosféricos pesados ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação de petróleo bruto. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{31}$ , e destila no intervalo de aproximadamente 121 °C a 510 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 69783-13-1

EEC No 272-187-9

No 649-033-00-8


NOTA H

- ES: residuos (petróleo), depurador del coquizador, con productos aromáticos con anillos condensados; Fuelóleo pesado [Combinación muy compleja de hidrocarburos producida como la fracción residual de la destilación del residuo obtenido a vacío y los productos de un proceso de craqueo térmico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{20}$  y con un punto de ebullición aproximado por encima de  $350^{\circ}\text{C}$ . Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4- a 6-miembros.]
- DA: rester (råolie), coker scrubber, indeholder kondenserede aromater; Fuelolie [En meget sammensat blanding af carbonhydrider fremstillet som restfraktionen fra destillationen af vakuumremanensen og produkterne fra en termisk krakningsproces. Den består overvejende af carbonhydrider, overvejende større end  $C_{20}$  og koger omtrent over  $350^{\circ}\text{C}$ . Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserede ringe.]
- DE: Rückstände (Erdöl), Kokswäscher, kondensierte Ring-Aromaten-enthaltend; Heizöl schwer [Komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraktion durch Destillation des Vakuumrückstandes und der Produkte aus einem thermischen Crackverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$  und siedet über etwa  $350^{\circ}\text{C}$ . Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten aromatischen Ringen enthalten.]
- EL: υπολείμματα (πετρελαίου), καταιωστήρα μονάδας εξανθράκωσης, που περιέχουν συμπυκνωμένους αρωματικούς δακτύλιους· Βαρύ μαζούτ [Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται σαν το υπολειμματικό κλάσμα απόσταξης υπολείμματος κενού και των προϊόντων θερμικής πυρόλυσης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως μεγαλύτερους από  $C_{20}$  και βράζει πάντα από  $350^{\circ}\text{C}$  περίπου. Το ρεύμα αυτό είναι πιθανό να περιέχει 5 % κατά βάρος ή και περισσότερο, αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN: Residues (petroleum), coker scrubber, Condensed-ring-arom.-contg.; Heavy Fuel oil [A very complex combination of hydrocarbons produced as the residual fraction from the distillation of vacuum residuum and the products from a thermal cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than  $C_{20}$  and boiling above approximately  $350^{\circ}\text{C}$  ( $662^{\circ}\text{F}$ ). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR: résidu de laveur à coke (pétrole), contenant des aromatiques à noyaux condensés; Fioul lourd [Combinaison très complexe d'hydrocarbures produite comme fraction résiduelle dans la distillation d'un résidu sous vide et des produits résultant d'un craquage thermique. Se compose principalement d'hydrocarbures dont le nombre de carbonos est en majorité supérieur à  $C_{20}$  et dont le point d'ébullition est approximativement supérieur à  $350^{\circ}\text{C}$ . Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT: residui (petrolio), da scrubber impianto coking, contenenti aromatici ad anelli condensati; Olio combustibile denso [Combinazione molto complessa di idrocarburi ottenuta come frazione residua dalla distillazione di un residuo sotto vuoto e dai prodotti di un processo di cracking termico. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{20}$  e punto di ebollizione superiore a  $350^{\circ}\text{C}$  ca. Questa corrente contiene probabilmente il 5 % in peso o più di idrocarburi ad anelli condensati di 4-6 elementi.]
- NL: residuen (aardolie), verkookser-gasreiniger, bevat aromaten met gecondenseerde ringen; Stookolie [Een zeer complexe verzameling koolwaterstoffen die wordt gevormd als de residufractie uit de destillatie van vacuumresidu en de producten uit een thermisch kraakproces. Bestaat voornamelijk uit koolwaterstoffen, overwegend groter dan  $C_{20}$ , en kookt boven  $350^{\circ}\text{C}$ . Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT: residuos (petróleo), da coluna de remoção de gases do coker, contendo hidrocarbonetos aromáticos polinucleares, Fuelóleo [Uma combinação muito complexa de hidrocarbonetos produzida como a fracção residual da destilação do residuo de vacuo e dos produtos de um processo de cracking térmico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{20}$  e destila acima de aproximadamente  $350^{\circ}\text{C}$ . Esta fracção geralmente contém 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*


Cas No 68955-27-1

EEC No 273-263-4

No 649-034-00-3

## NOTA H

- ES : destilados (petróleo), residuos de petróleo obtenidos a vacío ; Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida por la destilación a vacío del residuo de la destilación atmosférica del petróleo crudo.]
- DA : destillater (råolie), råolierester vakuum- ; Fuelolie  
[En sammensat blanding af carbonhydrider ved vakuumdestillationen af remanensen fra den atmosfæriske destillation af råolie.]
- DE : Destillate (Erdöl), Erdölrückstände Vakuum ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl.]
- EL : αποσταγμάτα (πετρελαίου), υπολείμματα πετρελαίου κενού· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη στο κενό του υπολείμματος από την ατμοσφαιρική απόσταξη αργού πετρελαίου.]
- EN : Distillates (petroleum), petroleum residues vacuum ; Heavy Fuel oil  
[A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from the atmospheric distillation of crude oil.]
- FR : distillats sous vide (pétrole), résidus de pétrole ; Fioul lourd  
[Combinaison complexe d'hydrocarbures produite par la distillation sous vide du résidu de la distillation atmosphérique du pétrole brut.]
- IT : distillati (petrolio), sotto vuoto, residui di petrolio ; Olio combustibile denso  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo di distillazione atmosferica del grezzo.]
- NL : destillaten (aardolie), aardolieresiduen vacuüm- ; Stookolie  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de vacuümdestillatie van het residu dat afkomstig is van de atmosferische destillatie van ruwe olie.]
- PT : destilados (petróleo), de vácuo de resíduos do petróleo ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vácuo do residuo da destilação atmosférica de petróleo bruto.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68955-36-2

EEC No 273-272-3

No 649-035-00-9

NOTA H

- ES : residuos (petróleo), craqueados a vapor, resinosos ; Fuelóleo pesado  
[Residuo complejo de la destilación de residuos de petróleo craqueados a vapor.]
- DA : rester (råolie), dampkrakket, harpiksholdige ; Fuelolie  
[En sammensat remanens fra destillationen af dampkrakkede råolierester.]
- DE : Rückstände (Erdöl), Dampf-gekrackt, harzartig ; Heizöl schwer  
[Komplexer Rückstand aus der Destillation von Dampf-gekrackten Erdölrückständen.]
- EL : υπολείμματα (πετρελαίου), ατμοπυρολυμένα, ρητινώδη· Βαρύ μαζούτ  
[Πολύπλοκο υπόλειμμα από την απόσταξη ατμοπυρολυμένων υπολειμμάτων πετρελαίου.]
- EN : Residues (petroleum), steam-cracked, resinous ; Heavy Fuel oil  
[A complex residuum from the distillation of steam-cracked petroleum residues.]
- FR : résidus de vapocraquage résineux (pétrole) ; Fioul lourd  
[Résidu complexe issu de la distillation de résidus de vapocraquage du pétrole.]
- IT : residui (petrolio), crackizzati con vapore, resinosi ; Olio combustibile denso  
[Residuo complesso proveniente dalla distillazione di residui di petrolio crackizzati con vapore acqueo.]
- NL : residuen (aardolie), stoomgekraakt, harsachtig ; Stookolie  
[Een complex residu dat wordt verkregen door de destillatie van stoomgekraakte aardolieresiduen.]
- PT : resíduos (petróleo), do steam-cracking, resinosos ; Fuelóleo  
[Um resíduo complexo da destilação de resíduos de petróleo do steam-cracking.]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

Carc. Cat. 2 ; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	R : 45
	S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 70592-76-6

EEC No 274-683-0

No 649-036-00-4

## NOTA H

- ES : destilados (petróleo), fracción intermedia obtenida a vacío ; **Fuélolo pesado**  
[Combinación compleja de hidrocarburos producida por destilación a vacío del residuo de la destilación atmosférica de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{42}$  y con un intervalo de ebullición aproximado de 250 °C a 545 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA : destillater (råolie), intermediære vakuum ; **Fuelolie**  
[En sammensæt blanding af carbonhydrider fremstillet ved destillationen af remanensen af den atmosfæriske destillation af råolie. Den består af carbonhydrider, overvejende  $C_{14}$  og til og med  $C_{42}$  og koger omtrent i intervallet fra 250 °C til 545 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent eller mere af 4- til 6-leddede kondenserede aromatiske carbonhydrider.]
- DE : Destillate (Erdöl), intermediär Vakuum ; **Heizöl schwer**  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{42}$  und siedet im Bereich von etwa 250 °C bis 545 °C. Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen enthalten.]
- EL : αποστάγματα (πετρελαίου), ενδιάμεσα κενού· **Βαρύ μαζούτ**  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με την απόσταξη στο κενό του υπολειμματος ατμοσφαιρικής απόσταξης αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  ως και  $C_{42}$  και με περιοχή βρασμού από 250 °C ως 545°C περίπου. Το ρεύμα αυτό πιθανό να περιέχει 5 % κατά βάρος ή και περισσότερο, αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN : Distillates (petroleum), intermediate vacuum ; **Heavy Fuel oil**  
[A complex combination of hydrocarbons produced by the vacuum, distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{42}$  and boiling in the range of approximately 250 °C to 545 °C (482 °F to 1 013 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR : distillats intermédiaires sous vide (pétrole) ; **Fioul lourd**  
[Combinaison complexe d'hydrocarbures produit par distillation sous vide du résidu issu de la distillation atmosphérique de pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{14}$ -  $C_{42}$  et dont le point d'ébullition est approximativement compris entre 250 °C et 545 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant 4 à 6 cycles.]
- IT : distillati (petrolio), tagli intermedi sotto vuoto ; **Olio combustibile denso**  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo della distillazione atmosferica del petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ - $C_{42}$  e con punto di ebollizione nell'intervallo 250 °C-545 °C ca. Questa corrente contiene probabilmente il 5 % in peso, o più di idrocarburi aromatici ad anelli condensati di 4-6 elementi.]
- NL : destillaten (aardolie), middelste vacuüm ; **Stookolie**  
[Een complexe verzameling koolwaterstoffen, verkregen door de vacuümdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_{14}$  tot en met  $C_{42}$ , met een kooktraject van ongeveer 250 °C tot 545 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT : destilados (petróleo), médios de vácuo ; **Fuelóleo**  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vácuo do resíduo da destilação atmosférica de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{14}$  até  $C_{42}$  e destila no intervalo de aproximadamente 250 °C a 545 °C. Esta fracção pode conter 5 % em peso ou mais hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 70592-77-7

EEC No 274-684-6

No 649-037-00-X

## NOTA H

- ES : destilados (petróleo), fracción ligera obtenida a vacío ; Fuéoleo pesado  
[Combinación compleja de hidrocarburos producida por destilación a vacío del residuo de la destilación atmosférica del petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{31}$ , y con un intervalo de ebullición de 250 °C a 545 °C.]
- DA : destillater (råolie), lette vakuum ; Fúelolie  
[En sammensat blanding af carbonhydrider fremstillet ved vakuumdestillation af remanensen fra den atmosfæriske destillation af råolie. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{31}$ , med koginterval omtrent fra 250 °C til 545 °C.]
- DE : Destillate (Erdöl), leichte Vakuum ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{31}$  und siedet im Bereich von etwa 250 °C bis 545 °C.]
- αποστανματα (πετρελαιο), ελαφρά κενού· Βαρύ μαζούτ  
Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη στο κενό του υπολείμματος ατμοσφαιρικής αποσταξης αργού πετρελαιο. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{31}$  και με περιοχή βρασμού από 250 °C ως 545 °C περίπου.]
- EN : Distillates (petroleum), light vacuum ; Heavy Fuel oil  
[A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{31}$  and boiling in the range of approximately 250 °C to 545 °C (482 °F to 1 013 °F).]
- FR : distillats légers sous vide (pétrole) ; Fioul lourd  
[Combinaison complexe d'hydrocarbures produite par distillation sous vide du résidu issu de la distillation atmosphérique de pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{31}$ , et dont le point d'ébullition est approximativement compris entre 250 °C et 545 °C.]
- IT : distillati (petrolio), tagli leggeri sotto vuoto ; Olio combustibile denso  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo della distillazione atmosferica del petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{31}$  e con punto di ebollizione nell'intervallo 250 °C-545 °C ca.]
- NL : destillaten (aardolie), lichte vacuüm- , Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen door de vacuümdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{31}$ , met een kooktraject van ongeveer 250 °C tot 545 °C.]
- PT : destilados (petróleo), leves de vacío ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vácuo do residuo da destilação atmosférica de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{31}$ , e destila no intervalo de aproximadamente 250 °C a 545 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 70592-78-8

EEC No 274 685-1

No 649-038-00-5

## NOTA H

- ES** destilados (petróleo), obtenidos a vacío, Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida por destilación a vacío del residuo de la destilación atmosférica del petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y con un intervalo de ebullición aproximado de 270 °C a 600 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA** destillater (råolie), vakuum, Fuelolie  
[En sammensat blanding af carbonhydrier fremstillet ved vakuumdestillationen af reanensen fra den atmosfæriske destillation af råolie. Den består af carbonhydrier overvejende  $C_{11}$  til og med  $C_{30}$ , med koginterval omtrent fra 270 °C til 600 °C. Denne strøm kan indeholde 5 vægtprocent, eller mere, aromatisk carbonhydrier bestående af 4 til 6 leddede kondenserede ringe.]
- DE** Destillate (Erdöl), Vakuum, Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorwiegend im Bereich von  $C_{11}$  bis  $C_{30}$  und siedet im Bereich von etwa 270 °C bis 600 °C. Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4 bis 6 gliedigen kondensierten Ringen enthalten.]
- L** αποσταγματα (πετρελαίου), κενού, Βαρύ μαζούτ  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που παραγεται με την απόσταξη στο κενό του υπολειμματος ατμοσφαιρικής απόσταξης αργού πετρελαιο. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{30}$  και με περιοχή θρασμού από 270 °C ως 600 °C περίπου. Το ρεύμα αυτό είναι πιθανό να περιχει 5 % κατά βάρος ή και περισσότερο, αρωματικούς υδρογονάνθρακες με τετραμελεις ως εξαμελεις συμπυκνωμένους άκετυλιους.]
- N** Distillates (petroleum), vacuum, Heavy Fuel oil  
[A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and boiling in the range of approximately 270 °C to 600 °C (518 °F to 1112 °F). This stream is likely to contain 5 wt % or more of 4 to 6 membered condensed ring aromatic hydrocarbons.]
- R** distillats sous vide (pétrole), Fioul lourd  
[Combinaison complexe d'hydrocarbures produite par distillation sous vide du résidu issu de la distillation atmosphérique de pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$  -  $C_{30}$  et dont le point d'ébullition est compris entre 270 °C et 600 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant 4 à 6 cycles.]
- distillati (petrolio), sotto vuoto, Olio combustibile denso  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo della distillazione atmosferica del petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  -  $C_{30}$  e con punto di ebollizione nell'intervallo 270 °C - 600 °C ca. Questa corrente contiene probabilmente il 5 % in peso o più di idrocarburi aromatici ad anelli condensati di 4-6 elementi.]
- destillaten (aardolie), vacuum-, Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen door de vakuumdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , met een kooktraject van ongeveer 270 °C tot 600 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4 tot 6 voudig gerondenseerde ringen.]
- destilados (petróleo), de vacío, Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vacío do residuo da destilação atmosférica de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e destila no intervalo de aproximadamente 270 °C a 600 °C. Esta fração geralmente contém 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 85117-03-9

EEC No 285-555-9

No 649-839-00-0

## NOTA H


- ES: gasoleos (petróleo), fracción pesada obtenida a vacío hidrodesulfurada del coquizador; **Fuélóleo pesado**  
[Combinación compleja de hidrocarburos obtenida por hidrodesulfuración de reservas de destilado pesado del coquizador. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{18}$  a  $C_{24}$  y con un intervalo de ebullición aproximado de 304 °C a 548 °C. Probablemente contenga un 5 % o más de hidrocarburos aromáticos con anillos condensados de 4- a 6- miembros.]
- DA: gasolier (råolie), hydroafsvovlede tunge coker vakuum-; **Fuelolie**  
[En sammensat blanding af carbonhydrider opnået ved hydroafsvovling af tunge coker-destillat råstoffer. Den består overvejende af carbonhydrider, overvejende  $C_{18}$  til  $C_{24}$ , med koginterval omtrent fra 304 °C til 548 °C. Indeholder sandsynligvis 5 %, eller mere, aromatiske carbonhydrider bestående af 4- til 6-leddede kondenserende ringe.]
- DE: Gasöle (Erdöl), hydrodesulfurierte Koker schwere Vakuum; **Heizöl schwer**  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Hydrodesulfurierung von schweren Kokereidestillat Ausgangsstoffen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{18}$  bis  $C_{24}$  und siedet im Bereich von etwa 304 °C bis 548 °C. Enthält wahrscheinlich 5 % oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen.]
- EL: ακαθάρτα πετρελαιο (πετρελαίου), υδρογονοαποδεδειγμένα μονάδας εξανθράκωσης βαρέα κενού· **Βαρύ μαζούτ**  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με υδρογονοαποθείωση αποθεμάτων βαρέος αποστάγματος μονάδας εξανθράκωσης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{18}$  ως  $C_{24}$  και και βράζει στην περιοχή από 304 °C ως 548 °C περίπου. Είναι πιθανό να περιέχει 5 % ή περισσότερο, αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαμελείς συμπυκνωμένους δακτύλιους.]
- EN: Gas oils (petroleum), hydrodesulfurized coker heavy vacuum; **Heavy Fuel oil**  
[A complex combination of hydrocarbons obtained by hydrodesulfurization of heavy coker distillate stocks. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range  $C_{18}$  to  $C_{24}$  and boiling in the range of approximately 304 °C to 548 °C (579 °F to 1 018 °F). Likely to contain 5 % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR: gazoles lourds sous vide (pétrole), cokéfaction, hydrodésulfuration; **Fioul lourd**  
[Combinaison complexe d'hydrocarbures obtenue par hydrodésulfuration de charges de distillats lourds de cokéfaction. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{18}$ - $C_{24}$  et dont le point d'ébullition est compris approximativement entre 304 °C et 548 °C. Peut contenir 5 % ou plus d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT: gasoli (petrolio), pesanti sotto vuoto da coker idrodesolforati; **Olio combustibile denso**  
[Combinazione complessa di idrocarburi ottenuti per idrodesolforazione di stock di distillato pesante di coker. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_{18}$ - $C_{24}$  e punto di ebollizione nell'intervallo 304 °C-548 °C ca. Contiene probabilmente il 5 % in peso o più di idrocarburi aromatici condensati da 4 a 6 elementi.]
- NL: gasoliën (aardolie), met waterstof ontzwavelde verkookser zware vacuümdestillatiefraction; **Stookolie**  
[Een complexe verzameling koolwaterstoffen verkregen door ontzwaveling met waterstof van zware destillaatgrondstoffen uit de verkookser. Het bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{18}$  tot  $C_{24}$ , met een kooktraject van ongeveer 304 °C tot 548 °C. Bevat waarschijnlijk 5 % of meer aromatische koolwaterstoffen met 4- tot 6-voudige gecondenseerde ringen.]
- PT: gesoleo (petróleo), pesados de vácuo do coker hidrogenodessulfurizados; **Fuelóleo**  
[Uma combinação complexa de hidrocarbonetos obtida por hidrogenodessulfuração de destilados pesados do coker. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{18}$  até  $C_{24}$  e destila no intervalo de aproximadamente 304 °C a 548 °C. Pode conter 5 % ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90669-75-3

EEC No 292-657-7

No 649-040-00-6

## NOTA H

- ES : residuos (petróleo), craqueados a vapor, destilados ; Fielóleo pesado  
[Combinación compleja de hidrocarburos obtenida durante la producción de alquitrán de petróleo refinado por la destilación de alquitrán craqueado a vapor. Compuesta en su mayor parte de aromáticos y otros hidrocarburos y compuestos orgánicos de azufre.]
- DA : rester (råolie), dampkrakkede, destillater ; Fuelolie  
[En sammensat blanding af carbonhydrider opnået under fremstillingen af raffineret råolietjære ved destillation af dampkrakket tjære. Den består overvejende af aromatiske og andre carbonhydrider organiske svovlforbindelser.]
- DE : Rückstände (Erdöl), dampfgekrackt, Destillate ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, die man während der Produktion von aufbereitetem Erdölteer durch Destillation von dampfgekracktem Teer erhält. Besteht vorherrschend aus aromatischen und anderen Kohlenwasserstoffen und organischen Schwefelverbindungen.]
- EL : υπολειμμάτων (πετρελαίου), ατμοπυρολυμένων, αποστάγματα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται κατά την παραγωγή διυλισμένης πίσσας πετρελαίου, με την απόσταξη ατμοπυρολυμένης πίσσας. Συνίσταται κυρίως από αρωματικούς και άλλους υδρογονάνθρακες και οργανικές ενώσεις θείου.]
- EN : Residues (petroleum), steam-cracked, distillates ; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained during the production of refined petroleum tar by the distillation of steam cracked tar. It consists predominantly of aromatic and other hydrocarbons and organic sulfur compounds.]
- FR : résidus de vapocraquage (pétrole), distillats ; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue durant la production de goudron de pétrole raffiné par distillation de goudron de vapocraquage. Se compose principalement d'hydrocarbures aromatiques et autres, et de composés soufrés organiques.]
- IT : residui (petrolio), crackizzati con vapore, distillati ; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuti nel corso della produzione di catrame di petrolio raffinato mediante la distillazione di catrame crackizzato con vapore. È costituita prevalentemente aromatici ed altri idrocarburi e composti organici dello zolfo.]
- NL : residuen (aardolie), stoomgekraakt, destillaten ; Stookolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen tijdens de productie van gezuiverde aardolieteer door de destillatie van stoomgekraakte teer. Bestaat voornamelijk uit aromatische en andere koolwaterstoffen en organische zwavelverbindingen.]
- PT : residuos (petróleo), do steam-cracking, destilados ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida durante a produção de alcatrão de petróleo refinado por destilação de alcatrão do steam-cracking. É constituída predominantemente por hidrocarbonetos aromáticos e outros e por compostos orgânicos de enxofre.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90669-76-4

EEC No 292-658-2

No 649-041-00-1

## NOTA H

- ES : residuos (petróleo), a vacío, fracción ligera , Fuelóleo pesado  
[Residuo complejo de la destilación a vacío del residuo de la destilación atmosférica de petróleo crudo. Compuesto fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{14}$  y con un punto de ebullición aproximado por encima de 390 °C]
- DA : rester (råolie), vakuum-, lette , Fuelolie  
[En sammensat remanens fra vakuumdestillation af remanensen fra atmosfærisk destillation af råolie. Den består overvejende af carbonhydrider, overvejende større end  $C_{14}$  og koger omtrent over 390 °C]
- DE : Rückstände (Erdöl), Vakuum, leicht , Heizöl schwer  
[Komplexer Rückstand aus der Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{14}$  und siedet über etwa 390 °C]
- EL : υπολείμματα (πετρελαίου) κενού, ελαφρά , Βαρύ μαζούτ  
[Πολύπλοκο υπόλειμμα από την απόσταξη σε κενό υπολειμματος ατμοσφαιρικής απόσταξης αργού πετρελαίου. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{14}$  και βράζει πάνω από 390 °C περίπου]
- EN : Residues (petroleum), vacuum, light , Heavy Fuel oil  
[A complex residuum from the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than  $C_{14}$  and boiling above approximately 390 °C (734 °F)]
- FR : résidus légers sous vide (pétrole) , Fioul lourd  
[Résidu complexe de la distillation sous vide du résidu de distillation atmosphérique du pétrole brut. Se compose principalement d'hydrocarbures dont le nombre de carbones est en majeure partie supérieur à  $C_{14}$  et dont le point d'ébullition est approximativement supérieur à 390 °C]
- IT : residui (petrolio), sotto vuoto, leggeri , Olio combustibile denso  
[Residuo complesso della distillazione sotto vuoto del residuo della distillazione atmosferica di petrolio grezzo. Costituito prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente maggiore di  $C_{14}$  e con punto di ebollizione maggiore di 390 °C ca.]
- NL : residuen (aardolie), vacuüm-, lichte , Stookolie  
[Een complex residu dat afkomstig is uit de vacuümdistillatie van het residu uit de atmosferische destillatie van ruwe olie. Bestaat voornamelijk uit koolwaterstoffen, overwegend groter dan  $C_{14}$ , kokend boven ongeveer 390 °C]
- PT : residuos (petróleo), de vácuo, leves , Fuelóleo  
[Um residuo complexo da destilação de vácuo do residuo da destilação atmosférica de petróleo bruto. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{14}$  e destila a uma de aproximadamente 390 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92045-14-2

EEC No 295-396-7

No 649-042-00-7

## NOTA H

- ES petroleo combustible, pesado, con gran proporción de azufre ; Fuéloleo pesado  
[Combinación compleja de hidrocarburos obtenida por la destilación del petróleo crudo. Compuesta fundamentalmente de hidrocarburos alifáticos, aromáticos y cicloalifáticos con un número de carbonos en su mayor parte superior a  $C_{25}$  y con un intervalo de ebullición aproximado por encima de 400 °C]
- DA brændselolie, tung, højt svovlindhold ; Fuelolie  
[En sammensat blanding af carbonhydrider opnået ved destillation af rå olie. Den består overvejende af aliphatiske, aromatiske og cycloaliphatiske carbonhydrider, overvejende større end  $C_{25}$ , der koger højere end omtrent over 400 °C]
- DE Brennstoff, schwer, hochschwefelhaltig ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von rohem Erdöl erhält. Besteht vorwiegend aus aliphatischen, aromatischen und cycloaliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorwiegend höher als  $C_{25}$  und siedet über etwa 400 °C]
- EL υπολείμματα (πετρελαίου), κενού, ελαφρά· Βαρύ μαζούτ  
[Πολυπλοκό υπόλειμμα από την απόσταξη σε κενό του υπολείμματος ατμοσφαιρικής απόσταξης αργού πετρελαίου. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{25}$  και βράζει πάνω από 400 °C περίπου.]
- EN Fuel oil, heavy, high-sulfur, Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by the distillation of crude petroleum. It consists predominantly of aliphatic, aromatic and cycloaliphatic hydrocarbons having carbon numbers predominantly higher than  $C_{25}$  and boiling above approximately 400 °C (752 °F)]
- FR fuel-oil lourd à haute teneur en soufre, Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole brut. Se compose principalement d'hydrocarbures aliphatiques, aromatiques et cycloaliphatiques dont le nombre de carbones est en majeure partie supérieur à  $C_{25}$  et dont le point d'ébullition est approximativement supérieur à 400 °C]
- IT olio combustibile, pesante, alto livello di zolfo, Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuti per distillazione di petrolio grezzo. È costituita prevalentemente da idrocarburi alifatici, aromatici e cicloalifatici con numero di atomi di carbonio prevalentemente maggiore di  $C_{25}$  e con punto di ebollizione superiore a 400 °C ca.]
- NL stookolie, zware, hoog zwavelgehalte, Stookolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van ruwe aardolie. Bestaat voornamelijk uit alifatische, aromatische en cyclo-alifatische-koolwaterstoffen, overwegend groter dan  $C_{25}$ , en kokend boven ongeveer 400 °C]
- PT fuel-oil, pesado, de alto teor em enxofre, Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação de petróleo bruto. É constituída predominantemente por hidrocarbonetos alifáticos, aromáticos e cicloalifáticos com números de átomos de carbono predominantemente superiores a  $C_{25}$  e destila acima de aproximadamente 400 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92061-97-7

EEC No 295-511-0

No ~~649-043-00-2~~

## NOTA H

- ES : residuos (petróleo), craqueo catalítico ; Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida como la fracción residual de la destilación de los productos de un proceso de craqueo catalítico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{11}$ , y con un punto de ebullición aproximado por encima de 200 °C.]
- DA : rester (råolie), katalytisk kraknings- ; Fuelolie  
[En sammensat blanding af carbonhydrider fremstillet som restfraktionen fra destillationen af produkterne fra en katalytisk krakningsproces. Den består overvejende af carbonhydrider, overvejende større end  $C_{11}$ , der koger omtrent over 200 °C.]
- DE : Rückstände (Erdöl), katalytisches Kracken ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraktion aus der Destillation der Produkte aus einem katalytischen Krackverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{11}$ , und siedet über etwa 200 °C.]
- EL : υπολείμματα (πετρελαίου), καταλυτικής πυρόλυσης· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται ως το υπολειμματικό κλάσμα από την απόσπαση των προϊόντων καταλυτικής πυρόλυσης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{11}$ , και βράζει πάνω από τους 200 °C περίπου.]
- EN : Residues (petroleum), catalytic cracking ; Heavy Fuel oil  
[A complex combination of hydrocarbons produced as the residual fraction from the distillation of the products from a catalytic cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than  $C_{11}$ , and boiling above approximately 200 °C (392 °F).]
- FR : résidu (pétrole), craquage catalytique ; Fioul lourd  
[Combinaison complexe d'hydrocarbures produite comme fraction résiduelle dans la distillation des produits résultant d'un craquage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{11}$ , et dont le point d'ébullition est approximativement supérieur à 200 °C.]
- IT : residui (petrolio), cracking catalitico ; Olio combustibile denso  
[Combinazione complessa di idrocarburi prodotta come frazione residua dalla distillazione dei prodotti da un processo di cracking catalitico. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente maggiore di  $C_{11}$ , e con punto di ebollizione superiore a 200 °C ca.]
- NL : residuen (aardolie), katalytische kraak- ; Stookolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als de residufractie uit de destillatie van de produkten van een katalytisch kraakproces. Bestaat voornamelijk uit koolwaterstoffen, overwegend groter dan  $C_{11}$ , kokend boven ongeveer 200 °C.]
- PT : resíduos (petróleo), do cracking catalítico ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida como a fracção residual da destilação dos produtos de um processo de cracking catalítico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{11}$ , e destila acima de aproximadamente 200 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92201-59-7

EEC No 295-990-6

No 649-044 00 8

## NOTA H

- ES destilados (petróleo), fracción intermedia craqueada catalíticamente, degradada térmicamente, Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo catalítico que se han utilizado como fluido de transferencia de calor. Compuesta en su mayor parte de hidrocarburos con un intervalo de ebullición aproximado de 220 °C a 450 °C. Esta corriente es probable que contenga compuestos orgánicos de azufre.]
- DA · destillater (råolie), intermediære katalytisk krakkede, termisk nedbrudte, Fuelolie  
[En sammensat blanding af carbonhydrider, fremstillet ved destillationen af produkter fra en katalytisk krakningsproces, som har været brugt som en varmeoverførselsvæske. Den består overvejende af carbonhydrider med kogesinterval omtrent fra 220 °C til 450 °C. Denne strøm indeholder sandsynligvis organiske svovlforbindelser.]
- DE · Destillate (Erdöl), intermediäre katalytisch gekrackte, thermisch abgebaut; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Crackverfahren, das als Wärmetransfer-Flüssigkeit benutzt wurde. Besteht vorherrschend aus Kohlenwasserstoffen und siedet im Bereich von etwa 220 °C bis 450 °C. Dieser Lauf enthält wahrscheinlich organische Schwefelverbindungen.]
- EL αποστάγματα (πετρελαίου), ενδιάμεσα καταλυτικά πυρολυμένα, θερμικώς υποβαθμισμένα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων καταλυτικής πυρόλυσης, τα οποία έχουν χρησιμοποιηθεί σαν ρευστό μέσο μεταφοράς θερμότητας. Συνίσταται κυρίως από υδρογονανθράκες με περιοχή βρασμού από 220 °C ως 450 °C περίπου. Το ρεύμα αυτό είναι πιθανό να περιέχει οργανικές ενώσεις θείου.]
- EN Distillates (petroleum), intermediate catalytic cracked, thermally degraded, Heavy Fuel oil  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process which has been used as a heat transfer fluid. It consists predominantly of hydrocarbons boiling in the range of approximately 220 °C to 450 °C (428 °F to 842 °F). This stream is likely to contain organic sulfur compounds.]
- FR distillats intermédiaires (pétrole), craquage catalytique, dégradation thermique, Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique et qui a été utilisée comme fluide caloporteur. Se compose principalement d'hydrocarbures dont le point d'ébullition est compris approximativement entre 220 °C et 450 °C. Peut contenir des composés organiques soufrés.]
- IT distillati (petrolio), intermedi da cracking catalitico, degradati termicamente, Olio combustibile denso  
[Combinazione complessa di idrocarburi prodotta dalla distillazione di prodotti da un processo di cracking catalitico che è stato usato come fluido di scambio di calore. È costituita prevalentemente da idrocarburi con punto di ebollizione nell'intervallo 220 °C a 450 °C ca. Questa corrente può contenere probabilmente composti organici dello zolfo.]
- NL · destillaten (aardolie), katalytisch gekraakte middenfracties, thermisch gedesintegreerd, Stookolie  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van produkten uit een katalytisch kraakproces en die is gebruikt als een warmte-overdrachtsvloeistof. Bestaat voornamelijk uit koolwaterstoffen met een kooktraject van ongeveer 220 °C tot 450 °C. Deze stroom bevat waarschijnlijk organische zwavelverbindingen.]
- PT · destilados (petróleo), intermédios do cracking catalítico, degradados termicamente, Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico que foi usada como fluido térmico. É constituída predominantemente por hidrocarbonetos que destilam no intervalo de aproximadamente 220 °C a 450 °C. Esta fracção geralmente contém compostos orgânicos de enxofre.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits.*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 93821-66-0

EEC No 298-754-0

No 649-043-00-3


## NOTA

- ES aceites residuales (petróleo); Fuelóleo pesado  
[Combinación compleja de hidrocarburos, compuestos de azufre y compuestos orgánicos con metales obtenida como el residuo de procesos de craqueo para el fraccionamiento en la refinería. Produce un aceite final con una viscosidad por encima de 2cSt a 100 °C.]
- DA restolier (råolie); Fuelolie  
[En sammensat blanding af carbonhydrider, svovlforbindelser og metalholdige organiske forbindelser opnået som resten fra raffinierfraktionerings-krakningsprocesser. Den danner en færdig olie med viskositet over 2cSt. ved 100 °C.]
- DE Rückstandsöle (Erdöl); Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, Schwefelverbindungen und Metall-enthaltenden organischen Verbindungen, die man als Rückstand aus Raffinerie-Fraktionier-Krackverfahren erhält. Ergibt ein Fertigöl mit einer Viskosität größer als 2cSt bei 100 °C.]
- EL υπολειμματικά έλαια (πετρελαίου): Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων ενώσεων θείου και οργανικών ενώσεων που περιέχουν μέταλλο που λαμβάνεται σαν το υπόλειμμα κλασμάτωσης πυρόλυσης σε διυλιστήριο. Περιέχει έτοιμο έλαιο με ιξώδες άνω των 2cSt 100 °C περίπου.]
- EN Residual oils (petroleum); Heavy Fuel oil  
[A complex combination of hydrocarbons, sulfur compounds and metal-containing organic compounds obtained as the residue from refinery fractionation cracking processes. It produces a finished oil with a viscosity above 2cSt at 100 °C.]
- FR huiles résiduelles (pétrole); Fioul lourd  
[Combinaison complexe d'hydrocarbures, de composés soufrés et de composés organiques métallifères obtenue comme résidu dans les procédés de raffinage par craquage et fractionnement. Donne une huile-produit fini de viscosité supérieure à 2cSt à 100 °C.]
- IT: olii residui (petrolio); Olio combustibile denso  
[Combinazione complessa di idrocarburi, composti di zolfo e composti organici contenenti metalli, ottenuta come residuo da processi di frazionamento di raffineria mediante cracking. Produce un olio finito con una viscosità superiore a 2cSt a 100 °C.]
- NL: residu-oliën (aardolie); Stookolie  
[Een complexe verzameling koolwaterstoffen, zwavelverbindingen en metaalhoudende organische verbindingen, verkregen als het residu van een fractioneringskraakproces in een raffinaderij. Het vormt een voltooide olie met een viscositeit boven 2cSt. bij 100 °C.]
- PT: Óleos residuais (petróleo); Fuelóleo  
[Uma combinação complexa de hidrocarbonetos, compostos de enxofre e compostos orgânicos contendo metais obtida como o residuo de processos de cracking de fraccionamento de uma refinaria. Produz um óleo acabado com uma viscosidade superior a 2cSt a 100 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 98219-64-8

EEC No 308-733-0

No 649-046-00-9


## NOTA H

- ES residuos, craqueados a vapor, tratados térmicamente ; Fuéloleo pesado  
[Combinación compleja de hidrocarburos obtenida por el tratamiento y destilación de nafta cruda craqueada a vapor. Compuesta en su mayor parte de hidrocarburos insaturados con un intervalo de ebullición aproximado por encima de 180 °C.]
- DA rester, dampkrakkede, termisk behandlede ; Fuelolie  
[En sammensat blanding af carbonhydrider opnået ved behandling og destillation af rå, dampkrakket naphtha. Den består overvejende af umættede carbonhydrider, der koger omtrent over 180 °C.]
- DE Rückstände, dampfgekrackt, thermisch behandelt ; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung und Destillation von roher dampfgekrackter Naphtha erhält. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen und siedet im Bereich über etwa 180 °C.]
- EL υπολείμματα, ατμοπυρολυμένα, θερμικώς κατεργασμένα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με την κατεργασία και απόσταξη ακατέργαστης ατμοπυρολυμένης ναφθας. Συνίσταται κυρίως από ακόρεστους υδρογονάνθρακες με περιοχή βρασμού από 180 °C περίπου.]
- EN Residues, steam cracked, thermally treated ; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by the treatment and distillation of raw steam-cracked naphtha. It consists predominantly of unsaturated hydrocarbons boiling in the range above approximately 180 °C (356 °F).]
- FR résidu de vapocraquage, traitement thermique ; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par traitement et distillation de naphtha brut de vapocraquage. Se compose principalement d'hydrocarbures insaturés dont le point d'ébullition est approximativement supérieur à 180 °C.]
- IT residui, crackizzati con vapore, trattati termicamente ; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta per trattamento e distillazione di nafta grezza crackizzata con vapore. È costituita prevalentemente da idrocarburi insaturi con punto di ebollizione nell'intervallo superiore a 180 °C ca.]
- NL residuen stoomgekraakt, thermisch behandeld ; Stookolie  
[Een complexe verzameling koolwaterstoffen verkregen uit de behandeling en destillatie van ruwe stoomgekraakte nafta. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, kokend boven ongeveer 180 °C.]
- PT resíduos, do steam-cracking, tratados termicamente ; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento e destilação dos produtos do steam-cracking de nafta não tratada. É constituída predominantemente por hidrocarbonetos insaturados que destilam acima de aproximadamente 180 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101316-57-8

EEC No 309-863-0

No 649-047-00-4

## NOTA H

- ES · destilados (petróleo), fracción intermedia de la serie completa hidrodesulfurada , Fuelóleo pesado  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una reserva de petróleo con hidrógeno Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_9$  a  $C_{21}$  y con un intervalo de ebullición aproximado de 150 °C a 400 °C]
- DA · destillater (råolie), hydroafsvovlede full-range middeltunge , Fuelolie  
[En sammensat blanding af carbonhydnder opnået ved at behandle en rå råolie med hydrogen Den består overvejende af carbonhydnder, overvejende  $C_9$  til og med  $C_{21}$ , med koginterval omtrent fra 150 °C til 400 °C.]
- DE · Destillate (Erdöl), hydrodesulfurierte gesamte mittlere , Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln eines Erdölausgangsstoffes mit Wasserstoff erhält Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_9$  bis  $C_{21}$ , und siedet im Bereich von etwa 150 °C bis 400 °C]
- EL · αποσταγματα (πετρελαίου), αποθειωμένα με υδρογόνο μεσαία πλήρους σύστασης Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία πετρελαιοκώ υλικού με υδρογόνο Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_9$  ως και  $C_{21}$  και με περιοχή θρασμού από 150 °C ως 400 °C περίπου.]
- EN · Distillates (petroleum), hydrodesulfurized full-range middle ; Heavy Fuel oil  
[A complex combination of hydrocarbons obtained by treating a petroleum stock with hydrogen It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_9$  through  $C_{21}$ , and boiling in the range of approximately 150 °C to 400 °C (302 °F to 752 °F)]
- FR · distillats moyens à large intervalle d'ébullition (pétrole), hydrodésulfurés , Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une charge pétrolière à l'hydrogène Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_9$ - $C_{21}$ , et dont le point d'ébullition est compris approximativement entre 150 °C et 400 °C]
- IT · distillati (petrolio), idrodesolforati taglio intero intermedi ; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta per trattamento con idrogeno di uno stock di petrolio È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_9$ - $C_{21}$  e punto di ebollizione nell'intervallo 150 °C-400 °C ca]
- NL · destillaten (aardolie), met waterstof ontwavende volledig bereik aan middelste , Stookolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardolie uitgangstof met waterstof Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_9$  tot en met  $C_{21}$ , met een kooktraject van ongeveer 150 °C tot a 400 °C]
- PT · destilados (petróleo), médios hidrogenodessulfurizados , Fuelóleo  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de um produto petrolífero com hidrogenio É construída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_9$  até  $C_{21}$ , e destila no intervalo de aproximadamente 150 °C a 400 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-67-9

EEC No 265-069-3

No 649-048-00-X

## NOTA H

- ES: residuos (petróleo), fraccionador del reformador catalítico; Fuelóleo pesado  
[Combinación compleja de hidrocarburos producida como la fracción residual de la destilación del producto de un proceso de reformado catalítico. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{25}$  y con un intervalo de ebullición aproximado de 160 °C a 400 °C. Esta corriente es probable que contenga un 5 % en peso o más de hidrocarburos aromáticos con anillos condensados de 4 a 6 miembros.]
- DA: rester (råolie), katalytisk reformer-fraktionator-; Fuelolie  
[En sammensat blanding af carbonhydrider fremstillet som restfraktionen fra destillation af produkterne fra en katalytisk reformeringsproces. Den består af overvejende aromatiske carbonhydrider, overvejende  $C_{10}$  til og med  $C_{25}$ , med koginterval omtrent fra 160 °C til 400 °C. Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider, bestående af 4- til 6-leddede kondenserende ringe.]
- DE: Rückstände (Erdöl), katalytisch reformierte Fraktionator-; Heizöl schwer  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt als Rückstandsfraction durch Destillation des Produktes aus einem katalytischen Reformingverfahren. Besteht aus vorherrschend aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{25}$  und siedet im Bereich von etwa 160 °C bis 400 °C. Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- oder 6-gliedrigen kondensierten Ringen enthalten.]
- EL: υπολείμματα (πετρελαίου), μονάδα κλασμάτωσης καταλυτικού αναμορφωτήρα· Βαρύ μαζούτ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται σαν το υπολειμματικό κλάσμα απόσταξης του προϊόντος καταλυτικής αναμόρφωσης. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  ως και  $C_{25}$  και με περιοχή βρασμού από 160 °C ως 400 °C περίπου. Το ρεύμα αυτό είναι πιθανό να περιέχει 5 % κατά βάρος ή περισσότερο, αρωματικούς υδρογονάνθρακες με τετραμελείς ως εξαιμελείς συμπυκνωμένους δακτύλιους.]
- EN: Residues (petroleum), catalytic reformer fractionator; Heavy Fuel oil  
[A complex combination of hydrocarbons produced as the residual fraction from distillation of the product from a catalytic reforming process. It consists of predominantly aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{25}$  and boiling in the range of approximately 160 °C to 400 °C (320 °F to 725 °F). This stream is likely to contain 5 wt. % or more of 4- or 6-membered condensed ring aromatic hydrocarbons.]
- FR: résidus de fractionnement (pétrole), reformage catalytique; Fioul lourd  
[Combinaison complexe d'hydrocarbures obtenue comme fraction résiduelle de la distillation du produit résultant d'un reformage catalytique. Se compose d'hydrocarbures en majorité aromatiques dont le nombre de carbones se situe principalement dans la gamme  $C_{10}$ - $C_{25}$ , et dont le point d'ébullition est compris approximativement entre 160 °C et 400 °C. Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles.]
- IT: residui (petrolio), frazionatore di reforming catalitico; Olio combustibile denso  
[Combinazione complessa di idrocarburi ottenuta come frazione residua della distillazione dei prodotti provenienti da un processo di reforming catalitico. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{25}$  e punto di ebollizione nell'intervallo 160 °C-400 °C ca. Questa frazione può probabilmente contenere il 5 % in peso o più di idrocarburi aromatici a nuclei condensati di 4-6 elementi.]
- NL: residuen (aardolie), katalytische reformator-fractioneerder; Stookolie  
[Een complexe verzameling koolwaterstoffen, verkregen als de residu-fractie bij destillatie van het produkt van een katalytisch reformeringsproces. Bestaat hoofdzakelijk uit aromatische koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{25}$ , met een kooktraject van ongeveer 160 °C tot 400 °C. Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen.]
- PT: resíduos (petróleo), do fraccionador do reformer catalítico; Fuelóleo  
[Uma combinação complexa de hidrocarbonetos produzida como a fracção residual da destilação do produto de um processo de reforming catalítico. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{25}$  e destila no intervalo de aproximadamente 160 °C a 400 °C. Esta fracção pode conter 5 % em peso ou mais de hidrocarbonetos aromáticos polinucleares com 4 a 6 membros.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 8002 93 9

FEC No 232-298 5

No 649 049-00-5 1

## NOTA H

## ES petróleo , Crudo

[Combinación compleja de hidrocarburos. Compuesta en su mayor parte de hidrocarburos alifáticos, alicíclicos y aromáticos. También puede contener cantidades pequeñas de nitrógeno, oxígeno y compuestos de azufre. Esta categoría incluye petróleos ligeros, medios y pesados, así como los aceites extraídos de arenas impregnadas de alquitrán. Materiales hidrocarbonados que requieren cambios químicos mayores para su recuperación o conversión en materias primas para refinación de petróleo tales como aceites de esquisto crudos, aceites de esquisto enriquecidos y combustibles líquidos de hulla que no se incluyen en esta definición.]

## DA råolie , Råolie

[En sammensat blanding af carbonhydrider. Den består overvejende af aliphatiske, alicycliske og aromatiske carbonhydrider. Den kan også indeholde små mængder af nitrogen, oxygen og svovlforbindelser. Denne kategori omfatter lette, middeltunge og tunge råolier, såvel som olier ekstraherede fra tjæresand. Carbonhydridholdige materialer, der kræver større kemiske forandringer for deres udvinding eller omdannelse til råolieraffineringsføde såsom rå skiferolier, oprensede skiferolier og flydende kulbrændsel er ikke medtaget i denne beskrivelse.]

## DE Erdöl , Rohöl

[Komplexe Kombination von Kohlenwasserstoffen. Besteht in erster Linie aus aliphatischen, alicyclischen und aromatischen Kohlenwasserstoffen. Kann auch geringe Mengen Stickstoff, Sauerstoff und Schwefelverbindungen enthalten. Diese Kategorie schließt Leicht-, Mittel- und Schweröle ein, auch aus Teersanden extrahierte Öle. Kohlenwasserstoffhaltige Materialien, die zu ihrer Gewinnung der Konversion zu Erdölraffineriegrundstoffen größere chemische Veränderungen erfordern wie rohe Schieferöle aufbereitete Schieferole und flüssige Kohlenbrennstoffe sind in dieser Definition nicht enthalten.]

## FI πετρέλαιο Αργό πετρέλαιο

[Πολυπλοκός συνδυασμός υδρογονανθράκων. Συνίσταται κυρίως από αλειφατικούς, αλκυκλικούς και αρωματικούς υδρογονανθράκες. Μπορεί επίσης να περιέχει μικρές ποσότητες ενώσεων αζώτου, θείου και οξυγόνου. Αυτή η κατηγορία συμπεριλαμβάνει ελαφρά, μέσα και βαρέα πετρέλαια καθώς και πετρέλαια που εξάγονται από πισσούχους άμμους. Δεν συμπεριλαμβάνονται σε αυτό τον ορισμό υδρογονανθρακούχα υλικά που απαιτούν μεγάλες χημικές αλλαγές για την ανάκτησή τους ή την μετατροπή τους σε πρώτες υλές τροφοδοσίας διυλιστηρίων όπως αργά πετρέλαια σχιστολιθίων αναβαθμισμένα πετρέλαια σχιστολιθίων και υγρά καύσιμα ανθράκων.]

## EN Petroleum , Crude oil

[A complex combination of hydrocarbons. It consists predominantly of aliphatic, alicyclic and aromatic hydrocarbons. It may also contain small amounts of nitrogen, oxygen and sulfur compounds. This category encompasses light, medium, and heavy petroleum, as well as the oils extended from tar sands. Hydrocarbonaceous materials requiring major chemical changes for their recovery or conversion to petroleum refinery feedstocks such as crude shale oils, upgraded shale oils and liquid coal fuels are not included in this definition.]

## FR pétrole , Pétrole brut

[Combinaison complexe d'hydrocarbures. Se compose principalement d'hydrocarbures aliphatiques, alicycliques et aromatiques. Peut aussi contenir de petites quantités de composés d'azote, d'oxygène et de soufre. Cette catégorie comprend les pétroles légers, moyens et lourds, ainsi que les huiles extraites des sables asphaltiques. Elle n'inclut pas les matières hydrocarbonées dont la récupération ou la conversion en charges de raffinage du pétrole impose des transformations chimiques importantes, comme les huiles de schiste brutes ou valorisées, ou les liquides combustibles issus du charbon.]

## IT petrolio ; Petrolio grezzo

[Combinazione complessa di idrocarburi. È costituita prevalentemente da idrocarburi alifatici, aliciclici ed aromatici. Può anche contenere piccole quantità di composti azotati, ossigenati e solforati. Questa categoria comprende le frazioni leggere, medie e pesanti del petrolio, nonché gli oli estratti dalle sabbie catramifere. Non sono inclusi in questa definizione i materiali idrocarburi per i cui recupero, o per la cui conversione a materie prime da alimentare alla raffinazione si rendono necessarie modifiche chimiche di carattere sostanziale, come è il caso degli oli di schisto grezzi o arnechiti e dei combustibili liquidi derivati dal carbone.]

## NL aardolie , Ruwe aardolie

[Een complexe verzameling van koolwaterstoffen. Bestaat voornamelijk uit alifatische, alicyclische en aromatische koolwaterstoffen. Kan ook kleine hoeveelheden stikstof, zuurstof en zwavelverbindingen bevatten. Deze categorie omvat lichte, middelzware en zware aardolien, alsmede olien gewonnen uit teerzand. Koolwaterstofmaterialen die ingrijpende chemische veranderingen vereisen om te worden gewonnen of te worden omgezet in grondstoffen voor aardolieraffinage zoals ruwe schalieolie, verbeterde schalieolie en vloeibare kolenbrandstof, zijn niet opgenomen in deze definitie.]

## PT petróleo , Petróleo bruto

[Uma combinação complexa de hidrocarbonetos. É constituída predominantemente por hidrocarbonetos alifáticos, alíciclicos e aromáticos. Pode conter também pequenas quantidades de compostos de azoto, de enxofre e de oxigénio. Esta categoria compreende os petróleos leve, médio e pesado bem como os extraídos de areias asfálticas. Não estão incluídos nesta definição materiais hidrocarboníferos que requerem modificações químicas substanciais para recuperação ou conversão em matérias primas petrolíferas tais como óleos de xistos betuminosos brutos e processados e combustíveis líquidos de carvão.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-50-0

EEC No 265-051-5

No 649-050-00-0

## NOTA H

- ES :** destilados (petróleo), fracción parafínica ligera ; Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos producida por destilación a vacío del residuo de la destilación atmosférica de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40 °C (100 SUS a 100 °F). Contiene una proporción relativamente grande de hidrocarburos alifáticos saturados presentes normalmente en este intervalo de destilación del petróleo crudo.]
- DA :** destillater (råolie), lette paraffin- ; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider fremstillet ved vakuumdestillation af remanensen fra atmosfærisk destillation af råolie. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C. Den indeholder en forholdsvis stor del mættede, aliphatiske carbonhydrider normalt tilstede i dette råoliedestillationsinterval.]
- DE :** Destillate (Erdöl), leichte paraffinhaltige ; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt Fertigöl mit einer Viskosität von weniger als 19cSt bei 40 °C. Enthält einen relativ großen Gehalt an gesättigten aliphatischen Kohlenwasserstoffen, die normalerweise in diesem Destillationsbereich von Rohöl vorhanden sind.]
- EL :** αποστάγματα (πετρελαίου), ελαφρά παραφινικά· Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη σε κενό του υπολείμματος της ατμοσφαιρικής απόσταξης αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt στους 40 °C. Περιέχει σχετικά μεγάλη αναλογία κορεσμένων αλειφατικών υδρογονανθράκων, που κανονικά υπάρχουν σε αυτή την περιοχή απόσταξης του αργού πετρελαίου.]
- EN :** Distillates (petroleum), light paraffinic ; Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons produced by vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated aliphatic hydrocarbons normally present in this distillation range of crude oil.]
- FR :** distillats paraffiniques légers (pétrole) ; Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures obtenue par distillation sous vide du résidu de distillation atmosphérique du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{30}$  et fournit une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures aliphatiques saturés, dont la présence dans cet intervalle de distillation du pétrole brut est normale.]
- IT :** distillati (petrolio), frazioni paraffiniche leggere ; Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo della distillazione atmosferica del petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito di viscosità inferiore a 19cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi alifatici saturi che sono normalmente presenti in questo intervallo di distillazione del grezzo.]
- NL :** destillaten (aardolie), lichte paraffinehoudende ; Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen verkregen door vacuümdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooiide olie met een viscositeit van minder dan 19cSt bij 40 °C. Bevat een relatief grote hoeveelheid alifatische koolwaterstoffen die normaal aanwezig zijn in dit destillatietraject van ruwe olie.]
- PT :** destilados (petróleo), parafínicos leves ; Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vácuo do residuo da destilação atmosférica de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C. Contém uma proporção relativamente elevada de hidrocarbonetos alifáticos saturados normalmente presentes neste intervalo de destilação do petróleo bruto.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Carc. Cat. 1 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-51-1

EEC No 265-052-0

No 649-051-00-6

NOTA H

- ES destilados (petróleo), fracción parafínica pesada; Aceite de base sin refinar o ligeramente refinado.  
[Combinación compleja de hidrocarburos producida por la destilación a vacío del residuo de la destilación atmosférica de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 19cSt a 40 °C (100 SUS a 100 °F). Contiene una proporción relativamente grande de hidrocarburos alifáticos saturados.]
- DA destillater (råolie), tunge paraffin-; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider fremstillet ved vakuumdestillation af remanensen fra atmosfærisk destillation af råolie. Den består af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder en forholdsvis stor del mættede, aliphatiske carbonhydrider.]
- DE Destillate (Erdöl), schwere paraffinhaltige; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von wenigstens 19cSt bei 40 °C. Enthält relativ große Mengen gesättigter aliphatischer Kohlenwasserstoffe.]
- EL αποσταγμάτα (πετρελαίου), βαρέα παραφινικά· Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη σε κενό του υπολειμματος της ατμοσφαιρικής αποσταξης αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες τουλάχιστο από 19cSt στους 40 °C. Περιέχει σχετικά μεγάλη αναλογία κορεσμένων αλειφατικών υδρογονανθράκων.]
- EN Distillates (petroleum), heavy paraffinic; Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons produced by vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated aliphatic hydrocarbons.]
- FR distillats paraffiniques lourds (pétrole); Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures obtenue par distillation sous vide du résidu de distillation atmosphérique du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{20}$ - $C_{40}$ , et fournit une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures aliphatiques saturés.]
- IT distillati (petrolio), frazioni paraffiniche pesanti; Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo della distillazione atmosferica del petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito con viscosità di almeno 19cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi alifatici saturi.]
- NL destillaten (aardolie), zware paraffinehoudende; Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen verkregen door vacuümdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit van minstens 19cSt bij 40 °C. Bevat een relatief grote hoeveelheid alifatische koolwaterstoffen.]
- PT destilados (petróleo), parafínicos pesados; Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vácuo de residuo da destilação atmosférica de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade não inferior a 19cSt a 40 °C. Contém uma proporção relativamente elevada de hidrocarbonetos alifáticos saturados.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Kotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentraçãõ*


Cas No 64741-52-2

EEC No 265-053-6

No 649 052 00 1

NOTA H

- ES** destilados (petróleo), fracción nafténica ligera, Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos producida por destilación a vacío del residuo de la destilación atmosférica de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{15}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA** destillater (råolie), lette naphthen-, Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrier fremstillet ved vakuumdestillation af remanensen fra atomsfærisk destillation af råolie. Den består af carbonhydrier, overvejende  $C_{15}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE** Destillate (Erdöl), leichte naphthenhaltige; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{15}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von wenigstens 19cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL** αποσταγμάτα (πετρελαίου), ελαφρά ναφθενικά. Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που παράγεται με απόσταξη σε κενό του υπολείμματος της ατμοσφαιρικής απόσταξης αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{15}$  ως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN** Distillates (petroleum), light naphthenic, Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons produced by vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{15}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR** distillats naphthéniques légers (pétrole), Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures obtenue par distillation sous vide du résidu de distillation atmosphérique du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{15}$  -  $C_{30}$ , et fournit une huile produite finie de viscosité inférieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT** distillati (petrolio), frazioni nafteniche leggere, Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo della distillazione atmosferica del petrolio grezzo. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{15}$  -  $C_{30}$  e produce un olio finito con viscosità inferiore a 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL** destillaten (aardolie), lichte naftenhoudende, Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen verkregen door vakuumdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegende  $C_{15}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die minder is dan 19cSt bij 40 °C. Bij relatief weinig normale paraffinen.]
- PT** destilados (petróleo), nafténicos leves, Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vácuo do residuo da destilação atmosférica de petróleo bruto. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_{15}$  ate  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C. Contem relativamente poucas parafinas normais.]

*Clasificación, Klasifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limit, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-53-3

EEC No 265-054-1

No 649-053-00-7


## NOTA H

- ES destilados (petróleo), fracción nafténica pesada ; Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos producida por destilación a vacío de residuo de la destilación atmosférica de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{30}$  y produce un aceite final con una viscosidad al menos de 19cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA destillater (råolie), tunge naphthen- ; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrier fremstillet ved vakuumdestillation af remanensen fra atmosfærisk destillation af råolie. Den består af carbonhydrier, overvejende  $C_{20}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE Destillate (Erdöl), schwere naphthenhaltige ; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Vakuumdestillation des Rückstandes aus der offenen Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von wenigstens 19cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL αποσταγμάτα (πετρελαιο), βαρέα ναφθενικά: Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη στο κενό του υπολείμματος της ατμοσφαιρικής απόσταξης αργού πετρελαιο. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{30}$  και παραγεί τελικό έλαιο με ιξώδες τουλάχιστο 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN Distillates (petroleum), heavy naphthenic , Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons produced by vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{30}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR distillats naphténiques lourds (pétrole) , Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures obtenue par distillation sous vide du résidu de distillation atmosphérique du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{20}$ - $C_{30}$ , et fournit une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT distillati (petrolio), frazioni nafteniche pesanti , Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi prodotta per distillazione sotto vuoto del residuo della distillazione atmosferica del petrolio grezzo. È costituita da idrocarburi aventi numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{30}$  e produce un olio finito con viscosità pari ad almeno 19 cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL destillaten (aardolie), zware naftenhoudende , Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen verkregen door vacuumdestillatie van het residu van de atmosferische destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{30}$ , en vormt een voltioide olie met een viscositeit van minstens 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT destilados (petrólio), nafténicos pesados , Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de vácuo do residuo da destilação atmosférica de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade não inferior a 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 1 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


No 64742-18-3

EEC No 265-117-3

No 649-054-00-1

## NOTA H

- H** Destilados (petróleo), fracción nafténica pesada tratada con ácido ; Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos obtenida como un refinado de un proceso de tratamiento con ácido sulfúrico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 19cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- D** Destillater (råolie), syrebehandlede tunge naphthen- ; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider opnået som et raffinat fra en svovlsyrebehandlingsproces. Den består af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder forholdsvis få normaleparaffiner.]
- F** Destillate (Erdöl), Säure-behandelte schwere naphthenhaltige ; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Verfahren durch Einwirkung von Schwefelsäure. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19cSt bei 40 °C. Enthält relativ wenige normale Paraffine.]
- Ε** Εποσταγµατα (πετρελαιο), βαρεα ναφθανικά κατεργασµένα µε οξύ· Μη επεξεργασµένο ή ελαφρώς επεξεργασµένο βασικό ορυκτέλαιο  
[Πολύπλοκος συνδυασµός υδρογονανθράκων που λαµβάνεται σαν εκχυλισµένο προϊόν από διαδικασία κατεργασίας µε θειικό οξύ. Συνίσταται από υδρογονάνθρακες µε αριθµό ατόμων άνθρακα κυρίως στην περιοχή  $C_{20}$  ως και  $C_{40}$  και παράγει τελικό έλαιο µε βώδες τουλάχιστο 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- N** Distillates (petroleum), acid-treated heavy naphthenic ; Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- R** Distillats naphthéniques lourds (pétrole), traités à l'acide ; Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'un traitement à l'acide sulfurique. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- I** Distillati (petrolio), frazione naftenica pesante trattata con acido ; Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di trattamento con acido solforico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito di viscosità pari ad almeno 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- N** Destillaten (aardolie), met zuur behandelde zware naftenhoudende fractie ; Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen verkregen als raffinaat uit een zwavelzuurbehandelingsproces. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit van minstens 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- T** Destilados (petróleo), nafténicos pesados tratados com ácido ; Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado de um processo de tratamento com ácido sulfúrico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 1 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichetare, Kennzeichen, Rutelaggen*

<div data-bbox="367 434 389 459" data-label="Text">T</div> <div data-bbox="338 488 422 577" data-label="Image"> </div> <div data-bbox="940 483 1019 510" data-label="Text">R : 45</div> <div data-bbox="940 535 1051 562" data-label="Text">S : 53-45</div>
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgränzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-19-4

EEC No 265-118-9

No 649-055-00-8

## NOTA H

- ES : destilados (petróleo), fracción nafténica ligera tratada con ácido ; Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos obtenida como un refinado de un proceso de tratamiento con ácido sulfúrico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA : destillater (råolie), syrebehandlede lette naphthen- ; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrier opnået som et raffinat fra en svovlsyrebehandlingsproces. Den består af carbonhydrier, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE : Destillate (Erdöl), Säure-behandelte leichte naphthenhaltige ; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Verfahren durch Einwirkung von Schwefelsäure. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19cSt bei 40 °C. Enthält relativ wenige normale Paraffine.]
- EL : αποστάγματα (πετρελαίου), ελαφρά ναφθενικά, κατεργασμένα με οξύ. Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν εκχυλισμένο προϊόν από κατεργασία με θειικό οξύ. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt στους 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN : Distillates (petroleum), acid-treated light naphthenic ; Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR : distillats naphthéniques légers (pétrole), traités à l'acide ; Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'un traitement à l'acide sulfurique. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT : distillati (petrolio), frazione naftenica leggera trattata con acido ; Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di trattamento con acido solforico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito di viscosità pari ad almeno 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL : destillaten (aardolie), zuurbehandelde lichte naftenhoudende ; Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als het raffinaat uit een zwavelzuurbehandelingsproces. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT : destilados (petróleo), nafténicos leves tratados com ácido ; Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado de um processo de tratamento com ácido sulfúrico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificaçã*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rutulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 64742-20-7

EEC No 265-119-4

No 649-056-00-3

NOTA H

- ES · destilados (petróleo), fracción parafínica pesada tratada con ácido ; Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos obtenida como un refinado de un proceso de tratamiento con ácido sulfúrico. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 19cSt a 40 °C (100 SUS a 100 °F).]
- DA · destillater (råolie), syrebehandlede tunge paraffin- ; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider opnået som et raffinat fra en svovlsyrebehandlingsproces. Den består overvejende af mættede carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C.]
- DE · Destillate (Erdöl), Säure-behandelte schwere paraffinhaltige ; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Verfahren durch Einwirkung von Schwefelsäure. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19cSt bei 40 °C.]
- EL · αποσταγµατα (πετρελαίου), βαρέα παραφινικά κατεργασµένα με οξύ· Μη επεξεργασµένο ή ελαφρώς επεξεργασµένο βασικό ορυκτέλαιο  
[Πολύπλοκος συνδυασµός υδρογονάνθρακων που λαµβάνεται σαν εκχυλισµένο προϊόν από κατεργασία με θειικό οξύ. Συνίσταται κυρίως από κορεσµένους υδρογονάνθρακες με αριθµό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες τουλάχιστο από 19cSt σε 40 °C.]
- EN · Distillates (petroleum), acid-treated heavy paraffinic ; Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil having a viscosity of a least 100 SUS at 100 °F (19cSt at 40 °C).]
- FR · distillats paraffiniques lourds (pétrole), traité à l'acide ; Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'un traitement à l'acide sulfurique. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C.]
- IT · distillati (petrolio), frazione paraffinica pesante trattata con acido ; Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di trattamento con acido solfonco. È costituita da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito di viscosità pari ad almeno 19cSt a 40 °C.]
- NL · destillaten (aardolie), zuurbehandelde zware paraffinehoudende ; Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als het raffinaat uit een zwavelzuurbehandelingsproces. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die minstens 19 cSt is bij 40 °C.]
- PT · destilados (petróleo), parafínicos pesados tratados com ácido ; Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado de um processo de tratamento com ácido sulfúrico. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificacão*

Carc. Cat. 1, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-21-8

EEC No 265-121-5

No 649-057-00-9


## NOTA H

- ES : destilados (petróleo), fracción parafínica ligera tratada con ácido ; Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos obtenida como un refinado de un proceso de tratamiento con ácido sulfúrico. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40 °C (100 SUS a 100 °F).]
- DA : destillater (råolie), syrebehandlede lette paraffin- ; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider opnået som et raffinat fra en svovlsyrebehandlingsproces. Den består overvejende af mættede carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C.]
- DE : Destillate (Erdöl), Säure-behandelte leichte paraffinhaltige ; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Verfahren durch Einwirkung von Schwefelsäure. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19cSt bei 40 °C.]
- EL : αποσταγματα (πετρελαίου), ελαφρά παραφινικά κατεργασμένα με οξύ· Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν εκχυλισμένο προϊόν από κατεργασία με θειικό οξύ. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C.]
- EN : Distillates (petroleum), acid-treated light paraffinic ; Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil having a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C).]
- FR : distillats paraffiniques légers (pétrole), traités à l'acide ; Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'un traitement à l'acide sulfurique. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C.]
- IT : distillati (petrolio), frazione paraffinica leggera trattata con acido ; Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di trattamento con acido solforico. È costituita da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito di viscosità pari ad almeno 19cSt a 40 °C.]
- NL : destillaten (aardolie), zuurbehandelde lichte paraffinehoudende ; Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als het raffinaat uit een zwavelzuurbehandelingsproces. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C.]
- PT : destilados (petróleo), parafínicos leves tratados com ácido ; Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado de um processo de tratamento com ácido sulfúrico. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-27-4

EEC No 265-127-8

No 649-058-00-4

NOTA H

- ES destilados (petróleo), fracción parafínica pesada neutralizada químicamente, Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos obtenida de un proceso de tratamiento para separar materiales ácidos. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 19cSt a 40 °C (100 SUS a 100 °F). Contiene una proporción relativamente grande de hidrocarburos alifáticos.]
- DA destillater (råolie), kemisk neutraliserede tunge paraffin-, Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider opnået ved en behandlingsproces til fjernelse af sure materialer. Den består overvejende af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder en forholdsvis stor del aliphatiske carbonhydrider.]
- DE Destillate (Erdöl), chemisch neutralisierte schwere paraffinhaltige, Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einer Behandlungsmethode zum Entfernen saurer Stoffe. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19cSt bei 40 °C. Enthält eine relativ große Menge aliphatischer Kohlenwasserstoffe.]
- EL αποσταγμάτα (πετρελαιο), βαρέα παραφινικά χημικώς εξουδετερωμένα. Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από κατεργασία για να απομακρυνθούν όξινες ουσίες. Αποτελείται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες τουλάχιστο 19cSt σε 40 °C. Περιέχει σχετικά μεγάλη αναλογία αλειφατικών υδρογονανθράκων.]
- EN Distillates (petroleum), chemically neutralized heavy paraffinic, Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons obtained from a treating process to remove acidic materials. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of aliphatic hydrocarbons.]
- FR distillats paraffiniques lourds (pétrole), neutralisés chimiquement, Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures aliphatiques.]
- IT distillati (petrolio), frazioni paraffiniche pesanti neutralizzate chimicamente, Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi ottenuta da un processo di trattamento per la rimozione delle sostanze acide. È costituita in prevalenza da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito di viscosità pari ad almeno 19cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi alifatici.]
- NL destillaten (aardolie), chemisch geneutraliseerde zware paraffinehoudende, Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een behandlingsproces waarbij zure materialen worden verwijderd. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die minstens 19cSt is bij 40 °C. Bevat een relatief grote hoeveelheid alifatische koolwaterstoffen.]
- PT destilados (petróleo), parafínicos pesados neutralizados químicamente, Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de tratamento para remoção de materiais ácidos. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C. Contem uma proporção relativamente elevada de hidrocarbonetos alifáticos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 1 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-28-5

EEC No 265-128-3

No 649-059-00-X.

NOTA H

- ES : destilados (petróleo), fracción parafínica ligera neutralizada químicamente ; Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos producida por un proceso de tratamiento para separar materiales ácidos. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40 °C (100 SUS a 100 °F).]
- DA : destillater (råolie), kemisk neutraliserede lette paraffin- ; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider fremstillet ved en behandlingsproces til fjernelse af sure materialer. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet mindre end 19cSt ved 40 °C.]
- DE : Destillate (Erdöl), chemisch neutralisierte leichte paraffinhaltige Destillate (Erdöl), chemisch neutralisierte schwere paraffinhaltige ; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einer Behandlungsmethode zum Entfernen saurer Stoffe. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19cSt bei 40 °C.]
- EL : αποσταγmata (πετρελαίου), ελαφρά παραφινικά χημικώς εξουδετερωμένα ; Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγονται με επεξεργασία για να απομακρυνθούν όξινα συστατικά. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C.]
- EN : Distillates (petroleum), chemically neutralized light paraffinic ; Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity less than 100 SUS at 100 °F (19cSt at 40 °C).]
- FR : distillats paraffiniques légers (pétrole), neutralisés chimiquement ; Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C.]
- IT : distillati (petrolio), frazioni paraffiniche leggere neutralizzata chimicamente ; Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi prodotta con un processo di trattamento per la rimozione delle sostanze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito con viscosità inferiore a 19cSt a 40 °C.]
- NL : destillaten (aardolie), chemisch geneutraliseerde lichte paraffinehoudende ; Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een behandlingsproces waarbij zure materialen worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C.]
- PT : destilados (petróleo), parafínicos leves neutralizados quimicamente ; Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos produzida por um processo de tratamento para remoção de materiais ácidos. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 1, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="375 436 391 459" style="text-align: center;">T</div> <div data-bbox="335 481 430 582" style="text-align: center;">  </div> <div data-bbox="941 492 1021 526" style="text-align: right;">R : 45</div> <div data-bbox="941 537 1053 571" style="text-align: right;">S : 53-45</div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-34-3

EEC No 265-135-1

No 649-060-00-5

NOTA H

- ES : destilados (petróleo), fracción nafténica pesada neutralizada químicamente ; Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos producida por un proceso de tratamiento para separar materiales ácidos. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 19cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA : destillater (råolie), kemisk neutraliserede tunge naphthen- ; Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider fremstillet ved en behandlingsproces til fjernelse af sure materialer. Den består af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE : Destillate (Erdöl), chemisch neutralisierte schwere naphthenhaltige ; Nicht oder leicht raffiniertes Grundöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch eine Behandlungsmethode zum Entfernen saurer Stoffe. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL : αποσταγμάτα (πετρελαίου), βαρέα παραφινικά χημικώς εξουδετερωμένα· Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία για να απομακρυνθούν όξινα συστατικά. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες τουλάχιστο 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN : Distillates (petroleum), chemically neutralized heavy naphthenic ; Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR : distillats naphthéniques lourds (pétrole), neutralisés chimiquement ; Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT : distillati (petrolio), frazione naftenica pesante neutralizzata chimicamente ; Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi prodotta con un processo di trattamento per rimozione delle sostanze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito con viscosità di almeno 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL : destillaten (aardolie), chemisch geneutraliseerde zware naftenhoudende ; Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een behandelingsproces waarbij zure materialen worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die minstens 19 cSt is bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT : destilados (petróleo), nafténicos pesados neutralizados químicamente ; Óleo-base não refinado ou semi-refinado  
[Uma combinação complexa de hidrocarbonetos produzida por um processo de tratamento para remoção de materiais ácidos. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-35-4

EEC No 265-136-7

No 649 061 00 0

NOTA H

- ES destilados (petróleo), fracción nafténica ligera neutralizada químicamente, Aceite de base sin refinar o ligeramente refinado  
[Combinación compleja de hidrocarburos producida por un proceso de tratamiento para separar materiales ácidos. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40°C (100 SUS a 100°F). Contiene relativamente pocas parafinas normales.]
- DA destillater (råolie), kemisk neutraliserede lette naphthen-, Uraffineret eller let raffineret baseolie  
[En sammensat blanding af carbonhydrider fremstillet ved en behandlingsproces til fjernelse af sure materialer. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$  og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE Destillate (Erdöl), chemisch neutralisierte leichte naphthenhaltige, Nicht oder leicht raffiniertes Grundöl  
[Komplex Kombination von Kohlenwasserstoffen, erhalten durch eine Behandlungsmethode zum Entfernen saurer Stoffe. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL αποσταγμάτα (πετρελαίου) ελαφρά ναφθενικά χημικώς εξουδετερωμένα. Μη επεξεργασμένο ή ελαφρώς επεξεργασμένο βασικό ορυκτέλαιο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία για να απομακρυνθούν όξινα συστατικά. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN Distillates (petroleum), chemically neutralized light naphthenic, Unrefined or mildly refined baseoil  
[A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 19cSt at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR distillats naphthéniques légers (pétrole), neutralisés chimiquement, Huile de base non raffinée ou légèrement raffinée  
[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$  et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT distillati (petrolio), frazione naftenica leggera neutralizzata chimicamente, Olio base non raffinato o mediamente raffinato  
[Combinazione complessa di idrocarburi prodotta con un processo di trattamento per la rimozione delle sostanze acide. È costituita da idrocarburi con numeri di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito con viscosità pari ad almeno 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL destillaten (aardolie), chemisch geneutraliseerde lichte naftenhoudende, Niet of licht geraffineerde basisolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een behandlingsproces waarbij zure materialen worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT destilados (petróleo), nafténicos leves neutralizados químicamente, Óleo-base não refinado ou semi refinado  
[Uma combinação complexa de hidrocarbonetos produzida por um processo de tratamento para remoção de materiais ácidos. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 45

S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-73-6

EEC No 270-755-0

No 649-062-00 6

NOTA H

NOTA K

- ES gases (petróleo), producto de cabeza del despropanizador de nafta craqueada catalíticamente , Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por fraccionamiento de hidrocarburos craqueados catalíticamente y tratados para separar impurezas ácidas. Compuesta de hidrocarburos con un número de carbonos dentro del intervalo de  $C_2$  a  $C_4$ , en su mayor parte  $C_3$ ]
- DA gasser (råolie), katalytisk krakket naphtha depropanizer-topfraktion,  $C_3$  rige syrefrie , Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktionering af katalytisk krakkede carbonhydrider og behandlet for at fjerne sure urenheder. Den består af carbonhydrider,  $C_2$  til og med  $C_4$ , overvejende  $C_3$ ]
- DE Gase (Erdöl), katalytisch gekrackte Naphtha Depropanisierer Kopf,  $C_3$ -reich ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung katalytisch gekrackter Kohlenwasserstoffe und behandelt, um saurehaltige Verunreinigungen zu entfernen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_2$  bis  $C_4$ , vorherrschend  $C_3$ ]
- EL αερια (πετρελαίου), κορυφής αποπροπανιώτηρα καταλυτικά πυρολυμένης νάφρας, πλούσια σε  $C_3$ , ελεύθερα οξέος  
Πετρελαιο αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από κλασμάτωση καταλυτικής πυρόλυμενων υδρογονανθράκων, α, κατεργασία για να απομακρυνθούν όξινες προσμίξεις. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_2$  ως και  $C_4$ , κυρίως  $C_3$ ]
- EN Gases (petroleum), catalytic cracked naphtha depropanizer overhead,  $C_3$  -rich acid-free , Petroleum, gas  
[A complex combination of hydrocarbons obtained from fractionation of catalytic cracked hydrocarbons and treated to remove acidic impurities. It consists of hydrocarbons having carbon numbers in the range of  $C_2$  through  $C_4$ , predominantly,  $C_3$ ]
- FR gaz de tête (pétrole), dépropanisation du naphtha de craquage catalytique, riches en  $C_3$  et desacidifiés , Gaz de pétrole  
[Combinaison complexe d'hydrocarbures issue du fractionnement d'hydrocarbures de craquage catalytique et soumise à un traitement destiné à éliminer les impuretés acides. Se compose d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_2$  -  $C_4$ , principalement en  $C_3$ ]
- IT gas (petrolio), nafta crackizzata cataliticamente, frazioni di testa del depropanizzatore, ricchi di  $C_3$  privi di acido , Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento di idrocarburi crackizzati cataliticamente e trattati per separare le impurezze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_2$ - $C_4$ , prevalentemente  $C_3$ ]
- NL gassen (aardolie), katalytisch gekraakte nafta depropanisator topprodukten,  $C_3$ -rijke zuurvrije , Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door fractionering van katalytisch gekraakte koolwaterstoffen en behandeld om zure onzuiverheden te verwijderen. Bestaat uit koolwaterstoffen overwegend  $C_3$  tot en met  $C_4$ ]
- PT gases (petróleo), produtos de cabeça do despropanizador da nafta do cracking catalítico, ricos em  $C_3$  e sem ácidos , Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por fraccionamento de hidrocarbonetos do cracking catalítico tratada para remoção de impurezas ácidas. É constituída por hidrocarbonetos com números de átomos de carbono na gama de  $C_2$  até  $C_4$ , predominantemente  $C_3$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-74-7

EEC No 270-756-6

No 649-063-00-1

NOTA H

NOTA K


- ES : gases (petróleo), craqueador catalítico ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de los productos de un proceso de craqueo catalítico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : gasser (råolie), katalytisk krakker- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af produkterne fra en katalytisk krakningsproces. Den består overvejende af aliphatiske carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE : Gase (Erdöl), katalytische Kracker ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem katalytischen Krackverfahren. Besteht vorherrschend aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αέρια (πετρελαίου), μονάδας καταλυτικής πυρόλυσης- Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με την απόσταξη των προϊόντων καταλυτικής πυρόλυσης. Συνίσταται κυρίως από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Gases (petroleum), catalytic cracker ; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of the products from a catalytic cracking process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz (pétrole), craquage catalytique ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose principalement d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_1$  -  $C_6$ .]
- IT : gas (petrolio), dall'impianto di cracking catalitico ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti derivanti da un processo di cracking catalitico. È costituita prevalentemente da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$  -  $C_6$ .]
- NL : gassen (aardolie), katalytische kraker ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de destillatie van de producten van een katalytisch kraakproces. Bestaat voornamelijk uit alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gases (petróleo), do cracker catalítico ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de cracking catalítico. É constituída predominantemente por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límits de concentració, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*


Cas No 68477-75-8

EEC No 270-757-1

No 649-064-00-7

NOTA H

NOTA K

- ES : gases (petróleo), craqueador catalítico, ricos en  $C_{1-5}$ ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo catalítico. Compuesta de hidrocarburos alifáticos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_{10}$ , en su mayor parte de  $C_1$  a  $C_5$ .]
- DA : gasser råolie), katalytisk krakker,  $C_{1-5}$ -rige; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af produkter fra en katalytisk krakningsproces. Den består af aliphatiske carbonhydrider,  $C_1$  til og med  $C_{10}$ , overvejende  $C_1$  til og med  $C_5$ .]
- DE : Gase (Erdöl), katalytische Kracker,  $C_{1-5}$ -reich; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem katalytischen Krackverfahren. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_{10}$ , vorherrschend  $C_1$  bis  $C_5$ .]
- EL : αερια (πετρελαίου), μονάδας καταλυτικής πυρόλυσης, πλούσια σε  $C_{1-5}$ ; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή κυρίως από  $C_1$  ως και  $C_{10}$ , κυρίως από  $C_1$  ως και  $C_5$ .]
- EN : Gases (petroleum), catalytic cracker,  $C_{1-5}$ -rich; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of aliphatic hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_{10}$ , predominantly  $C_1$  through  $C_5$ .]
- FR : gaz (pétrole), craquage catalytique, riches en  $C_{1-5}$ ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_{10}$ , principalement en  $C_1$  à  $C_5$ .]
- IT : gas (petrolio), da impianto di cracking catalitico, ricchi di  $C_{1-5}$ ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi alifatici con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_{10}$ , prevalentemente  $C_1$ - $C_5$ .]
- NL : gassen (aardolie), katalytische kraker,  $C_{1-5}$ -rijk; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door de destillatie van produkten van een katalytisch kraakproces. Bestaat uit alifatische koolwaterstoffen,  $C_1$  tot en met  $C_{10}$ , overwegend  $C_1$  tot en met  $C_5$ .]
- PT : gases (petróleo), do cracker catalítico, ricos em  $C_{1-5}$ ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono na gama de  $C_1$  até  $C_{10}$ , predominantemente  $C_1$  até  $C_5$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 68477-76-9

EEC No 270-758-7

No 649-065-00 2

NOTA H


NOTA K

- ES : gases (petróleo), productos de cabeza del estabilizador de nafta polimerizada catalíticamente, ricos en  $C_{2-4}$ , Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por estabilización y fraccionamiento de nafta polimerizada catalíticamente. Compuesta de hidrocarburos alifáticos con un número de carbonos dentro del intervalo de  $C_2$  a  $C_6$ , en su mayor parte de  $C_2$  a  $C_4$ .]
- DA : gasser (råolie), katalytisk polymeriseret naphtha stabilizer-topfraktion,  $C_{2-4}$ -rige ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktioneringsstabiliseringen af katalytisk polymeriseret naphtha. Den består af aliphatiske carbonhydrider,  $C_2$  til og med  $C_6$ , overvejende  $C_2$  til og med  $C_4$ .]
- DE : Gase (Erdöl), katalytisch polymerisierte Naphtha Stabilisierer Kopf,  $C_{2-4}$ -reich ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der fraktionierten Stabilisierung katalytisch polymerisierter Naphtha. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_2$  bis  $C_6$ , vorherrschend  $C_2$  bis  $C_4$ .]
- EL : αέρια (πετρελαίου), κορυφής σταθεροποιητή καταλυτικά πολυμερισμένης νάφθας προϊόντων, πλούσια σε  $C_{2-4}$  : Πετρελαιοαέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την κλασμάτωση σταθεροποίησης καταλυτικά πολυμερισμένης νάφθας. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_2$  ως και  $C_6$ , κυρίως από  $C_2$  ως και  $C_4$ .]
- EN : Gases (petroleum), catalytic polymerized naphtha stabilizer overhead,  $C_{2-4}$ -rich, Petroleum gas  
[A complex combination of hydrocarbons obtained from the fractionation stabilization of catalytic polymerized naphtha. It consists of aliphatic hydrocarbons having carbon numbers in the range of  $C_2$  through  $C_6$ , predominantly  $C_2$  through  $C_4$ .]
- FR : gaz de tête (pétrole), stabilisation de naphtha de polymérisation catalytique, riches en  $C_{2-4}$ , Gaz de pétrole  
[Combinaison complexe d'hydrocarbures issue de la stabilisation par fractionnement de naphtha de polymérisation catalytique. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe dans la gamme  $C_2$ - $C_6$ , principalement en  $C_2$  à  $C_4$ .]
- IT : gas (petrolio), frazione di testa stabilizzatore nafta polimerizzata cataliticamente, ricchi di  $C_{2-4}$ , Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione-frazionamento di nafta polimerizzata cataliticamente. È costituita da idrocarburi alifatici con numero di atomi di carbonio nell'intervallo  $C_2$ - $C_6$ , prevalentemente  $C_2$ - $C_4$ .]
- NL : gassen (aardolie), katalytisch gepolymeriseerde nafta-stabilisator topfractie,  $C_{2-4}$  rijk ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de fractioneringsstabilisatie van katalytisch gepolymeriseerde nafta. Bevat alifatische koolwaterstoffen,  $C_2$  tot en met  $C_6$ , overwegend  $C_2$  tot en met  $C_4$ .]
- PT : gases (petróleo), de cabeça do estabilizador da nafta polimerizada cataliticamente, ricos em  $C_{2-4}$ , Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por estabilização do fraccionamento de nafta polimerizada cataliticamente. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono na gama de  $C_2$  até  $C_6$ , predominantemente  $C_2$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-79-2

EEC No 270-760-8

No 649-066-00-8

NOTA H

NOTA K

- ES: gases (petróleo), reformador catalítico, ricos en  $C_{1-4}$ ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de reformado catalítico. Compuesta de hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_6$ , en su mayor parte de  $C_1$  a  $C_4$ .]
- DA: gasser (råolie), katalytisk reformer-,  $C_{1-4}$ -rige; Kulbrintegasser  
[En sammensæt blanding af carbonhydrider fremstillet ved destillation af produkterne fra en katalytisk reformeringsproces. Den består af carbonhydrider,  $C_1$  til og med  $C_6$ , overvejende  $C_1$  til og med  $C_4$ .]
- DE: Gase (Erdöl), katalytische Reformer,  $C_{1-4}$ -reich; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem katalytischen Reformingverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_6$ , vorherrschend  $C_1$  bis  $C_4$ .]
- EL: αερια (πετρελαίου), καταλυτικού αναμόρφωτήρα, πλούσια σε  $C_{1-4}$ ; Πετρελαιοϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με απόσταξη προϊόντων καταλυτικής αναμόρφωσης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_6$ , κυρίως από  $C_1$  ως και  $C_4$ .]
- EN: Gases (petroleum), catalytic reformer,  $C_{1-4}$ -rich; Petroleum gas  
[A complex combination of hydrocarbons produced by distillation of products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_6$ , predominantly  $C_1$  through  $C_4$ .]
- FR: gaz (pétrole), reformage catalytique, riches en  $C_{1-4}$ ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un reformage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_6$ , principalement en  $C_1$  à  $C_4$ .]
- IT: gas (petrolio), impianto di reforming catalitico, ricchi di  $C_{1-4}$ ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di reforming catalitico. È costituita da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_6$ , prevalentemente  $C_1$ - $C_4$ .]
- NL: gassen (aardolie), katalytische reformator,  $C_{1-4}$ -rijk; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door destillatie van produkten uit een katalytisch reformeringsproces. Bestaat uit koolwaterstoffen,  $C_1$  tot en met  $C_6$ , overwegend  $C_1$  tot en met  $C_4$ .]
- PT: gases (petróleo), do reformer catalítico, ricos em  $C_{1-4}$ ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida por destilação de produtos de um processo de reforming catalítico. É constituída por hidrocarbonetos com números de átomos de carbono na gama de  $C_1$  até  $C_6$ , predominantemente  $C_1$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-83-8

EEC No 270-765-5

No 649-067-00-3

NOTA H

NOTA K


- ES : gases (petróleo), alimentación de  $C_{3,5}$  para la alquilación parafínica-olefínica ; Gases de petróleo  
[Combinación compleja de hidrocarburos olefínicos y parafínicos con un número de carbonos dentro del intervalo de  $C_3$  a  $C_5$  los cuales son utilizados como alimentación para la alquilación. La temperatura ambiente normalmente supera la temperatura crítica de estas combinaciones.]
- DA : gasser (råolie),  $C_{3,5}$ -olefin- og paraffin-alkyleringsføde- ; Kulbriategasser  
[En sammensat blanding af olefin- og paraffin-carbonhydrider,  $C_3$  til og med  $C_5$ , der anvendes som alkyleringsføde. De omgivende temperaturer overskrider normalt disse blandingers kritiske temperatur.]
- DE : Gase (Erdöl),  $C_{3,5}$  olefinhaltige-paraffinhaltige Alkylierungsbeschickung ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von olefinhaltigen und paraffinhaltigen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_5$ , die für die Alkylierungsbeschickung gebraucht werden. Umgebungstemperaturen überschreiten normalerweise die kritische Temperatur dieser Kombinationen.]
- EL : αέρια (πετρελαίου),  $C_{3,5}$  ολεφίνες-παραφίνες τροφοδότησης αλκυλίωσης· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός ολεφινικών και παραφινικών υδρογονανθράκων με αριθμό ατόμων άνθρακα στην περιοχή από  $C_3$  ως και  $C_5$ , οι οποίοι χρησιμοποιούνται για τροφοδότηση αλκυλίωσης. Οι θερμοκρασίες περιβάλλοντος κανονικά υπερβαίνουν την κρίσιμη θερμοκρασία των συνδυασμών αυτών.]
- EN : Gases (petroleum),  $C_{3,5}$  olefinic-paraffinic alkylation feed ; Petroleum gas  
[A complex combination of olefinic and paraffinic hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_5$  which are used as alkylation feed. Ambient temperatures normally exceed the critical temperature of these combinations.]
- FR : gaz (pétrole), charge d'alkylation oléfinique et paraffinique en  $C_{3,5}$  ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures oléfiniques et paraffiniques dont le nombre de carbones se situe dans la gamme  $C_3$ - $C_5$  et qui sont utilisés comme charge d'alkylation. Les températures ambiantes sont généralement supérieures à la température critique de ces combinaisons.]
- IT : gas (petrolio),  $C_{3,5}$  carica di alchilazione olefinica-p. affinica ; Gas di petrolio  
[Combinazione complessa di idrocarburi olefinici e paraffinici con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_5$  usati come carica di alchilazione. Le temperature ambientali sono di norma superiori alla temperatura critica di queste combinazioni.]
- NL : gassen (aardolie),  $C_{3,5}$ -olefinische en paraffinische alkyleringsgrondstof ; Petroleumgas  
[Een complexe verzameling van olefinische en paraffinische koolwaterstoffen, overwegend  $C_3$  tot en met  $C_5$ , die worden gebruikt als alkyleringsgrondstof. Omgevingstemperaturen overtreffen gewoonlijk de kritische temperaturen van deze combinaties.]
- PT : gases (petróleo),  $C_{3,5}$  olefinicos-parafínicos de carga de alquilação ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos olefinicos e parafínicos com números de átomos de carbono na gama de  $C_3$  até  $C_5$ , usada como carga de um processo de alquilação. A temperatura crítica destas combinações é normalmente inferior à temperatura ambiente.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-85-0

EEC No 270-767-6

No 649-068-00-9

NOTA H

NOTA K

- ES : gases (petróleo), ricos en  $C_4$  ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por destilación de productos de un proceso de fraccionamiento catalítico. Compuesta de hidrocarburos alifáticos con un número de carbonos dentro del intervalo de  $C_3$  a  $C_{10}$ , en su mayor parte  $C_4$ .]
- DA : gasser (råolie),  $C_4$ -rige ; Kulbrintegasser  
[En sammensæt blanding af carbonhydrider fremstillet ved destillation af produkterne fra en katalytisk fraktioneringsproces. Den består af aliphatiske carbonhydrider,  $C_3$  til og med  $C_{10}$ , overvejende  $C_4$ .]
- DE : Gase (Erdöl),  $C_4$ -reich ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem katalytischen Fraktionierungsverfahren. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_{10}$ , vorherrschend  $C_4$ .]
- EL : αέρια (πετρελαίου), πλούσια σε  $C_4$ · Πετρελαιοτικό αέριο·  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με απόσταξη προϊόντων καταλυτικής κλασμάτωσης. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_3$  ως  $C_{10}$ , κυρίως  $C_4$ .]
- EN : Gases (petroleum),  $C_4$ -rich ; Petroleum gas  
[A complex combination of hydrocarbons produced by distillation of products from a catalytic fractionation process. It consists of aliphatic hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_{10}$ , predominantly  $C_4$ .]
- FR : gaz (pétrole), riches en  $C_4$  ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un fractionnement catalytique. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe dans la gamme  $C_3$ - $C_{10}$ , principalement en  $C_4$ .]
- IT : gas (petrolio), ricchi di  $C_4$  ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di frazionamento catalitico. È costituita da idrocarburi alifatici con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_{10}$ , prevalentemente  $C_4$ .]
- NL : gassen (aardolie),  $C_4$ -rijk ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door destillatie van producten uit een katalytisch fractioneringsproces. Bestaat uit alifatische koolwaterstoffen,  $C_3$  tot en met  $C_{10}$ , hoofdzakelijk  $C_4$ .]
- PT : gases (petróleo), ricos em  $C_4$  ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida por destilação de produtos de um processo de fraccionamento catalítico. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono na gama de  $C_3$  até  $C_{10}$ , predominantemente  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Εισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-86-1

EEC No 270-768-1

No 649-069-00-4

NOTA H

NOTA K

- ES: gases (petróleo), productos de cabeza del desetanizador; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por destilación de gas y fracciones de gasolina de un proceso de craqueo catalítico. Contiene en su mayor parte etano y etileno.]
- DA: gasser (råolie), deethanizer-topfraktioner; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af gas- og benzinfraktionerne fra den katalytiske krakningsproces. Den indeholder overvejende ethan og ethylen.]
- DE: Gase (Erdöl), Deethanisierer Kopf; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation der Gas- und Benzinfraktionen aus dem katalytischen Krackverfahren. Enthält vorherrschend Ethan und Ethylen.]
- EL: αέρια (πετρελαίου), προϊόντων κορυφής απαιθανωτήρα- Πετρελαιοεικό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται από απόσταξη των κλασμάτων αερίου και βενζίνας από την καταλυτική πυρόλυση. Περιέχει κυρίως αιθάνιο και αιθυλένιο.]
- EN: Gases (petroleum), deethanizer overheads; Petroleum gas  
[A complex combination of hydrocarbons produced from distillation of the gas and gasoline fractions from the catalytic cracking process. It contains predominantly ethane and ethylene.]
- FR: gaz de tête (pétrole), déséthaniseur; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des fractions gaz et essence issues du craquage catalytique. Contient principalement de l'éthane et de l'éthylène.]
- IT: gas (petrolio), frazioni di testa del deetanizzatore; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione delle frazioni di gas e di benzina provenienti dal processo di cracking catalitico. Contiene prevalentemente etano ed etilene.]
- NL: gassen (aardolie), deëthaniser-topprodukten; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door destillatie van de gas- en gasolinefracties uit het katalytische kraakproces. Bevat voornamelijk ethaan en ethyleen.]
- PT: gases (petróleo), de cabeça do desetanizador; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida por destilação das fracções de gás e gasolina do processo de cracking catalítico. Contém predominantemente etano e etileno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-87-2

EEC No 270-769-7

No 649-070-00-X

NOTA H

NOTA K

- ES gases (petróleo), productos de cabeza de la torre del desisobutanizador ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación atmosférica de una corriente de butano-butileno. Compuesta de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>3</sub> a C<sub>4</sub>.]
- DA gasser (råolie), deisobutanizertårn-topfraktioner ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved den atmosfæriske destillation af en butan-butyleenstrøm. Den består af aliphatiske carbonhydrider, overvejende C<sub>3</sub> til og med C<sub>4</sub>.]
- DE Gase (Erdöl), Deisobutanisierer Turm Kopf ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der offenen Destillation eines Butan-Butylenlaufes. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>3</sub> bis C<sub>4</sub>.]
- EL αέρια (πετρελαίου), προϊόντων κορυφής στήλης αποϊσοδουτανιωτήρα- Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με την ατμοσφαιρική απόσταξη ρεύματος βουτανίου-βουτυλενίου. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως C<sub>3</sub> και C<sub>4</sub>.]
- EN Gases (petroleum), deisobutanizer tower overheads ; Petroleum gas  
[A complex combination of hydrocarbons produced by the atmospheric distillation of a butane-butylene stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>3</sub> through C<sub>4</sub>.]
- FR gaz de tête (pétrole), colonne de déisobutanisation ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation atmosphérique d'un mélange butane-butylène. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe principalement dans la gamme C<sub>3</sub>-C<sub>4</sub>.]
- IT gas (petrolio), frazioni di testa della colonna del deisobutanizzatore ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione atmosferica di una corrente di butano-butilene. È costituita da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>3</sub>-C<sub>4</sub>.]
- NL gassen (aardolie), deisobutanisatortoren-topprodukten ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door de atmosferische destillatie van een butaan-butyleenstroom. bestaat uit alifatische koolwaterstoffen, overwegend C<sub>3</sub> tot en met C<sub>4</sub>.]
- PT gases (petróleo), de cabeça da coluna do desisobutanizador ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação atmosférica de uma fracção de butanos-butilenos. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de C<sub>3</sub> até C<sub>4</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-90-7

EEC No 270-772-3

No 649-071-00-5

NOTA H

NOTA K

- ES: gases (petróleo), despropanizador por vía seca, ricos en propeno; Gases en petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de productos de gas y fracciones de gasolina de un proceso de craqueo catalítico. Compuesta en su mayor parte de propileno con algo de etano y propano.]
- DA: gasser (råolie), tørre depropanizer-, propenrige; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af produkter fra gas- og benzinfraktionerne fra en katalytisk krakningsproces. Den består overvejende af propylen med noget ethan og propan.]
- DE: Gase (Erdöl), Depropanisierer trocken, Propen-reich; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus den Gas- und Benzinfraktionen aus einem katalytischen Krackverfahren. Besteht vorherrschend aus Propylen mit etwas Ethan und Propan.]
- EL: αέρια (πετρελαίου), ξηρά από αποπροπανιωτήρα, πλούσια σε προπένιο· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων των κλασμάτων αερίου και δενζίνης καταλυτικής πυρόλυσης. Συνίσταται κυρίως από προπυλένιο με λίγο αιθάνιο και προπάνιο.]
- EN: Gases (petroleum), depropanizer dry, propene-rich; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of products from the gas and gasoline fractions of a catalytic cracking process. It consists predominantly of propylene with some ethane and propane.]
- FR: gaz secs (pétrole), dépropaniseur, riches en propène; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits issus des fractions gaz et essence d'un craquage catalytique. Se compose principalement de propylène, avec un peu d'éthane et de propane.]
- IT: gas (petrolio), secchi dal depropanizzatore, ricchi di propilene; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuti per distillazione di prodotti provenienti dalle frazioni di gas e di benzina di un processo di cracking catalitico. È costituita prevalentemente da propilene con un poco di etano e propano.]
- NL: gassen (aardolie), depropanisator droog, propen-rijk; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door de destillatie van produkten uit de gas- en gasolinefracties van een katalytisch kraakproces. Bestaat voornamelijk uit propyleen met wat ethaan en propaan.]
- PT: gases (petróleo), secos do despropanizador, ricos em propeno; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos das fracções de gás e gasolina de um processo de cracking catalítico. É constituída predominantemente por propileno com algum etano e propano.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-91-8

EEC No 270-773-9

No 649-072-00-0

NOTA H

NOTA K

- ES: gases (petróleo), productos de cabeza del despropanizador ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por destilación de productos de gas y fracciones de gasolina de un proceso de craqueo catalítico. Compuesta de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA: gasser (råolie), depropanizer-topfraktioner ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkterne fra gas- og benzinfraktionerne fra en katalytisk krakningsproces. Den består af aliphatiske carbonhydrider, overvejende  $C_2$  til og med  $C_4$ .]
- DE: Gase (Erdöl), Depropanisierer Kopf ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus den Gas- und Benzinfraktionen aus einem katalytischen Crackverfahren. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL: αερια (πετρελαίου), προϊόντων κορυφής αποπροπανιωτήρα· Πετρελαιοικό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με απόσταξη προϊόντων των κλασμάτων αερίου και δενζίνας καταλυτικής πυρόλυσης. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN: Gases (petroleum), depropanizer overheads ; Petroleum gas  
[A complex combination of hydrocarbons produced by distillation of products from the gas and gasoline fractions of a catalytic cracking process. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR: gaz de tête (pétrole), dépropaniseur ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits issus des fractions gaz et essence d'un craquage catalytique. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_4$ .]
- IT: gas (petrolio), frazioni di testa del depropanizzatore ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti dalle frazioni di gas e benzina di un processo di cracking catalitico. È costituita da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL: gassen (aardolie), depropanisator-topprodukten ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door destillatie van produkten van de gas- en gasolinefracties van een katalytisch kraakproces. Bestaat uit alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT: gases (petróleo), de cabeça do despropanizador ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida por destilação de produtos das fracções de gás e gasolina de um processo de cracking catalítico. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477 94-1

EEC No 270-777-0

No 649-073-00-6

NOTA H

NOTA K

- ES : gases (petróleo), productos de cabeza del despropanizador de la planta de recuperación de gas ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por fraccionamiento de diversas corrientes hidrocarbonadas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_4$ , en su mayor parte propano.]
- DA : gasser (råolie), gas-genudvindingsanlæg depropanizer-topfraktioner ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktionering af diverse carbonhydridstrømme. Den består overvejende af carbonhydrider,  $C_1$  til og med  $C_4$ , overvejende propan.]
- DE : Gase (Erdöl), Gaswiedergewinnungsfabrik Depropanisierer Kopf ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Fraktionierung verschiedener Kohlenwasserstoffläufe. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_4$ , vorherrschend Propan.]
- EL : αερια (πετρελαίου), μονάδας επανάκτησης αερίου αποπροπανιωτήρα: Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κλασμάτωση διαφόρων ρευμάτων υδρογονανθράκων. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_4$ , κυρίως προπάνιο.]
- EN : Gases (petroleum), gas recovery plant depropanizer overheads ; Petroleum gas  
[A complex combination of hydrocarbons obtained by fractionation of miscellaneous hydrocarbon streams. It consists predominantly of hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_4$ , predominantly propane.]
- FR : gaz de tête (pétrole), unité de récupération des gaz, dépropaniseur ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement de divers mélanges d'hydrocarbures. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_4$ , du propane en majorité.]
- IT : gas (petrolio), frazioni di testa depropanizzatore impianto recupero gas ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per frazionamento di una miscellanea di correnti idrocarburiche. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_4$ , prevalentemente propano.]
- NL : gassen (aardolie), gasherwinningsinstallatie depropanisator-topprodukten ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de fractionering van verscheidene koolwaterstofstromen. Bestaat voornamelijk uit koolwaterstoffen,  $C_1$  tot en met  $C_4$ , voornamelijk propaan.]
- PT : gases (petróleo), de cabeça do despropanizador de uma unidade de recuperação de gases ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por fraccionamento de várias fracções de hidrocarbonetos. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono na gama de  $C_1$  até  $C_4$ , predominantemente propano.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 68477-95-2

EEC No 270-778-6

No 649-074-00-1

NOTA H

NOTA K

- ES: gases (petróleo), alimentación de la unidad Girbatol ; Gases de petróleo  
[Combinación compleja de hidrocarburos que se utilizan como alimentación en la unidad Girbatol para separar sulfuro de hidrógeno. Compuesta de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>2</sub> a C<sub>4</sub>.]
- DA: gasser (råolie), Girbatol-enhed føde- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider, der anvendes som føde i Girbatol-enheden for at fjerne hydrogensulfid. Den består af aliphatiske carbonhydrider, overvejende C<sub>2</sub> til og med C<sub>4</sub>.]
- DE: Gase (Erdöl), Girbatolanlage Beschickung ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, die zur Beschickung einer Girbatolanlage zur Entfernung von Schwefelwasserstoff gebraucht wird. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>2</sub> bis C<sub>4</sub>.]
- EL: αερια (πετρελαίου), τροφοδότησης μονάδας Girbatol· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που χρησιμοποιείται σαν την τροφοδότηση της μονάδας Girbatol για την απομάκρυνση υδροθείου. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από C<sub>2</sub> ως και C<sub>4</sub>.]
- EN: Gases (petroleum), Girbatol unit feed ; Petroleum gas  
[A complex combination of hydrocarbons that is used as the feed into the Girbatol unit to remove hydrogen sulfide. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>2</sub> through C<sub>4</sub>.]
- FR: gaz (pétrole), charge de l'unité Girbatol ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures utilisée comme charge de l'unité Girbatol destinée à l'élimination de l'hydrogène sulfuré. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe principalement dans la gamme C<sub>2</sub>-C<sub>4</sub>.]
- IT: gas (petrolio), alimentazione impianto Girbatol ; Gas di petrolio  
[Combinazione complessa di idrocarburi utilizzata come carica di alimentazione dell'impianto Girbatol per la separazione dell'acido solfidrico. È costituita da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>2</sub>-C<sub>4</sub>.]
- NL: gassen (aardolie), Girbatol-installatie-grondstof ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt gebruikt als grondstof in een Girbatol-installatie om waterstofsulfide te verwijderen. Bestaat uit alifatische koolwaterstoffen, overwegend C<sub>2</sub> tot en met C<sub>4</sub>.]
- PT: gases (petróleo), de alimentação da unidade Girbatol ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos usada como alimentação da unidade Girbatol para remoção de sulfureto de hidrógeno. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de C<sub>2</sub> até C<sub>4</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 68477-99-6

EEC No 270-782-8

No 649-075-00-7

NOTA H

NOTA K

- ES : gases (petróleo), fraccionador de nafta isomerizada, ricos en  $C_4$ , libres de sulfuro de hidrógeno , Gases de petróleo
- DA : gasser (råolie), isomeriseret naphtha fraktioneringskolonne-,  $C_4$ -rige, hydrogensulfidfri , Kulbrintegasser
- DE : Gase (Erdöl), isomerisierte Naphthafraktionen,  $C_4$ -reich, Schwefelwasserstoff frei , Gase aus der Erdölverarbeitung
- EL : αερια (πετρελαίου), μονάδας κλασμάτωσης ισομερισμένης νάφθας πλούσια σε  $C_4$  , απαλλαγμένα υδροθείου Πετρε-  
λαικό αέριο
- EN : Gases (petroleum), isomerized naphtha fractionator,  $C_4$ -rich, hydrogen sulfide-free , Petroleum gas
- FR : gaz (pétrole), fractionnement de naphtha isomérisé, riches en  $C_4$ , exempts d'hydrogène sulfuré , Gaz de pétrole
- IT : gas (petrolio), frazionati di benzina pesante isomerizzata, arricchiti in  $C_4$ , esenti da idrogeno solforato , Gas di  
petrolio
- NL : gassen (aardolie), geïsomeneerde naftafraktionator, rijk aan  $C_4$ , vrij van waterstofsulfide , Petroleumgas
- PT : gases (petróleo), da coluna de fraccionamento da nafta isomerizada, ricos em  $C_4$ , sem sulfureto de hidrogénio , Gases  
de petróleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 , R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*




Cas No 68478-21-7

EEC No 270-802-5

No 649-076-00-2

NOTA H

NOTA K

ES: gas de cola (petróleo), aceite clarificado craqueado catalíticamente y tambor de reflujo para el fraccionamiento del residuo obtenido a vacío craqueado térmicamente; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento de aceite clarificado craqueado catalíticamente y del residuo obtenido a vacío craqueado térmicamente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]

DA: slutgas (råolie), katalytisk krakket klart olie og termisk krakket vakuumrest fraktioneringsrefluxkammer; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktionering af katalytisk krakket, klart olie og termisk krakket vakuumrest. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]

DE: Endgas (Erdöl), katalytisch gekracktes aufgehelltes Öl und thermisch gekrackte Vakuumrückstandsfraktionierung Reflux Trommel; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Fraktionierung von katalytisch gekracktem aufgehelltem Öl und thermisch gekracktem Vakuumrückstand. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]

EL: αεριο ουρας (πετρελαίου), από καταλυτικώς πυρολυμένο διαυγασμένο έλαιο και θερμικώς πυρολυμένο υπόλειμμα κενού από δοχείο επαναροής κλασμάτωσης; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από κλασμάτωση καταλυτικώς πυρολυθέντος διαυγασμένου ελαίου κα θερμικώς πυρολυθέντος υπολείμματος κενού. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]

EN: Tail gas (petroleum), catalytic cracked clarified oil and thermal cracked vacuum residue fractionation reflux drum; Petroleum gas  
[A complex combination of hydrocarbons obtained from fractionation of catalytic cracked clarified oil and thermal cracked vacuum residue. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]

FR: gaz résiduels (pétrole), huile clarifiée de craquage catalytique et résidu sous vide de craquage thermique, ballon de reflux de fractionnement; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fonctionnement d'huile clarifiée de craquage catalytique et de résidu sous vide de craquage thermique. Se compose principalement d'hydrocarbures dont le nombre de carbonos se situe en majorité dans la gamme  $C_1$ - $C_6$ .]

IT: gas di coda (petrolio), da torre di riflusso frazionamento olio purificato di cracking catalitico e residuo sotto vuoto di cracking termico; Gas-di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento di olio purificato crackizzato cataliticamente e di residuo sotto vuoto crackizzato termicamente. È costituito prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$  -  $C_6$ .]

NL: restgas (aardolie), katalytisch gekraakte geklaarde olie en thermisch gekraakt vacuümresidu fractioneringsterugloopvat; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door fractionering van katalytisch gekraakte geklaarde olie en thermisch gekraakt vacuümresidu. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]

PT: gas residual (petróleo), do tanque de refluxo do fraccionamento de óleo clarificado de cracking catalítico e residuo de vácuo de cracking térmico; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por fraccionamento de óleo clarificado de cracking catalítico e residuo de vácuo de cracking térmico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem.*

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*Límites de concentración, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-22-8

EEC No 270-803-0

No 649-077-00-8

NOTA H

NOTA K

- ES : gases de cola (petróleo), aparato de absorción para la estabilización de nafta craqueada catalíticamente ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la estabilización de nafta craqueada catalíticamente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : slutgas (råolie), katalytisk krakket naphtha stabiliseringsabsorber ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved stabiliseringen af katalytisk krakket naphtha. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE : Endgas (Erdöl), katalytisch gekrackte Naphtha Stabilisierung Absorber ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Stabilisierung katalytisch gekrackter Naphtha. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αεριο ουρας (πετρελαιο), απορροφητήρας σταθεροποίησης καταλυτικά πυρολυμένης νάφθας. Πετρελαιο αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων του λαμβάνονται από την σταθεροποίηση καταλυτικά πυρολυμένης νάφθας. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Tail gas (petroleum), catalytic cracked naphtha stabilization absorber ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the stabilization of catalytic cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz résiduels (pétrole), stabilisation de naphtha de craquage catalytique, absorbeur ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures résultant de la stabilisation de naphtha de craquage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT : gas di coda (petrolio), assorbitore di stabilizzazione nafta crackizzata cataliticamente ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione di nafta crackizzata cataliticamente. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL : restgas (aardolie), katalytisch gekraakte nafta-stabiliseringsabsorbator ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de stabilisering van katalytisch gekraakte nafta. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gas residual (petróleo), da torre de absorção de estabilização da nafta do cracking catalítico ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por estabilização da nafta do cracking catalítico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  ate  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-24-0

EEC No 270-804-6

No 649-078-00-3

NOTA H

NOTA K

- ES : gas de cola (petróleo), fraccionador para los productos combinados del hidrodesulfurizador, reformador catalítico y craqueador catalítico ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento de productos de craqueo catalítico, reformado catalítico y procesos de hidrodesulfuración tratados para separar impurezas ácidas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>6</sub>.]
- DA : slutgas (råolie), katalytisk krakker, katalytisk reformer og hydroafsvovler, kombineret fraktioneringskolonne- ; Kulbrintegasser  
[En sammensat blanding af carbonhydnder, opnået ved fraktioneringen af produkterne fra katalytiske kraknings-, katalytiske reformerings- og hydroafsvovlingsprocesser, behandlet for at fjerne sure urenheder. Den består overvejende af carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>6</sub>.]
- DE : Endgas (Erdöl), katalytische Krack, katalytische Reformer und Hydrodesulfurierer kombinierte Fraktionator ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Fraktionierung von Produkten aus katalytischen Krack-, katalytischen Reforming- und Hydrodesulfurierungsverfahren, behandelt zum Entfernen säurehaltiger Verunreinigungen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>6</sub>.]
- EL : αεριο ουρας (πετρελαιο), μονάδας καταλυτικής πυρόλυσης, κοινού κλασματωτή μονάδας καταλυτικής αναμόρφωσης και μονάδας υδρογονοαποθείωσης- Πετρελαιο αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την κλασμάτωση προϊόντων καταλυτικής αναμόρφωσης και υδρογονοαποθείωσης και έχουν υποστεί κατεργασία για την απομάκρυνση όξινων ξένων προσμίξεων. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως C<sub>6</sub>.]
- EN : Tail gas (petroleum), catalytic cracker, catalytic reformer and hydrodesulfurizer combined fractionator ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the fractionation of products from catalytic cracking, catalytic reforming and hydrodesulfurizing processes treated to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>6</sub>.]
- FR : gaz résiduels (pétrole), fractionnement combiné des produits de craquage catalytique, de reformage catalytique et d'hydrodésulfuration ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures issue du fractionnement des produits de craquage catalytique, de reformage catalytique et d'hydrodésulfuration traité pour éliminer les impuretés acides. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme C<sub>1</sub>-C<sub>6</sub>.]
- IT : gas di coda (petrolio), dai processi di cracking e reforming catalitico e dal frazionatore combinato con l'idrodesolforatore ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento di prodotti del cracking catalitico, del reforming catalitico e dei processi di idrodesolforazione, trattata per eliminarne le impurezze acide. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>6</sub>.]
- NL : restgas (aardolie), fractionator van gecombineerde produkten uit katalytische kraker, katalytische reformator en waterstofontzwavelaar ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de fractionering van produkten uit katalytische kraak-, katalytische reforming- en waterstofontzwavelingsprocessen en behandeld om zure onzuiverheden te verwijderen. Bestaat voornamelijk uit koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>6</sub>.]
- PT : gas residual (petróleo), do fraccionador de correntes combinadas do cracker catalítico, reformer catalítico e hidrogenodessulfurizador ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida do fraccionamento de produtos dos processos de cracking catalítico, reforming catalítico e hidrogenodessulfurização tratados para remoção de impurezas ácidas. São constituídos predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>6</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-26-2

EEC No 270-806-7

No 649-079-00-9

NOTA H

NOTA K

- ES gas de cola (petróleo), estabilizador para el fraccionamiento de nafta reformada catalíticamente, Gases de petróleo [Combinación compleja de hidrocarburos obtenida del fraccionamiento y la estabilización de nafta reformada catalíticamente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA slutgas (råolie), katalytisk reformeret naphtha fraktioneringsstabilizer; Kulbrintegasser [En sammensat blanding af carbonhydrider opnået ved fraktioneringsstabiliseringen af katalytisk reformeret naphtha. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_4$ .]
- DE Endgas (Erdöl), katalytisch reformierte Naphtha Fraktionierung Stabilisator, Gase aus der Erdölverarbeitung [Komplexe Kombination von Kohlenwasserstoffen aus der fraktionierten Stabilisierung katalytisch reformierter Naphtha. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C bis  $C_4$ .]
- EL αεριο ουρας (πετρελαίου), σταθεροποιητή κλασμάτωσης καταλυτικά αναμορφωμένης νάφθας. Πετρελαϊκό αέριο [Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την κλασμάτωση σταθεροποίησης κλασμάτωσης καταλυτικά αναμορφωμένης νάφθας. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN Tail gas (petroleum), catalytic reformed naphtha fractionation stabilizer; Petroleum gas [A complex combination of hydrocarbons obtained from the fractionation stabilization of catalytic reformed naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR gaz résiduels (pétrole), stabilisation par fractionnement du naphtha de reformage catalytique, Gaz de pétrole [Combinaison complexe d'hydrocarbures issue de la stabilisation par fractionnement du naphtha de reformage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ .]
- IT gas di coda (petrolio), dalla stabilizzazione per frazionamento di nafta riformata cataliticamente; Gas di petrolio [Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione per frazionamento di nafta riformata cataliticamente. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL restgas (aardolie), katalytisch gereformeerde nafta-fraktioneringsstabilisator; Petroleumgas [Een complexe verzameling koolwaterstoffen, verkregen uit de fractioneringsstabilisatie van katalytisch gereformeerde nafta. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT gás residual (petróleo), do estabilizador do fraccionamento de nafta do reforming catalítico; Gases de petróleo liquefeitos [Uma combinação complexa de hidrocarbonetos obtida da estabilização do fraccionamento de nafta do reforming catalítico. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits;  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68478-32-0

EEC No 270-813-5

No 649-080-00-4

NOTA H


NOTA K

- ES : gas de cola (petróleo), corriente mixta del saturado de la planta de gas, rico en  $C_4$  ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento y estabilización de nafta de primera destilación, destilación del gas de cola y gas de cola del estabilizador de nafta reformada catalíticamente. Compuesta de hidrocarburos con un número de carbonos dentro del intervalo de  $C_3$  a  $C_6$ , en su mayor parte butano e isobutano.]
- DA : slutgas (råolie), saturatgas blandet anlægsstrøm,  $C_4$ -rig ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået fra fraktioneringsstabilisationen af straight-run naphtha, destillationsslutgas og katalytisk reformeret naphthastabilizerslutgas. Den består af carbonhydrider,  $C_3$  til og med  $C_6$ , overvejende butan og isobutan.]
- DE : Abgas (Erdöl), gesattigter Gasanlage Mischungsstrom,  $C_4$ -reich , Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen erhalten aus Fraktionsstabilisation von straight-run Naphtha, Destillation von Abgas und katalytisch reformiertem Naphthastabilisiertem Abgas. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_6$ , vorherrschend Butan und Isobutan.]
- EL : τελικό αέριο (πετρελαίου), εγκατάστασης κορεσμένων υδρογονανθράκων αερίου μείγματος ρευμάτων, πλούσιο σε  $C_4$  ; Πετρελαιοαέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από τη σταθεροποίηση κλασμάτωσης απευθείας νάφθας, ακάθαρτου πετρελαίου απόσταξης και καταλυτικής αναμορφωμένης νάφθας σταθεροποιητικού ακάθαρτου πετρελαίου. Συνίσταται από υδρογονανθράκες με αριθμούς ατόμων άνθρακα στην περιοχή από  $C_3$  ως και  $C_6$ , κυρίως βουτάνιο και ισοβουτάνιο.]
- EN : Tail gas (petroleum), saturate gas plant mixed stream,  $C_4$ -rich ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the fractionation stabilization of straight-run naphtha, distillation tail gas and catalytic reformed naphtha stabilizer tail gas. It consists of hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_6$ , predominantly butane and isobutane.]
- FR : gaz résiduels (pétrole), mélange de l'unité de gaz saturés, riches en  $C_4$  , Gaz de pétrole  
[Combinaison complexe d'hydrocarbures résultant de la stabilisation du fractionnement de naphtha de distillation directe, de gaz résiduel de distillation et de gaz résiduel de stabilisation de naphtha de reformage catalytique. Se compose d'hydrocarbures dont le nombre de carbonos se situe dans la gamme  $C_3$ - $C_6$ , principalement du butane et de l'isobutane.]
- IT : gas di coda (petrolio), corrente mista impianto di gas saturo, ricco di  $C_4$  ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione frazionata di nafta ottenuta per via diretta, gas di coda di distillazione e gas di coda stabilizzatore da nafta riformata cataliticamente. È costituita da idrocarburi aventi numero di atomi di carbonio nell'intervallo  $C_3$ - $C_6$ , prevalentemente butano e isobutano.]
- NL : restgas (aardolie), verzadigd-gas-installatie gemengde stroom, rijk aan  $C_4$  ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de fractioneringsstabilisatie van restgas van de destillatie van nafta verkregen door directe fractionering en katalytisch gereformeerd nafta-stabilisator-restgas. Bestaat uit koolwaterstoffen,  $C_3$  tot en met  $C_6$ , overwegend butaan en isobutaan.]
- PT : gas residual (petróleo), saturado de várias origens, rico em  $C_4$  ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por estabilização do fraccionamento de gás de destilação, nafta de destilação directa e gás do estabilizador da do reforming catalítico da nafta. É constituída por hidrocarbonetos com números de átomos de carbono na gama de  $C_3$  até  $C_6$ , predominantemente butano e isobutano.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-33-1

EEC No 270-814-0

No 649-081-00-X

NOTA H

NOTA K

- ES: gas de cola (petróleo), saturado de la planta de recuperación de gas, rico en  $C_{1,2}$ ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento del destilado del gas de cola, nafta de primera destilación, gas de cola del estabilizador de nafta reformada catalíticamente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_{10}$ , en su mayor parte metano y etano.]
- DA: slurgas (råolie), saturatgas anlægsgenindvindings-,  $C_{1,2}$ -rig; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået fra fraktionering af destillatslugas, straight-run naphtha, katalytisk reformeret naphthastabilizerslugas. Den består overvejende af carbonhydnder,  $C_1$  til og med  $C_{10}$ , overvejende methan og ethan.]
- DE: Abgas (Erdöl), gesättigte Gaswiedergewinnungsanlage,  $C_{1,2}$ -reich; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen erhalten aus Fraktionieren von destilliertem Abgas, straight-run Naphtha, katalytisch reformiertem Naphthastabilisiertem Abgas. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_{10}$ , vorherrschend Methan und Ethan.]
- EL: τελικό αέριο (πετρελαίου), κορεσμένων υδρογονανθράκων αέριο εγκατάστασης ανάκτησης, πλούσιο σε  $C_{1,2}$ ; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από κλασμάτωση αποστάγματος τελικού αερίου, απευθείας νάφθας καταλυτικής αναμορφωμένης νάφθας σταθεροποιητή τελικού αερίου. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_{10}$ , κυρίως μεθάνιο και αιθάνιο.]
- EN: Tail gas (petroleum), saturate gas recovery plant,  $C_{1,2}$ -rich; Petroleum gas  
[A complex combination of hydrocarbons obtained from fractionation of distillate tail gas, straight-run naphtha, catalytic reformed naphtha stabilizer tail gas. It consists predominantly of hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_{10}$ , predominantly methane and ethane.]
- FR: gaz résiduels (pétrole), unité de récupération des gaz saturés, riches en  $C_{1,2}$ ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures résultant du fractionnement de gaz résiduel de distillation, de naphtha de distillation directe et de gaz résiduel de stabilisation de naphtha de reformage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_{10}$ , en majorité du méthane et de l'éthane.]
- IT: gas di coda (petrolio), impianto di ricupero di gas saturo, ricco di  $C_{1,2}$ ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuti dal frazionamento di gas di coda distillato, nafta ottenuta per via diretta, gas di coda stabilizzatore da nafta riformata cataliticamente. È costituita prevalentemente da idrocarburi aventi numero di atomi di carbonio nell'intervallo  $C_{1,10}$ , prevalentemente metano e etano.]
- NL: restgas (aardolie), verzadigd-gas-herwinningsinstallatie, rijk aan  $C_{1,2}$ ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de fractionering van destillatie-restgas, door directe fractio-  
nering verkregen nafta, katalytisch gereformeerd nafta-stabilisator-restgas. Bestaat voornamelijk uit koolwaterstoffen,  $C_1$  tot en met  $C_{10}$ , overwegend methaan en ethaan.]
- PT: gas residual (petróleo), saturado da unidade recuperação de gases, rico em  $C_{1,2}$ ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por fraccionamento do gás de destilação, nafta de destilação directa e gás do estabilizador dos produtos do reforming catalítico da nafta. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono na gama de  $C_1$  até  $C_{10}$ , predominantemente metano e etano.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-34-2

EEC No 270-815-6

No 649-082-00-5

NOTA H

NOTA K

- ES : gas de cola (petróleo), craqueador térmico de residuos obtenidos a vacío ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del craqueo térmico de residuos obtenidos a vacío. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{12}$ ]
- DA : slutgas (råolie), vakuumrester termisk krakker- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved den termiske krakning af vakuumrester. Den består af carbonhydrider, overvejende  $C_1$  til og med  $C_{12}$ ]
- DE : Endgas (Erdöl), Vakuumrückstände thermischer Kracker ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus thermischen Kracken von Vakuumrückständen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{12}$ ]
- EL : αεριο ουρας (πετρελαίου), υπολειμμάτων κενού μονάδας θερμικής πυρόλυσης. Πετρελαιο αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από θερμική πυρόλυση υπολειμμάτων κενού. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{12}$ ]
- EN : Tail gas (petroleum), vacuum residues thermal cracker ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the thermal cracking of vacuum residues. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{12}$ ]
- FR : gaz résidués (pétrole), craquage thermique de résidus sous vide ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures résultant du craquage thermique de résidus sous vide. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_{12}$ ]
- IT : gas di coda (petrolio), dall'impianto di cracking termico di residui sotto vuoto ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal cracking termico di residui sotto vuoto. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{12}$ ]
- NL : restgas (aardolie), thermische vacuümresiduenkraakgas ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit het thermische kraken van vacuümresiduen. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{12}$ ]
- PT : gas residual (petróleo), do cracker térmico dos resíduos de vácuo ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida do cracking térmico de resíduos de vácuo. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{12}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68512-91-4

EEC No 270-990-9

No 649-083-00-0

NOTA H

NOTA K

- ES: hidrocarburos, ricos en  $C_{3,4}$ , destilado del petróleo; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por destilación y condensación del petróleo crudo. Compuesta de hidrocarburos con un número de carbonos dentro del intervalo de  $C_3$  a  $C_{10}$ , en su mayor parte de  $C_3$  a  $C_4$ .]
- DA: carbonhydrider,  $C_{3,4}$ -rige, råoliedestillat; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillation og kondensation af råolie. Den består af carbonhydrider,  $C_3$  til og med  $C_{10}$ , overvejende  $C_3$  til og med  $C_4$ .]
- DE: Kohlenwasserstoffe,  $C_{3,4}$ -reich, Erdöldestillat; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation und Kondensation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_{10}$ , vorherrschend  $C_3$  bis  $C_4$ .]
- EL: υδρογονάνθρακες, πλούσιοι σε  $C_{3,4}$ , αποστάγματος πετρελαίου. Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη και συμπύκνωση αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_3$  ως και  $C_{10}$ , κυρίως  $C_3$  και  $C_4$ .]
- EN: Hydrocarbons,  $C_{3,4}$ -rich, petroleum distillate; Petroleum gas  
[A complex combination of hydrocarbons produced by distillation and condensation of crude oil. It consists of hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_{10}$ , predominantly  $C_3$  through  $C_4$ .]
- FR: hydrocarbures riches en  $C_{3,4}$ , distillat de pétrole; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation et condensation du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_3$ - $C_{10}$ , principalement en  $C_3$  et en  $C_4$ .]
- IT: idrocarburi, ricchi di  $C_{3,4}$ , distillato di petrolio; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta per distillazione e condensazione di petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_{10}$ , prevalentemente  $C_3$ - $C_4$ .]
- NL: koolwaterstoffen,  $C_{3,4}$ -rijk, aardoliedestillaat; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door destillatie en condensatie van ruwe olie. Bestaat uit koolwaterstoffen  $C_3$  tot en met  $C_{10}$ , overwegend  $C_3$  tot en met  $C_4$ .]
- PT: hidrocarbonetos, ricos em  $C_{3,4}$ , destilado do petróleo; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida por destilação e condensação de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono na gama de  $C_3$  até  $C_{10}$ , predominantemente de  $C_3$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68513-15-5

EEC No 271-000-8

No 649-084-00-6

NOTA H

NOTA K

- ES : gases (petróleo), deshexanizador de la serie completa de nafta de primera destilación ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por fraccionamiento de la serie completa de nafta de primera destilación. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>2</sub> a C<sub>6</sub>.]
- DA : gasser (råolie), full-range straight-run naphtha dehexanizer-aftræks- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktioneringen af full-range, straight-run naphtha. Den består af carbonhydrider, overvejende C<sub>2</sub> til og med C<sub>6</sub>.]
- DE : Gase (Erdöl), gesamte straight-run Naphtha Dehexanisierer Ab- , Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung der gesamten straight-run Naphtha. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>2</sub> bis C<sub>6</sub>.]
- EL : αερια (πετρελαίου), εξερχόμενα από εξανιωτήρα πλήρους σύνθεσης απευθείας νάφθας· Πετρελαιο αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κλασμάτωση της πλήρους σύνθεσης απευθείας νάφθας. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>2</sub> ως και C<sub>6</sub>.]
- EN : Gases (petroleum), full-range straight-run naphtha dehexanizer off ; petroleum gas  
[A complex combination of hydrocarbons obtained by the fractionation of the full-range straight-run naphtha. It consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>2</sub> through C<sub>6</sub>.]
- FR : gaz résiduels (pétrole), déshexaniseur de naphtha de distillation directe à large intervalle d'ébullition ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement du naphtha de distillation directe à large intervalle d'ébullition. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme C<sub>2</sub>-C<sub>6</sub>.]
- IT : gas (petrolio), dall'apparecchio di deesanizzazione di nafta di prima distillazione, gamma completa di frazioni ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per frazionamento di nafta di prima distillazione « full range » . È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>2</sub>-C<sub>6</sub>.]
- NL : gassen (aardolie), totaal bereik door directe fractionering verkregen nafta dehexanisatoruitstoot- ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door fractionering van het totale bereik van door directe fractionering verkregen nafta. Bestaat uit koolwaterstoffen, overwegend C<sub>2</sub> tot en met C<sub>6</sub>.]
- PT : gases (petróleo), do desexanizador da nafta de destilação directa ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida pelo fraccionamento da nafta de destilação directa. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de C<sub>2</sub> até C<sub>6</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*...lmites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68513-16-6

EEC No 271-001 3

No 649-085-00-1

NOTA H

NOTA K

- ES : gases (petróleo), despropanizador de hidrocrackeo, ricos en hidrocarburos ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de hidrocrackeo. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>4</sub>. También puede contener pequeñas cantidades de hidrógeno y sulfuro de hidrógeno.]
- DA : gasser (råolie), hydrokrakningsdepropanizer-aftræks-, carbonhydridrige ; Kulbrintegasser  
[En sammensat blanding af carbonhydrier fremstillet ved destillationen af produkterne fra en hydrokrakningsproces. Den består overvejende af carbonhydrier, overvejende C<sub>1</sub> til og med C<sub>4</sub>. Den kan også indeholde små mængder hydrogen og hydrogensulfid.]
- DE : Gase (Erdöl), Hydrokracken Depropanisierer Ab-, Kohlenwasserstoff-reich ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem Hydrokrackverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>4</sub>. Kann auch geringe Mengen Wasserstoff und Schwefelwasserstoff enthalten.]
- EL : αερια (πετρελαίου), εξερχόμενα από αποπροπανιωτήρα υδρογονοπυρολύτηρα, πλούσια σε υδρογονάνθρακες. Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων από υδρογονοπυρόλυση. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>4</sub>. Μπορεί επίσης να περιέχει μικρές ποσότητες υδρογόνου και υδροθείου.]
- EN : Gases (petroleum), hydrocracking depropanizer off, hydrocarbon-rich ; Petroleum gas  
[A complex combination of hydrocarbon produced by the distillation of products from a hydrocracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>4</sub>. It may also contain small amounts of hydrogen and hydrogen sulfide.]
- FR : gaz résiduels (pétrole), dépropaniseur d'hydrocraquage, riches en hydrocarbures ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un hydrocraquage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme C<sub>1</sub>-C<sub>4</sub>. Peut aussi contenir de petites quantités d'hydrogène et d'hydrogène sulfuré.]
- IT : gas (petrolio), dal depropanizzatore di idrocracking, ricchi di idrocarburi ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di idrocracking. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>4</sub>. Può anche contenere piccole quantità di idrogeno e idrogeno solforato.]
- NL : gassen (aardolie), waterstofkraken-depropanisator-uitstoot-, koolwaterstofrijk . Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de destillatie van produkten van een waterstofkraakproces. Bestaat voornamelijk uit koolwaterstoffen, overwegende C<sub>1</sub> tot en met C<sub>4</sub>. Kan ook kleine hoeveelheden waterstof en waterstofsulfide bevatten.]
- PT : gases (petróleo), do despropanizador de um processo de hidrocracking, ricos em hidrocarbonetos. Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de hidrocracking. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de C até C<sub>4</sub>. Pode conter também pequenas quantidades de hidrogénio e sulfureto de hidrogénio.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68513-17-7

EEC No 271-002-9

No 649-086-00-7

NOTA H

NOTA K

- ES : gases (petróleo), estabilizador de nafta ligera de primera destilación ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por la estabilización de nafta ligera de primera destilación. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_2$  a  $C_6$ .]
- DA : gasser (råolie), let straight-run naphtha stabilizer-aftræks- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved stabiliseringen af let, straight-run naphtha. Den består af mættede, aliphatiske carbonhydrider, overvejende  $C_2$  til og med  $C_6$ .]
- DE : Gase (Erdöl), leichte straight-run Naphtha Stabilisierer Ab- ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Stabilisierung leichter straight-run Naphtha. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_2$  bis  $C_6$ .]
- EL : αερια (πετρελαίου), σταθεροποιητή ελαφράς απευθείας νάφθας· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με τη σταθεροποίηση ελαφράς απευθείας νάφθας. Συνίσταται από κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_2$  ως και  $C_6$ .]
- EN : Gases (petroleum), light straight-run naphtha stabilizer off ; Petroleum gas  
[A complex combination of hydrocarbons obtained by the stabilization of light straight-run naphtha. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_2$  through  $C_6$ .]
- FR : gaz résiduels (pétrole), stabilisateur de naphtha léger de distillation directe ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par stabilisation de naphtha léger de distillation directe. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_2$ - $C_6$ .]
- IT : gas (petrolio), dalla stabilizzazione frazioni leggere di nafta di prima distillazione ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per stabilizzazione di tagli leggeri di nafta di prima distillazione. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_2$ - $C_6$ .]
- NL : gassen (aardolie), lichte door directe fractionering verkregen nafta stabilisator-uitstoot- ; Petroleum-gas  
[Een complexe verzameling koolwaterstoffen, verkregen door de stabilisering van lichte door directe fractionering verkregen nafta. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend  $C_2$  tot en met  $C_6$ .]
- PT : gases (petróleo), do estabilizador da nafta leve de destilação directa ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida pela estabilização de nafta leve de destilação directa. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_2$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68513-66-6

EEC No 271-010-2

No 649-087-00-2

NOTA H


NOTA K

- ES : residuos (petróleo), separador de alquilación ricos en  $C_4$  ; Gases de petróleo  
[Residuo complejo de la destilación de corrientes de diversas operaciones de refinaria. Compuesto de hidrocarburos con un número de carbonos dentro del intervalo de  $C_4$  a  $C_7$ , en su mayor parte butano y con un intervalo de ebullición aproximado de  $-11,7^{\circ}\text{C}$  a  $27,8^{\circ}\text{C}$ .]
- DA : rester (råolie), alkyleringssplitter-,  $C_4$ -rige ; Kulbrintegasser  
[En sammensat remanens fra destillationen af strømme fra forskellige raffinadenprocesser Den består af carbonhydrider  $C_4$  til og med  $C_7$ , overvejende butan, med koginterval omtrent fra  $-11,7^{\circ}\text{C}$  til  $27,8^{\circ}\text{C}$ .]
- DE : Rückstände (Erdöl), Alkylierung Splitter,  $C_4$ -reich ; Gase aus der Erdölverarbeitung  
[Komplexer Rückstand aus der Destillation von Läufen aus verschiedenen Raffinenevorgängen Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_4$  bis  $C_7$ , vorherrschend aus Butan, und siedet im Bereich von etwa  $-11,7^{\circ}\text{C}$  bis  $27,8^{\circ}\text{C}$ .]
- EL : υπολείμματα (πετρελαίου), διαχωριστήρα αλκυλίωσης, πλούσια σε  $C_4$  ; Πετρελαιοεικό αέριο  
[Πολύπλοκο υπόλειμμα από την απόσταξη ρευμάτων από διάφορες διεργασίες διυλιστηρίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_4$  ως και  $C_7$ , κυρίως βουτάνιο και με περιοχή θρασμού από  $-11,7^{\circ}\text{C}$  ως  $27,8^{\circ}\text{C}$  περίπου.]
- EN : Residues (petroleum), alkylation splitter,  $C_4$ -rich ; Petroleum gas  
[A complex residuum from the distillation of streams various refinery operations. It consists of hydrocarbons having carbon numbers in the range of  $C_4$  through  $C_7$ , predominantly butane and boiling in the range of approximately  $-11,7^{\circ}\text{C}$  to  $27,8^{\circ}\text{C}$  ( $11^{\circ}\text{F}$  to  $82^{\circ}\text{F}$ ).]
- FR : résidus (pétrole), séparateur d'alkylation, riches en  $C_4$  ; Gaz de pétrole  
[Résidu complexe issu de la distillation de mélanges provenant de diverses opérations de raffinene. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_7$ , principalement du butane, et dont le point d'ébullition est compris approximativement entre  $-11,7^{\circ}\text{C}$  et  $27,8^{\circ}\text{C}$ .]
- IT : residui (petrolio), splitter di alchilazione, ricchi di  $C_4$  ; Gas di petrolio  
[Residuo complesso della distillazione di correnti provenienti da varie operazioni di raffinaria. È costituita da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_4$ - $C_7$ , prevalentemente butano, e punto di ebollizione nell'intervallo  $-11,7^{\circ}\text{C}$  -  $27,8^{\circ}\text{C}$  ca.]
- NL : residuen (aardolie), alkyleringssplitter,  $C_4$ -rijk , Petroleumgas  
[Een complex residu, afkomstig uit de destillatie van stromen uit uiteenlopende zuiveringsbewerkingen. Bestaat uit koolwaterstoffen,  $C_4$  tot en met  $C_7$ , overwegend butaan en met een kooktraject van ongeveer  $-11,7^{\circ}\text{C}$  tot  $27,8^{\circ}\text{C}$ .]
- PT : residuos (petróleo), do splitter da alquilação, ricos em  $C_4$  , Gases de petróleo liquefeitos  
[Um residuo complexo da destilação de fracções de várias operações de uma refinaria. É constituído por hidrocarbonetos com numeros de átomos de carbono na gama de  $C_4$  até  $C_7$ , predominantemente butano e destila no intervalo de aproximadamente  $-11,7^{\circ}\text{C}$  a  $27,8^{\circ}\text{C}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συχέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68514-31-8

EEC No 271-032-2

No 649-088-00-8

NOTA H


NOTA K

- ES:** hidrocarburos,  $C_{1-4}$ ; Gases de petróleo  
[Combinación de hidrocarburos producida por craqueo térmico y operaciones en el aparato de absorción y por destilación del petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$  y con un intervalo de ebullición aproximado de menos 164 °C a menos 0,5 °C.]
- DA:** carbonhydrider,  $C_{1-4}$ ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved termiske kraknings- og absorberprocesser samt ved destillation af råolie. Den består af carbonhydrider, overvejende  $C_1$  til og med  $C_4$ , med koginterval omtrent fra minus 164 °C til minus 0,5 °C.]
- DE:** Kohlenwasserstoffe,  $C_{1-4}$ ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch thermische Crack- und Absorbervorgänge und durch Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$  und siedet im Bereich von etwa minus 164 °C bis minus 0,5 °C.]
- EL:** υδρογονάνθρακες,  $C_{1-4}$ ; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με θερμοπυρόλυση και εργασίες απορρόφησης και από απόσταξη αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$  περίπου και περιοχή βρασμού από μείον 164 °C ως μείον 0,5 °C περίπου.]
- EN:** Hydrocarbons,  $C_{1-4}$ ; Petroleum gas  
[A complex combination of hydrocarbons provided by thermal cracking and absorber operations and by distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$  and boiling in the range of approximately minus 164 °C to minus 0,5 °C (–263 °F to 31 °F).]
- FR:** hydrocarbures en  $C_{1-4}$ ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures produite par des opérations de craquage thermique et d'absorption, et par distillation du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_4$  et dont le point d'ébullition est compris approximativement entre –164 °C et –0,5 °C.]
- IT:** idrocarburi,  $C_{1-4}$ ; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta mediante cracking termico e operazioni di assorbimento e con la distillazione di petrolio grezzo. È costituita da idrocarburi con numero di atomi carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$  e con punto di ebollizione nell'intervallo –164 °C a –0,5 °C ca.]
- NL:** koolwaterstoffen,  $C_{1-4}$ ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door thermische kraak- en absorptieprocessen en door destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ , met een kooktraject van ongeveer –164 °C tot –0,5 °C.]
- PT:** hidrocarbonetos,  $C_{1-4}$ ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida por cracking térmico e operações de absorção e por destilação de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$  e destila no intervalo de aproximadamente menos 164 °C a menos 0,5 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68514-36-3

EEC No 271-038-5

No 649-089-00-3

NOTA H

NOTA K

- ES:** hidrocarburos,  $C_{1-4}$ , desazufrados; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida sometiendo gases hidrocarbonados a un proceso de desazufrado para transformar mercaptanos o separar impurezas ácidas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$  y con un intervalo de ebullición aproximado de  $-164\text{ °C}$  a  $-0,5\text{ °C}$ .]
- DA:** carbonhydrider,  $C_{1-4}$ , sweetenede; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved at underkaste carbonhydrider en sweetening-proces for at omdanne mercaptaner eller for at fjerne sure urenheder. Den består af carbonhydrider, overvejende  $C_1$  til og med  $C_4$  med kogesinterval omtrent fra  $-164\text{ °C}$  til  $-0,5\text{ °C}$ .]
- DE:** Kohlenwasserstoffe,  $C_{1-4}$ , gesüßt; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Aussetzen von Kohlenwasserstoffgasen einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen säurehaltiger Verschmutzungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$  und siedet im Bereich von etwa  $-164\text{ °C}$  bis  $-0,5\text{ °C}$ .]
- EL:** υδρογονάνθρακες,  $C_{1-4}$ , γλυκασμένοι; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται υποβάλλοντας αέριους υδρογονάνθρακες σε γλύκανση για να μετατραπουν μερκαπτανες ή να απομακρυνθούν όξινες προσμίξεις. Συνίσταται από υδρογονάνθρακες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$  και με περιοχή βρασμού από  $-164\text{ °C}$  ως  $-0,5\text{ °C}$  περίπου.]
- EN:** Hydrocarbons,  $C_{1-4}$ , sweetened; Petroleum gas  
[A complex combination of hydrocarbons obtained by subjecting hydrocarbon gases to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$  and boiling in the range of approximately  $-164\text{ °C}$  to  $-0,5\text{ °C}$  ( $-263\text{ °F}$  to  $31\text{ °F}$ ).]
- FR:** hydrocarbures en  $C_{1-4}$  adoucis; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue en soumettant des gaz hydrocarbures à un adoucissement destiné à convertir les mercaptans ou à éliminer les impuretés acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_4$  et dont le point d'ébullition est compris approximativement entre  $-164\text{ °C}$  et  $-0,5\text{ °C}$ .]
- IT:** idrocarburi,  $C_{1-4}$ , addolciti; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta sottoponendo gas idrocarburi a un processo di addolcimento per convertire i mercaptani o per eliminare le impurezze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$  e punto di ebollizione nell'intervallo da  $-164\text{ °C}$  a  $-0,5\text{ °C}$  ca.]
- NL:** koolwaterstoffen,  $C_{1-4}$ , stankvrij gemaakt; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door koolwaterstofgassen te onderwerpen aan een stankverwijderingsproces waarbij mercaptanen worden omgezet of zure onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen overwegend  $C_1$  tot en met  $C_4$ , met een kooktraject van ongeveer  $-164\text{ °C}$  tot  $-0,5\text{ °C}$ .]
- PT:** hidrocarbonetos,  $C_{1-4}$ , tratados (sweetened); Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida submetendo hidrocarbonetos gasosos a um processo de sweetening para conversão de mercaptans ou remoção de impurezas ácidas. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$  e destila no intervalo de aproximadamente  $-164\text{ °C}$  a  $-0,5\text{ °C}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68527-16-2

EEC No 271-259-7

No 649-090-00-9

NOTA H


NOTA K

- ES: hidrocarburos,  $C_{1-3}$ ; Gases de petróleo  
[Combinación compleja de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_3$  y con un intervalo de ebullición aproximado de menos de 164 °C a menos 42 °C.]
- DA: carbonhydrider,  $C_{1-3}$ ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider, overvejende  $C_1$  til og med  $C_3$ , med kogesinterval omtrent fra minus 164 °C til minus 42 °C.]
- DE: Kohlenwasserstoffe,  $C_{1-3}$ ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_3$  und siedet im Bereich von etwa minus 164 °C bis minus 42 °C.]
- EL: υδρογονάνθρακες,  $C_{1-3}$ ; Πετρελαιοαέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_3$  και που βράζει στην περιοχή από μείον 164 °C ως μείον 42 °C περίπου.]
- EN: Hydrocarbons,  $C_{1-3}$ ; Petroleum gas  
[A complex combination of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_3$  and boiling in the range of approximately minus 164 °C to minus 42 °C (−263 °F to −44 °F).]
- FR: hydrocarbures en  $C_{1-3}$ ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_1$ ,  $C_2$  et dont le point d'ébullition est compris approximativement entre −164 °C et −42 °C.]
- IT: idrocarburi,  $C_{1-3}$ ; Gas di petrolio  
[Combinazione complessa di idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_3$  e con punto di ebollizione nell'intervallo −164 °C a −42 °C ca.]
- NL: koolwaterstoffen,  $C_{1-3}$ ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, overwegend  $C_1$  tot en met  $C_3$ , met een kooktraject van ongeveer −164 °C tot −42 °C.]
- PT: hidrocarbonetos,  $C_{1-3}$ ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_3$  e que destila no intervalo de aproximadamente menos 164 °C a menos 42 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68527-19-5

EEC No 271-261-8

No 649-091-00-4

NOTA H  
NOTA K

ES: hidrocarburos, C<sub>1-4</sub>, fracción del desbutanizador; Gases de petróleo  
 DA: carbonhydrider, C<sub>1-4</sub>, debutanizer-fraktion; Kulbrintegasser  
 DE: Kohlenwasserstoffe, C<sub>1-4</sub>, Debutanizerfraktion; Gase aus der Erdölverarbeitung  
 EL: υδρογονάνθρακες, C<sub>1-4</sub>, κλάσμα αποδουτανιωτή Πετρελαϊκό αέριο  
 EN: Hydrocarbons, C<sub>1-4</sub>, debutanizer fraction; Petroleum gas  
 FR: hydrocarbures en C<sub>1-4</sub>, fraction débutanisée; Gaz de pétrole  
 IT: idrocarburi, C<sub>1-4</sub>, frazione debutanizzatore; Gas di petrolio  
 NL: koolwaterstoffen, C<sub>1-4</sub>, debutanisator-fractie; Petroleumgas  
 PT: hidrocarbonetos, C<sub>1-4</sub>, fracção do desbutanizador; Gases de petróleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	R: 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68602-83-5

EEC No 271-624-0

No 649-092-00-X

NOTA H

NOTA K


- ES : gases (petróleo),  $C_{1-7}$ , en húmedo ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de petróleo crudo y/o el craqueo de gasóleo en torre. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_7$ .]
- DA : gasser (råolie),  $C_{1-7}$ , våde ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af råolie og/eller krakningen af tårn-gasolie. Den består af carbonhydrider, overvejende  $C_1$  til og med  $C_7$ .]
- DE : Gase (Erdöl),  $C_{1-7}$ , naß ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Rohöl und/oder durch Cracken von Turm-gasöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_7$ .]
- EL : αέρια (πετρελαίου),  $C_{1-7}$ , υγρά· Πετρελαιοικό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη αργού πετρελαίου και/ή την πυρόλυση γκαζόιλ του πυργού απόσταξης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  έως και  $C_7$ .]
- EN : Gases (petroleum),  $C_{1-7}$ , wet ; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of crude oil and/or the cracking of tower gas oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_7$ .]
- FR : gaz humides en  $C_{1-7}$  (pétrole) ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole brut et/ou par craquage de gazole de distillation. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_7$ .]
- IT : gas (petrolio),  $C_{1-7}$ , umidi ; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta per distillazione di petrolio grezzo e/o cracking di gasolio di colonna. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_7$ .]
- NL : gassen (aardolie),  $C_{1-7}$ , nat ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de destillatie van ruwe olie en/of het kraken van gasolie uit een fractioneringstoren. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_7$ .]
- PT : gases (petróleo),  $C_{1-7}$ , húmidos ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de petróleo bruto e/ou cracking de gasóleo de vácuo. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_7$ .]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68606-25-7

EEC No 271-734-9

No 649-093-00-5

NOTA H

NOTA K

- ES hidrocarburos,  $C_{2-4}$ , Gases de petroleo  
 DA carbonhydrider,  $C_{2-4}$ , Kulbrintegasser  
 DE Kohlenwasserstoffe,  $C_{2-4}$ , Gase aus der Erdolverarbeitung  
 EL υδρογονάνθρακες,  $C_{2-4}$ , Πετρελαιο αεριο  
 EN Hydrocarbons,  $C_{2-4}$ , Petroleum gas  
 FR hydrocarbures en  $C_{2-4}$ , Gaz de petrole  
 IT idrocarburi,  $C_{2-4}$ , Gas di petrolio  
 NI koolwaterstoffen,  $C_{2-4}$ , Petroleumgas  
 PT hidrocarbonetos,  $C_{2-4}$ , Gases de petroleo liquefeitos

Clasificación Klassificering Einstufung Ταξινόμηση, Classification Classification Classificazione Indelning Classificação

Carc Cat 2, R 45

Etiquetado, Etikettering Kennzeichnung Επισήμανση Labelling Etiketase, Etichettatura Kenmerken Rotulagem

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Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως Concentration limits  
 Limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentraçao


Cas No 68606-26-8

EEC No 271-735-4

No 649-094-00-0

NOTA H  
NOTA KES: hidrocarburos, C<sub>3</sub>; Gases de petróleoDA: carbonhydrid, C<sub>3</sub>-; KulbrintegasserDE: Kohlenwasserstoffe, C<sub>3</sub>-; Gase aus der ErdölverarbeitungEL: υδρογονάνθρακες, C<sub>3</sub>; ΠετρελαιοαέριοEN: Hydrocarbons, C<sub>3</sub>; Petroleum gasFR: hydrocarbures en C<sub>3</sub>; Gaz de pétroleIT: idrocarburi, C<sub>3</sub>; Gas di petrolioNL: koolwaterstoffen, C<sub>3</sub>-; PetroleumgasPT: hidrocarbonetos, C<sub>3</sub>; Gases de petróleo liquefeitos*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R: 45

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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68606-27-9

EEC No 271-737-5

No 649-095-00-6

NOTA H

NOTA K

- ES : gases (petróleo), alimentación por alquilación ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por el craqueo catalítico de gasóleo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>3</sub> a C<sub>4</sub>.]
- DA : gasser (råolie), alkyleringsføde ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved den katalytiske krakning af gasolie. Den består af carbonhydrider, overvejende C<sub>3</sub> til og med C<sub>4</sub>.]
- DE : Gase (Erdöl), Alkylierung Beschickung ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch katalytisches Cracken von Gasöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>3</sub> bis C<sub>4</sub>.]
- EL : αερια (πετρελαίου), τροφοδότησης αλκυλίωσης ; Πετρελαιοτικό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την καταλυτική πυρόλυση ακάθαρτου πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>3</sub> ως και C<sub>4</sub>.]
- EN : Gases (petroleum), alkylation feed ; Petroleum gas  
[A complex combination of hydrocarbons produced by the catalytic cracking of gas oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>3</sub> through C<sub>4</sub>.]
- FR : gaz d'alimentation pour l'alkylation (pétrole) ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures produite par le craquage catalytique du gazole. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme C<sub>3</sub>-C<sub>4</sub>.]
- IT : gas (petrolio), carica di alchilazione ; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta mediante cracking catalitico di gasolio. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>3</sub>-C<sub>4</sub>.]
- NI : gassen (aardolie), alkyleringsinvoer ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door het katalytisch kraken van gasolie. Bestaat uit koolwaterstoffen, overwegend C<sub>3</sub> tot en met C<sub>4</sub>.]
- PT : gases (petróleo), de alimentação da alquilação ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pelo cracking catalítico do gasóleo. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de C<sub>3</sub> até C<sub>4</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68606-34-8

EEC No 271-742-2

No 649-096-00-1

NOTA H

NOTA K

- ES : gases (petróleo), fraccionamiento de los residuos del fondo del despropanizador ; Gases de petróleo  
[Combinación compleja de hidrocarburos del fraccionamiento de los residuos del fondo del despropanizador. Compuesta en su mayor parte de butano, isobutano y butadieno.]
- DA : gasser (råolie), depropanizer-bundfraktioner fraktioneringsaftræks- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktioneringen af depropanizer-bundfraktioner. Den består overvejende af butan, isobutan og butadien.]
- DE : Gase (Erdöl), Entpropanisierer Boden-Fractionen Ab- ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus der Fraktionierung von Entpropanisierer-Bodenprodukten. Besteht vorherrschend aus Butan, Isobutan und Butadien.]
- EL : αερια (πετρελαίου), εκλυόμενα από κλασμάτωση προϊόντων πυθμένα αποπροπανιωτήρα· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την κλασμάτωση προϊόντων πυθμένα αποπροπανιωτήρα. Συνίσταται κυρίως από βουτάνιο, ισοβουτάνιο και βουταδιένιο.]
- EN : Gases (petroleum), depropanizer bottoms fractionation off ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the fractionation of depropanizer bottoms. It consists predominantly of butane, isobutane and butadiene.]
- FR : gaz résiduels (pétrole), fractionnement des résidus du dépropaniseur ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement des résidus du dépropaniseur. Se compose principalement de butane, d'isobutane et de butadiène.]
- IT : gas (petrolio), dal frazionamento di residui del depropanizzatore ; Gas di petrolio  
[Combinazione complessa ottenuta dal frazionamento dei residui del depropanizzatore. È costituita prevalentemente da butano, isobutano e butadiene.]
- NI : gassen (aardolie), depropanisatorbodemfracties fractioneringsuitstoot- ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de fractionering van depropanisatorbodemfracties. Bestaat voornamelijk uit butaan, isobutaan en butadieen.]
- PT : gases (petróleo), do fraccionamento dos produtos de cauda do despropanizador ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida do fraccionamento dos produtos de cauda do despropanizador. É constituída predominantemente por butano, isobutano e butadieno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68783-07-3

EEC No 272-183-7

No 649-097-00-7

NOTA H

NOTA K

- ES : gases (petróleo), mezcla de refinería ; Gases de petróleo  
[Combinación compleja obtenida de diversos procesos de refinería. Compuesta de hidrógeno, sulfeno de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>7</sub>.]
- DA : gasser (råolie), raffinaderi blandings- ; Kulbrintegasser  
[En sammensat blanding opnået fra varierende raffinaderiprocesser. Den består af hydrogen, hydrogensulfid og carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>7</sub>.]
- DE : Gase (Erdöl), Raffinerieverschnitt ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination, erhalten aus verschiedenen Raffinerieverfahren. Besteht aus Wasserstoff, Schwefelwasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>7</sub>.]
- EL : αέρια (πετρελαίου), μείγμα διύλιστηρίου· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός που λαμβάνεται από διάφορες διεργασίες διύλιστηρίου. Συνίσταται από υδρογόνο, υδρόθειο και υδρογονάνθρακες κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>7</sub>.]
- EN : Gases (petroleum), refinery blend ; Petroleum gas  
[A complex combination obtained from various processes. It consists of hydrogen, hydrogen sulfide and hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>7</sub>.]
- FR : gaz (pétrole), mélange de raffinerie ; Gaz de pétrole  
[Combinaison complexe résultant de divers procédés de raffinerie. Se compose d'hydrogène, d'hydrogène sulfuré et d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme C<sub>1</sub> -C<sub>7</sub>.]
- IT : gas (petrolio), miscela di raffinaria ; Gas di petrolio  
[Combinazione complessa ottenuta da vari di raffineria. È costituita da idrogeno, idrogeno solforato e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub> -C<sub>7</sub>.]
- NL : gassen (aardolie), raffinage-meng- ; Petroleumgas  
[Een complexe combinatie, verkregen uit verscheidene raffinage-processen. Bestaat uit waterstof, waterstofsulfide en koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>7</sub>.]
- PT : gases (petróleo), de mistura gases da refinaria ; Gases de petróleo liquefeitos  
[Uma combinação complexa obtida das várias unidades de uma refinaria. É constituída por hidrogénio, sulfureto de hidrogénio e hidrocarbonetos com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>7</sub>.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68783-64-2

EEC No 272-203-4

No 649-098-00-2

NOTA H


NOTA K

- ES : gases (petróleo), craqueo catalítico ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de los productos de un proceso de craqueo catalítico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{10}$ .]
- DA : gasser (råolie), katalytisk krakkede ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkterne fra en katalytisk krakningsproces. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_{10}$ .]
- DE : Gase (Erdöl), katalytisches Kracken ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Crackverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{10}$ .]
- EL : αερια (πετρελαίου), καταλυτικής πυρόλυσης· Πετρελαιϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την απόσταξη προϊόντων καταλυτικής πυρόλυσης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{10}$ .]
- EN : Gases (petroleum), catalytic cracking ; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of the products from a catalytic cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{10}$ .]
- FR : gaz (pétrole), craquage catalytique ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_{10}$ .]
- IT : gas (petrolio), da cracking catalitico ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{10}$ .]
- NL : gassen (aardolie), katalytisch kraken ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de destillatie van de produkten van een katalytisch kraakproces. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{10}$ .]
- PT : gases (petróleo), do cracking catalítico ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de cracking catalítico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{10}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68783-65-3

EEC No 272-205-5

No 649-099-00-8

NOTA H


NOTA K

- ES: gases (petróleo),  $C_{2-4}$ , desazufrados; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida sometiendo un destilado de petróleo a un proceso de desazufrado para transformar mercaptanos o separar impurezas ácidas. Compuesta fundamentalmente de hidrocarburos saturados e insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_2$  a  $C_4$  y con un intervalo de ebullición aproximado de  $-51^{\circ}\text{C}$  a  $-34^{\circ}\text{C}$ .]
- DA: gasser (råolie),  $C_{2-4}$ , sweetenede; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved at underkaste et råoliedestillat en sweeteningsproces for at omdanne mercaptaner eller fjerne sure urenheder. Den består overvejende af mættede og umættede carbonhydrider, overvejende fra  $C_2$  til og med  $C_4$ , med kogesinterval omtrent fra  $-51^{\circ}\text{C}$  til  $-34^{\circ}\text{C}$ .]
- DE: Gase (Erdöl),  $C_{2-4}$ , gesüßt; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Aussetzen eines Erdöldestillates einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verunreinigungen. Besteht vorherrschend aus gesättigten und ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_2$  bis  $C_4$  und siedet im Bereich von etwa  $-51^{\circ}\text{C}$  bis  $-34^{\circ}\text{C}$ .]
- EL: αερια (πετρελαίου),  $C_{2-4}$  γλυκασμένα; Πετρελαιοαέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται όταν απόσταγμα πετρελαίου υποβάλλεται σε κατεργασία γλύκανσης για να μετατραπούν μερκαπτάνες ή για να απομακρυνθούν όξινες προσμίξεις. Συνίσταται κυρίως από κορεσμένους και ακόρεστους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_2$  ως και  $C_4$  και βράζει στην περιοχή από  $-51^{\circ}\text{C}$  ως  $-34^{\circ}\text{C}$  περίπου.]
- EN: Gases (petroleum),  $C_{2-4}$ , sweetened; Petroleum gas  
[A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_2$  through  $C_4$  and boiling in the range of approximately  $-51^{\circ}\text{C}$  to  $-34^{\circ}\text{C}$  ( $-60^{\circ}\text{F}$  to  $-30^{\circ}\text{F}$ ).]
- FR: gaz en  $C_{2-4}$  adoucis (pétrole); Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par adoucissement d'un distillat pétrolier, afin de convertir les mercaptans ou d'éliminer les impuretés acides. Se compose principalement d'hydrocarbures saturés et insaturés dont le nombre de carbones se situe en majorité dans la gamme  $C_2$ - $C_4$  et dont le point d'ébullition est compris approximativement entre  $-51^{\circ}\text{C}$  et  $-34^{\circ}\text{C}$ .]
- IT: gas (petrolio),  $C_{2-4}$ , addolciti; Gas petrolio  
[Combinazione complessa di idrocarburi ottenuta sottoponendo un distillato di petrolio ad un processo di addolcimento per convertire i mercaptani o eliminare impurezze acide. È costituita prevalentemente da idrocarburi saturi e insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_2$ - $C_4$  e punto di ebollizione nell'intervallo da  $-51^{\circ}\text{C}$  a  $-34^{\circ}\text{C}$  ca.]
- NL: gassen (aardolie),  $C_{2-4}$ , stankvrij gemaakte; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het onderwerpen van een aardoliedestillaat aan een stankverwijderend proces waarbij mercaptanen worden omgezet of zure onzuiverheden worden verwijderd. Bestaat voornamelijk uit verzadigde en onverzadigde koolwaterstoffen, overwegend  $C_2$  tot en met  $C_4$ , met een kooktraject van ongeveer  $-51^{\circ}\text{C}$  tot  $-34^{\circ}\text{C}$ .]
- PT: gases (petróleo),  $C_{2-4}$ , tratados (sweetened); Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera por um processo de sweetening para conversão de mercaptans ou remoção de impurezas ácidas. É constituída predominantemente por hidrocarbonetos saturados e insaturados com números de átomos de carbono predominantemente na gama de  $C_2$  até  $C_4$  e desliza no intervalo de aproximadamente  $-51^{\circ}\text{C}$  a  $-34^{\circ}\text{C}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68918-99-0

EEC No 272-871-7

No 649-100-00-1

NOTA H

NOTA K

- ES : gases (petróleo), fraccionamiento de petróleo crudo ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por el fraccionamiento de petróleo crudo. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{12}$ .]
- DA : gasser (råolie), råoliefraktioneringsaftræks- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved fraktioneringen af råolie. Den består af mættede aliphatiske carbonhydrider, overvejende fra  $C_1$  til og med  $C_{12}$ .]
- DE : Gase (Erdöl), Rohöl Fraktionierung Ab- ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung von Rohöl. Besteht aus gesättigtem aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{12}$ .]
- EL : αερια (πετρελαίου), εξόδου κλασμάτωσης αργού πετρελαίου· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την κλασμάτωση αργού πετρελαίου. Συνίσταται από κορεσμένους αλιφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{12}$ .]
- EN : Gases (petroleum), crude oil fractionation off ; Petroleum gas  
[A complex combination of hydrocarbons produced by the fractionation of crude oil. It consists of saturated aliphatic hydrocarbon having carbon numbers predominantly in the range of  $C_1$  through  $C_{12}$ .]
- FR : gaz résiduels (pétrole), fractionnement de pétrole brut ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement du pétrole brut. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_{12}$ .]
- IT : gas (petrolio), dal frazionamento del grezzo ; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta con il frazionamento del petrolio grezzo. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{12}$ .]
- NL : gassen (a. råolie), ruwe olie-fractionering uitstoot- ; Petroleumgas  
[Complexe verzameling koolwaterstoffen die wordt gevormd door de fractionering van ruwe olie. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{12}$ .]
- PT : gases (petróleo), do fraccionamento de petróleo bruto ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pelo fraccionamento de petróleo bruto. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{12}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-00-6

EEC No 272-872-2

No 649-101-00-7

NOTA H

NOTA K

- ES : gases (petróleo), deshexanizador ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por el fraccionamiento de corrientes de nafta combinada. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{17}$ ]
- DA : gasser (råolie), dehexanizer aftræks- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktioneringen af kombinerede naphthastrømme. Den består af mættede aliphatiske carbonhydrider, overvejende fra  $C_1$  til og med  $C_{17}$ ]
- DE : Gase (Erdöl), Enhexanisierer Ab- ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung von kombinierten Naphthaläufen. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{17}$ ]
- EL : αερια (πετρελαίου), εξόδου αποεξανιωτήρα · Πετρελαιοτικό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από την κλασμάτωση συνενωμένων ρευμάτων νάφθας. Συνίσταται από κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{17}$ ]
- EN : Gases (petroleum), dehexanizer off ; Petroleum gas  
[A complex combination of hydrocarbons obtained by the fractionation of combined naphtha streams. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{17}$ ]
- FR : gaz résiduels (pétrole), déshexaniseur ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement d'un mélange de naphthas. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme  $C_1$  -  $C_{17}$ ]
- IT : gas (petrolio), dal deesanizzatore ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta con il frazionamento di correnti combinate di nafta. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$  -  $C_{17}$ ]
- NL : gassen (aardolie), dehexanisatoruitstoot- , Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de fractionering van gecombineerde naftastromen. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{17}$ ]
- PT : gases (petróleo), do desexanizador ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida pelo fraccionamento de várias frações de nafta combinadas. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{17}$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-05-1

EEC No 272-878-5

No 649-102-00-2

NOTA H

NOTA K

- ES : gases (petróleo), estabilizador para el fraccionamiento de gasolina ligera de primera destilación ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por el fraccionamiento de gasolina ligera de primera destilación. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_5$ .]
- DA : gasser (råolie), let straight-run benzin fraktioneringsstabilizerafræks- ; Kulbrintegasser  
[En sammensæt blanding af carbonhydrider opnået ved fraktioneringen af let straight-run benzin. Den består af mættede aliphatiske carbonhydrider, overvejende fra  $C_1$  til og med  $C_5$ .]
- DE : Gase (Erdöl), leichte straight-run Benzin Fraktionierung Stabilisierer Ab- ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung leichten straight-run Benzins. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_5$ .]
- EL : αερια (πετρελαίου), εξόδου σταθεροποιητή κλασμάτωσης ελαφράς δενζίνης απευθείας απόσταξης. Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κλασμάτωση ελαφράς δενζίνης απευθείας απόσταξης. Συνίσταται από κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_5$ .]
- EN : Gases (petroleum), light straight run gasoline fractionation stabilizer off ; Petroleum gas  
[A complex combination of hydrocarbons obtained by the fractionation of light straight-run gasoline. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ .]
- FR : gaz résiduels de stabilisateur (pétrole), fractionnement de l'essence légère de distillation directe ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement d'essence légère de distillation directe. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbonos se situe principalement dans la gamme  $C_1$ - $C_5$ .]
- IT : gas (petrolio), da apparecchio stabilizzatore per frazionamento di benzina leggera di prima distillazione ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per frazionamento di benzina leggera di prima distillazione. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_5$ .]
- NL : gassen (aardolie), stabilisatoruitstootgassen uit de fractionering van door fractionering verkregen lichte gasoline ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de fractionering van direct door fractionering verkregen lichte gasoline. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_5$ .]
- PT : gases (petróleo), do estabilizador do fraccionamento de gasolina leve de destilação directa : Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida pelo fraccionamento de gasolina leve de destilação directa. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_5$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etschettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 68919-06-2

EEC No 272-879-0

No 649-103-00-8

NOTA H

NOTA K

- ES : gases (petróleo), extractor para la desulfuración de nafta en la unidad de refino ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por un proceso de desulfuración de nafta en la unidad de refino y rectificada del producto de nafta. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>4</sub>.]
- DA : gasser (råolie), naphthaunifiner-afsvovling stripperattræks- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved en naphtha unifiner-afsvovlingsproces og strippet fra naphthaproduktet. Den består af mættede aliphatiske carbonhydrider, overvejende fra C<sub>1</sub> til og med C<sub>4</sub>.]
- DE : Gase (Erdöl), Naphtha Unifiner Desulfurierung Stripper Ab- ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt in einem Naphtha Unifiner Desulfurierungsverfahren und gestrippt aus dem Naphthaprodukt. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>4</sub>.]
- EL : αέρια (πετρελαίου), εξόδου απογυμνωτή αποθείωσης νάφθας με τη μέθοδο unifining- Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με αποθείωση νάφθας με τη μέθοδο unifining και απογυμνώνεται από το προϊόν της νάφθας. Συνίσταται από κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>4</sub>.]
- EN : Gases (petroleum), naphtha unifiner desulfurization stripper off ; Petroleum gas  
[A complex combination of hydrocarbons produced by a naphtha unifiner desulfurization process and stripped from the naphtha product. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>4</sub>.]
- FR : gaz résiduels de rectification (pétrole), désulfuration Unifining de naphtha ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures produite par désulfuration Unifining de naphtha et séparée de l'effluent naphtha par rectification. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme C<sub>1</sub>-C<sub>4</sub>.]
- IT : gas (petrolio), da stripper o: desolfrazione « unifining » di nafta ; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta con il processo unifining di desolfrazione della nafta e ottenuta per stripping dalla nafta prodotta. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>4</sub>.]
- NL : gassen (aardolie), nafta-unifiner-ontzwaveling stripperruistoot- ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door een nafta-unifiner-ontzwavelingsproces en gestript van het nafta-produkt. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>4</sub>.]
- PT : gases (petróleo), do stripper da unidade de dessulfurização unifiner de nafta ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida por um processo de dessulfurização unifiner da nafta e separada desta. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>4</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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R : 45

S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-09-5

EEC No 272-882-7

No 649-104-00-3

NOTA H

NOTA K

- ES : gases (petróleo), reformado catalítico de nafta de primera destilación ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por el reformado catalítico de nafta de primera destilación y fraccionamiento del effluente total. Compuesta de metano, etano y propano.]
- DA : gasser (råolie), straight-run naphtha katalytisk reformeringsaftræks- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved den katalytiske reformering af straight-run naphtha og fraktionering af det totale udløb. Den består af metan, ethan og propan.]
- DE : Gase (Erdöl), straight-run Naphtha katalytisches Reformieren Ab- ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch katalytisches Reformieren von straight-run Naphtha und Fraktionieren des gesamten Ausflusses. Besteht aus Methan, Ethan und Propan.]
- EL : αερια (πετρελαίου), εκλυόμενα από καταλυτικό αναμορφωτήρα απευθείας νάφθας· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την καταλυτική αναμόρφωση απευθείας νάφθας και κλασμάτωση της ολικής απορροής. Συνίσταται από μεθάνιο, αιθάνιο και προπάνιο.]
- EN : Gases (petroleum), straight-run naphtha catalytic reforming off ; Petroleum gas  
[A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha and fractionation of the total effluent. It consists of methane, ethane, and propane.]
- FR : gaz résiduels (pétrole), reformage catalytique de naphtha de distillation directe ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par reformage catalytique de naphtha de distillation directe et fractionnement de la totalité de l'effluent. Se compose de méthane, d'éthane et de propane.]
- IT : gas (petrolio), da reforming catalitico di nafta di prima distillazione ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal reforming catalitico di nafta di prima distillazione e dal frazionamento dell'effluente totale. È costituita da metano, etano e propano.]
- NL : gassen (aardolie), direct door fractionering verkregen nafta katalytische reformeringsuitstoot- ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de katalytische reformering van direct door fractionering verkregen nafta en fractionering van de totale uitstroom. Bestaat uit methaan, ethaan en propaan.]
- PT : gases (petróleo), do reforming catalítico da nafta de destilação directa ; Gases e petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida pelo reforming catalítico de nafta de destilação directa e fraccionamento do effluente total. É constituída por metano, etano, e propano.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-20-0

EEC No 272-893-7

No 649-105-00-9

NOTA H

NOTA K


- ES · gases (petróleo), productos de cabeza del separador para el craqueador catalítico fluidizado, Gases de petróleo  
[Combinación compleja de hidrocarburos producida por el fraccionamiento de la carga de  $C_1$ - $C_4$  del separador. Compuesta en su mayor parte de hidrocarburos de  $C_1$ .]
- DA · gasser (råolie), fluidiseret katalytisk krakker splitter-topfraktioner, Kulbrintegasser  
[En sammensat blanding af carbonhydrier fremstillet ved fraktioneringen af charge til  $C_1$ - $C_4$  splitteren. Den består overvejende af  $C_1$ -carbonhydrier.]
- DE · Gase (Erdöl), Fließbettcracker Spalter Kopfbestandteile, Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Fraktionierung der Charge zum  $C_1$ - $C_4$  Spalter. Besteht vorherrschend aus  $C_1$ -Kohlenwasserstoffen.]
- EL · αέρια (πετρελαίου), προϊόντα κορυφής διαχωριστήρα ρευστοειδούς καταλυτικού πυρολυτήρα. Πετρελαιοαέρια  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την κλασμάτωση του φορτίου στον διαχωριστήρα  $C_1$ - $C_4$ . Συνίσταται κυρίως από υδρογονάνθρακες  $C_1$ .]
- EN · Gases (petroleum), fluidized catalytic cracker splitter overheads, Petroleum gas  
[A complex combination of hydrocarbons produced by the fractionation of the charge to the  $C_1$ - $C_4$  splitter. It consists predominantly of  $C_1$  hydrocarbons.]
- FR · gaz (pétrole), produits de tête du séparateur, craquage catalytique fluide, Gaz de pétrole  
[Combinaison complexe d'hydrocarbures produite par fractionnement de la charge du séparateur  $C_1$ - $C_4$ . Se compose principalement d'hydrocarbures en  $C_1$ .]
- IT · gas (petrolio), frazioni di testa di splitter di cracking catalitico fluidizzato, Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta per frazionamento della carica alimentata allo splitter  $C_1$ - $C_4$ . È costituita prevalentemente da idrocarburi  $C_1$ .]
- NL · gassen (aardolie), gefluidiseerde katalytische kraker-splittertopprodukten, Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de fractionering van de invoer van de  $C_1$ - $C_4$  splitter. Bestaat voornamelijk uit  $C_1$ -koolwaterstoffen.]
- PT · gases (petróleo), de cabeça do separador do cracker catalítico de leito fluidizado, Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pelo fraccionamento da carga ao separador  $C_1$ - $C_4$ . É constituída predominantemente por hidrocarbonetos em  $C_1$ .]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-10-8

EEC No 272-883-2

No 649-106-00-4

NOTA H

NOTA K

- ES : gases (petróleo), estabilizador de fracciones de primera destilación ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento del líquido de la primera torre utilizada en la destilación del petróleo crudo. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{12}$ ]
- DA : gasser (råolie), straight-run stabiliserfraks- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrier opnået fra fraktioneringen af væsken fra det første tårn brugt ved destillationen af råolie. Den består af mættede aliphatiske carbonhydrier, overvejende fra  $C_1$  til og med  $C_{12}$ ]
- DE : Gase (Erdöl), straight-run Stabilisator Ab- ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung der Flüssigkeit aus dem ersten Turm in der Destillation von Rohöl. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{12}$ ]
- EL : αερια (πετρελαίου), εκλυόμενα από σταθεροποιητή απευθείας απόσταξης. Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την κλασμάτωση του υγρού από την πρώτη στήλη που χρησιμοποιείται στην απόσταξη αργού πετρελαίου. Συνίσταται από κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{12}$ ]
- EN : Gases (petroleum), straight-run stabilizer off ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the fractionation of the liquid from the first tower used in the distillation of crude oil. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{12}$ ]
- FR : gaz résiduels (pétrole), stabilisation des coupes de distillation directe ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement du liquide issu de la première tour utilisée dans la distillation du pétrole brut. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_{12}$ ]
- IT : gas (petrolio), dallo stabilizzatore di prima distillazione ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento del liquido proveniente dalla prima torre usata nella distillazione del grezzo. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{12}$ ]
- NL : gassen (aardolie), directe fractioneringsstabilisatoruitstoot- ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de fractionering van de vloeistof uit de eerste destillatietoren die wordt gebruikt bij de destillatie van ruwe olie. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{12}$ ]
- PT : gases (petróleo), do estabilizador da destilação directa ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida do fraccionamento do líquido da primeira coluna usada na destilação de petróleo bruto. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{12}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etschettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentração*


Cas No 68952-76-1

EEC No 273-169-3

No 649-107-00-X

NOTA H

NOTA K

- ES: gases (petróleo), desbutanizador de nafta craqueada catalíticamente; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento de nafta craqueada catalíticamente. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA: gasser (råolie), katalytisk krakker naphtha debutanizer-; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktioneringen af katalytisk krakket naphtha. Den består af carbonhydrider, overvejende fra  $C_1$  til og med  $C_4$ .]
- DE: Gase (Erdöl), katalytisch gekrackte Naphtha Debutanisierer; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionisierung katalytisch gekrackter Naphtha. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL: αερια (πετρελαίου), καταλυτικά πυρολυμένης νάφθας αποθουτανιωτήρα· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από κλασμάτωση καταλυτικά πυρολυμένης νάφθας. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN: Gases (petroleum), catalytic cracked naphtha debutanizer; Petroleum gas  
[A complex combination of hydrocarbons obtained from fractionation of catalytic cracked naphtha. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR: gaz (pétrole), débutaniseur de naphtha de craquage catalytique; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement de naphtha de craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbonos se situe principalement dans la gamme  $C_1$  -  $C_4$ .]
- IT: gas (petrolio), da debutanizzatore di nafta crackizzata cataliticamente; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento nafta crackizzata cataliticamente. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$  -  $C_4$ .]
- NL: gassen (aardolie), katalytisch gekraakte nafta debutanisator-; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de fractionering van katalytisch gekraakte nafta. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT: gases (petróleo), do desbutanizador de nafta do cracking catalítico; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida do fraccionamento da nafta do cracking catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 . R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68952-77-2

EEC No 273-170-9

No 649-108-00-5

NOTA H

NOTA K

- ES : gas de cola (petróleo), estabilizador de nafta y destilado craqueados catalíticamente ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por el fraccionamiento de destilado y nafta craqueados catalíticamente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA : slutgas (råolie), katalytisk krakket destillat og naphthastabilizer- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktioneringen af katalytisk krakket nafta og destillat. Den består overvejende af carbonhydrider, overvejende fra  $C_1$  til og med  $C_4$ .]
- DE : Endgas (Erdöl), katalytisch gekracktes Destillat und Naphtha Stabilisator ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung katalytisch gekrackter Naphtha und Destillat. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL : αέριο ουράς (πετρελαίου), καταλυτικά πυρολυμένου αποστάγματος καινάφθας σταθεροποιητή· Πετρελαιοικό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κλασμάτωση καταλυτικά πυρολυμένης νάφθας και αποστάγματος. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN : Tail gas (petroleum), catalytic cracked distillate and naphtha stabilizer ; Petroleum gas  
[A complex combination of hydrocarbons obtained by the fractionation of catalytic cracked naphtha and distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR : gaz de queue (pétrole), stabilisateur de nafta et de distillat de craquage catalytique ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement de nafta et de distillat de craquage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ .]
- IT : gas di coda (petrolio), da stabilizzatore di nafta e distillato crackizzati cataliticamente ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta da frazionamento di distillato e nafta crackizzati cataliticamente. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL : restgas (aardolie), katalytisch gekraakt destillaat en nafta stabilisator ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de fractionering van katalytisch gekraakt nafta en destillaat. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT : gas residual (petróleo), do estabilizador do destilado e da nafta do cracking catalítico ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida pelo fraccionamento da nafta e de destilado do cracking catalítico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrænzen, Limites de concentração*


Cas No 68952-81-8

FEC No 273-175-6

No 649-109-00-0

NOTA H

NOTA K

- ES : Gas de cola (petróleo), aparato de absorción de nafta, gasóleo y destilado craquados catalíticamente ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la separación de destilados, nafta y gasóleo craquados térmicamente.  
Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : Lutgas (råolie), termisk krakket destillat, gasolie og naphtha absorber- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrier opnået ved separationen af termisk krakkede destillater, naphtha og gasolie. Den består overvejende af carbonhydrier, overvejende fra  $C_1$  til og med  $C_6$ .]
- DE : Endgas (Erdöl), thermisch gekracktes Destillat, Gasöl und Naphtha Absorber ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus der Trennung von thermisch gekrackten Destillaten, Naphtha und Gasöl. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αεριο ουρας (πετρελαίου), θερμοπυρολυμένου αποστάγματος, ακάθαρτου πετρελαίου και απορροφητήρα νάφθας  
Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από το διαχωρισμό θερμοπυρολυμένων αποσταγμάτων νάφθας και ακάθαρτου πετρελαίου. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Tail gas (petroleum), thermal-cracked distillate, gas oil and naphtha absorber ; petroleum gas  
[A complex combination of hydrocarbons obtained from the separation of thermal-cracked distillates, naphtha and gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz de queue (pétrole), distillat de craquage thermique, absorbeur de gazole et de naphtha ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par séparation de distillats de craquage thermique, de naphtha et de gazole. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ -  $C_6$ .]
- IT : gas di coda (petrolio), da assorbitore di nafta, gasolio e distillato crackizzati termicamente ; Gas di petrolio  
[Combinazio... complessa di idrocarburi ottenuta dalla separazione di distillati, nafta e gasolio crackizzati termicamente. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ -  $C_6$ .]
- \* NL : restgas (aardolie), thermisch gekraakt destillaat, gasolie en nafta absorptievat ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de scheiding van thermisch gekraakte destillaten, nafta en gasolie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gas residual (petróleo), de destilado do cracking térmico e da coluna de absorção de gasóleo e nafta ; Gases de petróleo liquefeitos  
[Uma combinação de hidrocarbonetos obtida da separação de destilados do cracking térmico, nafta e gasóleo. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68952-82-9

EEC No 273-176-1

No 649-110-00-6

NOTA H

NOTA K

- ES: gas de cola (petróleo), estabilizador para el fraccionamiento de hidrocarburos craqueados térmicamente, coquización de petróleo; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la estabilización del fraccionamiento de hidrocarburos craqueados térmicamente obtenidos del proceso de coquización de petróleo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA: slutgas (råolie), termisk krakket carbonhydrid fraktioneringsstabilizer, råolieforkoksning-; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktioneringsstabilisation af termisk krakkede carbonhydrider fra en råolieforkokningsproces. Den består af carbonhydrider, overvejende fra  $C_1$  til og med  $C_6$ .]
- DE: Endgas (Erdöl), thermisch gekrackter Kohlenwasserstoff-Fraktion Stabilisator, Erdöl-Verkokung; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch fraktionierte Stabilisierung von thermisch gekrackten Kohlenwasserstoffen aus dem Erdöl-Verkokungsverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL: αεριο ουρας (πετρελαίου), θερμοπυρολυμένων υδρογονανθράκων σταθεροποιητήρα κλασμάτωσης, εξανθράκωσης πετρελαίου- Πετρελαιοϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από τη σταθεροποίηση κλασμάτωσης θερμοπυρολυμένων υδρογονανθράκων από εξανθράκωση πετρελαίου. Συνίσταται από υδριγονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN: Tail gas (petroleum), thermal cracked hydrocarbon fractionation stabilizer, petroleum coking; Petroleum gas  
[A complex combination of hydrocarbons obtained from the fractionation stabilization of thermal cracked hydrocarbons from petroleum coking process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR: gaz de queue (pétrole), stabilisateur de fractionnement d'hydrocarbures de craquage thermique, cokéfaction pétrolière; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par stabilisation par fractionnement d'hydrocarbures ayant subi un craquage thermique, issus de la cokéfaction du pétrole. Se compose d'hydrocarbures dont le nombre de carbonos se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT: gas di coda (petrolio), da stabilizzazione per frazionamento di idrocarburi crackizzati termicamente, coking del petrolio; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione per frazionamento di idrocarburi crackizzati termicamente provenienti dal processo di coking del petrolio. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL: restgas (aardolie), thermisch gekraakte koolwaterstof-fractioneringsstabilisator-, aardolieverkokking; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de fractioneringsstabilisatie van thermisch gekraakte koolwaterstoffen die afkomstig zijn uit het aardolieverkokkingproces. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT: gas residual (petróleo), do estabilizador do fraccionamento de hidrocarbonetos do cracking térmico, coking de petróleo; Gases de petróleo-liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por estabilização do fraccionamento de produtos do cracking térmico de hidrocarbonetos de um processo de coking de petróleo. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68955-28-2

EEC No 273-265-5

No 649-111-00-1

NOTA H

NOTA K

- ES: gases (petróleo), fracción ligera craqueada a vapor, concentrado de butadieno; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo térmico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte de  $C_4$ .]
- DA: gasser (råolie), lette dampkrakkede, butadienkoncentrat; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af produkterne fra en termisk krakningsproces. Den består af carbonhydrider, overvejende  $C_4$ .]
- DE: Gase (Erdöl), leichte Dampf-gecrackte, Butadienkonzentrat; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem thermischen Crackverfahren. Besteht aus Kohlenwasserstoffen mit einer Kohlenstoffzahl vorherrschend von  $C_4$ .]
- EL: αερια (πετρελαίου), ελαφρά ατμοπυρολυμένα, συμπύκνωμα βουταδιενίου· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσπαση προϊόντων θερμοπυρόλυσης. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως  $C_4$ .]
- EN: Gases (petroleum, light steam-cracked, butadiene conc.; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of products from a thermal cracking process. It consists of hydrocarbons having a carbon number predominantly of  $C_4$ .]
- FR: gaz légers de vapocraquage (pétrole), concentrés de butadiène; Gaz-de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage thermique. Se compose d'hydrocarbures dont le nombre de carbones est en majorité  $C_4$ .]
- IT: gas (petrolio), da frazioni leggere di cracking con vapore, concentrati in butadiene; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti di cracking termico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente di  $C_4$ .]
- NL: gassen (aardolie), lichte stoomgekraakte, butadiëenconcentraat; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van produkten van een thermisch kraakproces. Bestaat uit koolwaterstoffen, overwegend  $C_4$ .]
- PT: gases (petróleo), leves do steam-cracking, concentrado de butadieno; Gases de petróleo liquefeitos  
[Uma combinação de hidrocarbonetos produzida pela destilação dos produtos de um processo de cracking térmico. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente de  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentração*


Cas No 68955-34-0

EEC No 273-270-2

No 649-112-00-7

NOTA H

NOTA K

- ES : gases (petróleo), productos de cabeza del estabilizador del reformador catalítico de nafta de primera destilación ;  
Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por el reformado catalítico de nafta de primera destilación y el fraccionamiento del effluente total. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_2$  a  $C_4$ .]
- DA : gasser (råolie), straight-run naphtha katalytisk reformer stabilizer topfraktions- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved den katalytiske reformering af straight-run naphtha og fraktioneringen af det totale udløb. Den består af mættede aliphatiske carbonhydrider, overvejende  $C_2$  til og med  $C_4$ .]
- DE : Gase (Erdöl), straight-run Naphtha katalytisch Reformer Stabilisator Kopf ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch katalytisches Reformieren von straight-run Naphtha und Fraktionieren des gesamten Ausflusses. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_2$  bis  $C_4$ .]
- EL : αερία (πετρελαίου), προϊόντων κορυφής σταθεροποιητήρα καταλυτικού αναμορφωτήρα απευθείας νάφθας. Πετρελαιοαέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με καταλυτική αναμόρφωση απευθείας νάφθας και την κλασμάτωση της ολικής απορροής. Συνίσταται από κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_2$  ως και  $C_4$ .]
- EN : Gases (petroleum), straight-run naphtha catalytic reformer stabilizer overhead ; Petroleum gas  
[A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha and the fractionation of the total effluent. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_2$  through  $C_4$ .]
- FR : gaz de tête du stabilisateur (pétrole), reformage catalytique du naphtha de distillation directe ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par reformage catalytique de naphtha de distillation directe et fractionnement de la totalité de l'effluent. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme  $C_2$ - $C_4$ .]
- IT : gas (petrolio), nafta di prima distillazione, frazione di testa stabilizzatore reforming catalitico ; Gas di petrolio  
[Combinazione complessa ottenuta con il reforming catalitico di nafta di prima distillazione e frazionamento dell'effluente globale. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_2$ - $C_4$ .]
- NL : gassen (aardolie), direct door fractionering verkregen nafta-katalytische reformator-stabilisatorproducten ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de katalytische reformering van direct door fractionering verkregen nafta en de fractionering van de totale uitstroom. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend  $C_2$  tot en met  $C_4$ .]
- PT : gases (petróleo), de cabeça do estabilizador do reformer catalítico da nafta de destilação directa ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida pelo reforming catalítico de nafta de destilação directa e fraccionamento do effluente total. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_2$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits.*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen. Limites de concentraç3o*


Cas No 87741-01-3

EEC No 289-339-5

No 649-113-00-2

NOTA H

NOTA K

ES: hidrocarburos, C<sub>4</sub>-; Gases de petróleo  
 DA: carbonhydriden, C<sub>4</sub>-; Kulbrintegasser  
 DE: Kohlenwasserstoffe, C<sub>4</sub>-; Gase aus Erdölverarbeitung  
 EL: υδρογονανθρακες, C<sub>4</sub>-; Πετρελαιο αέριο  
 EN: Hydrocarbons, C<sub>4</sub>-; Petroleum gas  
 FR: hydrocarbures en C<sub>4</sub>-; Gaz de pétrole  
 IT: idrocarburi C<sub>4</sub>-; Gas di petrolio  
 NL: koolwaterstoffen, C<sub>4</sub>-; Petroleumgas  
 PT: hidrocarbonetos, C<sub>4</sub>-; Gases de petróleo liquefeitos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

	R: 45
	S: 53-45

Limites de concentração, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 90622-55-2

EEC No 292-456-4

No 649-114-00-8

NOTA H  
NOTA K

ES: alcanos,  $C_{1-4}$ , ricos en  $C_3$ ; Gases de petróleo  
 DA: alkaner,  $C_{1-4}$ ,  $C_3$ -rige; Kulbriintegasser  
 DE: Alkane,  $C_{1-4}$ ,  $C_3$ -reich; Gase aus der Erdölverarbeitung  
 EL: αλκάνια,  $C_{1-4}$ , πλούσια σε  $C_3$ ; Πετρελαικό αέριο  
 EN: Alkanes,  $C_{1-4}$ ,  $C_3$ -rich; Petroleum gas  
 FR: alcanes en  $C_{1-4}$ , riches en  $C_3$ ; Gaz de pétrole  
 IT: alcani  $C_{1-4}$ , ricchi di  $C_3$ ; Gas di petrolio  
 NL: alkanen,  $C_{1-4}$ , rijk aan  $C_3$ ; Petroleumgas  
 PT: alcanos,  $C_{1-4}$ , ricos em  $C_3$ ; Gases de petróleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R: 45
	S: 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 92045-22-2

EEC No 295-404-9

No 649-115-00-3

NOTA H

NOTA K

- ES : gases (petróleo), fracción rica en C<sub>3</sub> del craqueador a vapor ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo a vapor. Compuesta en su mayor parte de propileno con algo de propano y con un intervalo de ebullición aproximado de menos 70 °C a 0 °C.]
- DA : gasser (røolie), dampkrakker, C<sub>3</sub>-rige ; Kulbrintegasser  
[En sammensæt blanding af carbonhydrider fremstillet ved destillation af produkter fra en dampkrakningsproces. Den består overvejende af propylen, sammen med noget propan, og koger i intervallet omtrent fra minus 70 °C til 0 °C.]
- DE : Gase (Erdöl), Dampfkracker C<sub>3</sub>-reich ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem Dampfkrackverfahren. Besteht vorherrschend aus Propylen mit etwas Propan und siedet im Bereich von etwa minus 70 °C bis 0 °C.]
- EL : αερια (πετρελαίου), μονάδας ατμοπυρόλυσης πλούσια σε C<sub>3</sub> · Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων από ατμοπυρόλυση. Συνίσταται κυρίως από προπιλένιο με λίγο προπάνιο και βράζει στην περιοχή από μείον 70 °C ως 0 °C περίπου.]
- EN : Gases (petroleum), steam-cracker C<sub>3</sub> rich ; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of products from a steam cracking process. It consists predominantly of propylene with some propane and boils in the range of approximately minus 70 °C to 0 °C (minus 94 °F to 32 °F).]
- FR : gaz de vapocraquage (pétrole), riches en C<sub>3</sub> ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage. Se compose principalement de propylène et d'un peu de propane ; son point d'ébullition est compris approximativement entre -70 °C et 0 °C.]
- IT : gas (petrolio), cracker a vapore ricchi di C<sub>3</sub> ; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotti della distillazione di prodotti da un processo di cracking con vapore. È costituita prevalentemente da propilene con del propano e con punto di ebollizione nell'intervallo da -70 °C a 0 °C ca.]
- NL : gassen (aardolie), stoomkraker C<sub>3</sub>-rijke ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van producten uit een stoomkraakproces. Bestaat voornamelijk uit propyleen met wat propan en heeft een kooktraject van ongeveer -70 °C tot 0 °C.]
- PT : gases (petróleo), ricos em C<sub>3</sub> do steam-cracker ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de steam-cracking. É constituída predominantemente por propileno com algum propano no intervalo de aproximadamente menos 70 °C a 0 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92045-23-3

EEC No 295-405-4

No 649-116-00-9

NOTA H

NOTA K

- ES: hidrocarburos,  $C_4$ , destilado del craqueador a vapor; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de los productos de un proceso de craqueo a vapor. Compuesta fundamentalmente de hidrocarburos con un número de carbonos de  $C_4$  en su mayor parte 1-buteno y 2-buteno, también con butano e isobuteno y con un intervalo de ebullición aproximado de menos 12 °C a 5 °C.]
- DA: carbonhydrider,  $C_4$ -, dampkrakker-destillat; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af produkterne fra en dampkrakningsproces. Den består overvejende af  $C_4$ -carbonhydrider, overvejende 1-buten og 2-buten, og indeholder også butan og isobuten, med kogesinterval omtrent fra minus 12 °C til 5 °C.]
- DE: Kohlenwasserstoffe,  $C_4$ -, Dampfkracker Destillat; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation der Produkte aus einem Dampfkraackverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit einer Kohlenstoffzahl von  $C_4$ , vorherrschend 1-Buten und 2-Buten. Enthält auch Butan und Isobuten und siedet im Bereich von etwa minus 12 °C bis 5 °C.]
- EL: υδρογονάνθρακες  $C_4$ , απόσταγμα μονάδας ατμοπυρόλυσης; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων από διεργασία ατμοπυρόλυσης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα  $C_4$ , κυρίως 1-βουτένιο περιέχει δε επίσης βουτάνιο και ισοβουτένιο και έχει περιοχή βρασμού από μείον 12 °C ως 5 °C περίπου.]
- EN: Hydrocarbons,  $C_4$ , steam-cracker distillate; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of the products of a steam cracking process. It consists predominantly of hydrocarbons having a carbon number of  $C_4$ , predominantly 1-butene and 2-butene, containing also butane and isobutene and boiling in the range of approximately minus 12 °C to 5 °C (10.4 °F to 41 °F).]
- FR: hydrocarbures en  $C_4$ , distillats de vapocraquage; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage. Se compose principalement d'hydrocarbures en  $C_4$ , essentiellement du butène-1 et du butène-2, et contient aussi du butane et de l'isobutène; son point d'ébullition est compris approximativement entre - 12 °C et 5 °C.]
- IT: idrocarburi,  $C_4$ , distillato da cracker a vapore; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta dalla distillazione dei prodotti di un processo di cracking con vapore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio pari a  $C_4$ , prevalentemente 1-butene e 2-butene, contiene inoltre butano ed isobutene ed ha un punto di ebollizione nell'intervallo da - 12 °C a 5 °C ca.]
- NL: koolwaterstoffen,  $C_4$ -, stoomkrakerdestillaat; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van de produkten uit een stoomkraakproces. Bestaat voornamelijk uit  $C_4$ -koolwaterstoffen, overwegend 1-buteen en 2-buteen, bevat ook butaan en isobuteen en heeft een kooktraject van ongeveer - 12 °C tot 5 °C.]
- PT: hidrocarbonetos,  $C_4$ , destilado do steam-cracker; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de steam-cracking. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono de  $C_4$ , predominantemente 1-buteno e 2-buteno, contendo também algum butano e isobuteno e destila no intervalo de aproximadamente menos 12 °C a 5 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 92045-80-2

EEC No 295-463-0

No 649-117-00-4

## NOTA K

- ES : gases del petróleo, licuados, desazufrados, fracción de  $C_4$  ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida sometiendo una mezcla de gas de petróleo licuado a un proceso de desazufrado para oxidar los mercaptanos o separar impurezas ácidas. Compuesta en su mayor parte de hidrocarburos insaturados y saturados de  $C_4$ .]
- DA : råoliegasser, fortættede, sweetenede,  $C_4$ -fraktion ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved at underkaste en fortættet råoliegasblanding en sweetening-proces for at omdanne mercaptaner eller fjerne sure urenheder. Den består overvejende af  $C_4$ -mættede og umættede carbonhydrider.]
- DE : Erdöl-gase, verflüssigt, gesüßt,  $C_4$ -Fraktion ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, die man erhält, wenn man ein verflüssigtes Erdöl-gasgemisch einem Süßungs-verfahren zur Oxidation von Mercaptanen oder zum Entfernen saurer Verunreinigungen aussetzt. Besteht vorherrschend aus  $C_4$ -gesättigten und ungesättigten Kohlenwasserstoffen.]
- EL : αερία πετρελαίου, υγροποιημένα, γλυκασμένα, κλάσμα  $C_4$ · Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται όταν μείγμα υγραερίου πετρελαίου υποβάλλεται σε κατεργασία γλύκανσης για την οξείδωση των μερκαπτανών ή την απομάκρυνση οξίνων προσμίξεων. Συνίσταται κυρίως από κορεσμένους και ακόρεστους υδρογονάνθρακες με  $C_4$ .]
- EN : Petroleum gases, liquefied, sweetened,  $C_4$  fraction ; Petroleum gas  
[A complex combination of hydrocarbons obtained by subjecting a liquified petroleum gas mix to a sweetening process to oxidize mercaptans or to remove acidic impurities. It consists predominantly of  $C_4$  saturated and unsaturated hydrocarbons.]
- FR : gaz de pétrole liquéfiés, adoucis, fraction en  $C_4$  ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue en soumettant un mélange de gaz de pétrole liquéfiés à un procédé d'adoucisement destiné à oxyder les mercaptans ou à éliminer les impuretés acides. Se compose principalement d'hydrocarbures saturés et insaturés en  $C_4$ .]
- IT : gas di petrolio, liquefatti, addolciti, frazione  $C_4$  ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta sottoponendo una miscela di gas di petrolio liquefatti ad un processo di addolcimento per ossidare i mercaptani o per eliminare le impurezze acide. È costituita prevalentemente da idrocarburi  $C_4$  saturi ed insaturi.]
- NL : aardoliegassen, vloeibaar gemaakt, van stank ontdaan,  $C_4$ -fractie ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door een vloeibaar gemaakt aardolie-gasmengsel aan een stank-ruïjmakingsproces te onderwerpen om mercaptanen te oxideren of om zure onzuiverheden te verwijderen. Bestaat voornamelijk uit  $C_4$ -verzadigde en onverzadigde koolwaterstoffen.]
- PT : gases de petróleo, liquefeitos, tratados (sweetened), fracção  $C_4$  ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida submetendo uma mistura de gases de petróleo liquefeitos a um processo de sweetening para oxidar mercaptans ou para remover impurezas ácidas. É constituída predominantemente por hidrocarbonetos em  $C_4$  saturados e insaturados.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

F + ; R 12	Carc. Cat. 2 ; R 45
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F +	T	
		R : 45-12
		S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 95465-89-7

EEC No 306-004-1

No 649-118-00-X

NOTA H  
NOTA K

- ES : hidrocarburos,  $C_4$ , libres de 1,3-butadieno e isobuteno ; Gases de petróleo
- DA : carbonhydrider,  $C_4$ , 1,3-butadien- og isobutenfri ; Kulbrintegasser
- DE : Kohlenwasserstoffe,  $C_4$ , 1,3-Butadien- und Isobuten-frei ; Gase aus der Erdölverarbeitung
- EL : υδρογονάνθρακες,  $C_4$ , απαλλαγμένοι 1,3-βουταδιενίου και ισοβουτενίου- Πετρελαικό αέριο
- EN : Hydrocarbons,  $C_4$ , 1,3-butadiene- and isobutene-free ; Petroleum gas
- FR : hydrocarbures en  $C_4$ , exempts de butadiène-1,3 et d'isobutène ; Gaz de pétrole
- IT : idrocarburi,  $C_4$ , privi di 1,3-butadiene e isobutene ; Gas di petrolio
- NL : koolwaterstoffen,  $C_4$ , 1,3-butadieen- en isobuteenvrij ; Petroleumgas
- PT : hidrocarbonetos,  $C_4$ , sem 1,3-butadieno e isobuteno ; Gases de petróleo liquefeitos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2 ; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Ki-merken, Rotulagem

T	
	R : 45
	S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 97722-19-5

EEC No 307-269-4

No 649-119-00-5

NOTA H


NOTA K

- ES: refinados (petróleo), extracción de acetato de amonio cuproso de la fracción de  $C_4$  craqueda a vapor  $C_{3,4}$  e insaturados de  $C_{3,4}$  libres de butadieno; Gases de petróleo
- DA: raffinater (råolie), dampkrakket  $C_4$ -fraktion, cupro- ammonium- og acetatekstraktion,  $C_{3,4}$ - og  $C_{3,4}$ -umættede, butadien-frie; Kulbrintegasser
- DE: Raffinate (Erdöl), Dampfgekrackte  $C_4$ -Fraktion, Kupferammoniakacetat-Extraktion,  $C_{3,4}$ - und  $C_{3,4}$ -ungesättigt, Butadien-frei; Gase aus der Erdölverarbeitung
- EL: εκχυλισμένα προϊόντα (πετρελαίου), εκχύλισης με εναμμώνιο οξικό χαλκό (II) ατμοπυρολυθέντος κλάσματος  $C_4$ ,  $C_{3,4}$  και  $C_{3,4}$  ακόρεστα, ελεύθερα βουταδιενίου· Πετρελαϊκό αέριο
- EN: Raffenates (petroleum), steam-cracked  $C_4$  fraction cuprous ammonium acetate extn,  $C_{3,4}$  and  $C_{3,4}$  unsatd, butadiene-free; Petroleum gas
- FR: raffinats en  $C_{3,4}$  saturés et insaturés (pétrole), exempts de butadiene, extraction a l'acétate d'ammonium cuivreux de la fraction de vapocraquage en  $C_4$ ; Gaz de pétrole
- IT: raffinati (petrolio), frazione  $C_4$  crackizzata con vapore dell'estrazione con ammonio acetato di rame,  $C_{3,4}$  e  $C_{3,4}$  insaturi, privi di butadiene; Gas di petrolio
- NL: raffinaten (aardolie), stoomgekraakte  $C_4$ -fractie na cuproammoniumacetaatextractie,  $C_{3,4}$ - en  $C_{3,4}$ -onverzadigd, butadienvrij; Petroleumgas
- PT: refinados (petróleo, fracção  $C_4$  do steam-cracking extraída com acetato de amónio cuproso,  $C_{3,4}$  e  $C_{3,4}$ -insaturados, sem butadieno; Gases de petróleo liquefeitos

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45 S : 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 68477-65-6

EEC No 270-746-1

No 649-120-00-0

NOTA H

NOTA K

- ES : gases (petróleo), alimentación del sistema con aminas ; Gas de refinería  
[Gas de alimentación del sistema con aminas para la separación de sulfuro de hidrógeno. Compuesto de hidrógeno. También pueden estar presentes el monóxido de carbono, dióxido de carbono, sulfuro de hidrógeno e hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA : gasser (råolie), aaminsystemføde- ; Raffinaderigas  
[Fødegassen til aaminsystemet for fjernelse af hydrogensulfid. Den består af hydrogen. Carbonmonoxid, carbondioxid, hydrogen-sulfid og aliphatiske carbonhydrider.  $C_1$  til og med  $C_4$  kan også være tilstede.]
- DE : Gase (Erdöl), Aaminsystem Beschickung ; Raffineriegas  
[Gas, mit dem das Aaminsystem zur Entfernung von Schwefelwasserstoff beschickt wird. Besteht aus Wasserstoff. Kohlenmonoxid, Kohlendioxid, Schwefelwasserstoff und aliphatische Kohlenwasserstoffe mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$  können auch vorhanden sein.]
- EL : αέρια (πετρελαίου), τροφοδότησης συστήματος αμίνης· Καύσιμο αέριο διυλιστηρίου  
[Το αέριο τροφοδότησης του συστήματος αμίνης για την απομάκρυνση υδροθείου. Συνίσταται από υδρογόνο. Μπορεί επίσης να υπάρχουν μονοξείδιο άνθρακα, διοξείδιο άνθρακα, υδροθείο και αλειφατικοί υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN : Gases (petroleum), amine system feed ; Refinery gas  
[The feed gas to the amine system for removal of hydrogen sulfide. It consists of hydrogen. Carbon monoxide, carbon dioxide, hydrogen sulfide and aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$  may also be present.]
- FR : gaz d'alimentation (pétrole), traitement aux amines ; Gaz de raffinerie  
[Gaz d'alimentation du système assurant l'élimination de l'hydrogène sulfuré par traitement aux amines. Se compose d'hydrogène. Peut aussi contenir du monoxyde et du dioxyde de carbone, de l'hydrogène sulfuré et des hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ .]
- IT : gas (petrolio), carica sistema amminico ; Gas di raffineria  
[Il gas di alimentazione del sistema amminico di eliminazione dell'idrogeno solforato. È costituito da idrogeno. Possono anche essere presenti ossido di carbonio, anidride carbonica, componenti naturali dell'aria e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL : gassen (aardolie), aminesysteem voedings- ; Raffinaderigas  
[Het voedingsgas naar het aminesysteem voor de verwijdering van waterstofsulfide. Bestaat uit waterstof. Koolmonoxide, kooldioxide, waterstofsulfide en alifatische koolwaterstoffen, voornamelijk  $C_1$  tot en met  $C_4$ , kunnen ook aanwezig zijn.]
- PT : gases (petróleo), de alimentação do processo de tratamento com aminas ; Gás de Refinaria  
[O gás de alimentação ao sistema de tratamento com aminas para remoção de sulfureto de hidrogenio. É constituído por hidrogenio. Podem também estar presentes monóxido de carbono, dióxido de carbono, sulfureto de hidrogenio e hidrocarbonetos alifáticos com numeros de átomos de carbono predominantemente na gama de  $C_1$  ate  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Cara. Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 68477-66-7

EEC No 270-747-7

No 649-121-00-6

NOTA H

NOTA K

- ES: gases (petróleo), hidrodesulfurador de la unidad de benceno ; Gas de refinería  
[Gases residuales producidos por la unidad de benceno. Compuestos principalmente de hidrógeno. También pueden estar presentes el monóxido de carbono e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ , incluyendo benceno.]
- DA: gasser (råolie), benzenenheds-hydroafsvovleraftræks- ; Raffinaderigas  
[Aftækgasser dannet af benzenenheden. De består primært af hydrogen. Carbonmonoxid og carbonhydrider, overvejende  $C_1$  til og med  $C_6$ , herunder benzen, kan også være tilstede.]
- DE: Gase (Erdöl), Benzolanlage Hydrodesulfurierer Ab- ; Raffineriegas  
[Abgase, hergestellt durch die Benzolanlage. Besteht in erster Linie aus Wasserstoff. Kohlenmonoxid und Kohlenwasserstoffe mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ , einschließlich Benzol, können auch anwesend sein.]
- EL: αέρια (πετρελαίου), εκλυόμενα από απουδροθείωση μονάδας βενζολίου· Καύσιμο αέριο διυλιστηρίου  
[Εκλυόμενα αέρια που παράγονται στη μονάδα βενζολίου. Συνίσταται πρωτίστως από υδρογόνο. Είναι δυνατό επίσης να υπάρχουν μονοξείδιο άνθρακα και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ , περιλαμβανομένου βενζολίου.]
- EN: Gases (petroleum), benzene unit hydrodesulfurizer off ; Refinery gas  
[Off gases produced by the benzene unit. It consists primarily of hydrogen. Carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ , including benzene, may also be present.]
- FR: gaz résiduels (pétrole), production du benzène, hydrodésulfuration ; Gaz de raffinerie  
[Gaz résiduels de l'unité de production du benzène. Se composent principalement d'hydrogène. Peuvent aussi contenir du monoxyde de carbone et des hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ , et notamment du benzène.]
- IT: gas (petrolio), dall'idrodesolforatore dell'impianto benzene ; Gas di raffineria  
[Gas prodotti dall'impianto benzene, costituiti principalmente da idrogeno. Possono anche essere presenti ossido di carbonio e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ , compreso il benzene.]
- NL: gasen (aardolie), benzeen-installatie-waterstofontzwarelaar afgassen ; Raffinaderiigas  
[Afgassen, gevormd door de benzeen-installatie. Bestaat hoofdzakelijk uit waterstof. Koolmonoxide en koolwaterstoffen, voornamelijk  $C$  tot en met  $C_6$ , inclusief benzeen, kunnen ook aanwezig zijn.]
- PT: gases (petróleo), do hidrogenodessulfurizador da unidade de benzeno ; Gás de refinaria  
[Gases produzidos na unidade de benzeno. São constituídos principalmente por hidrogénio. Podem também estar presentes monóxido de carbono e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ , incluindo benzeno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-67-8

EEC No 270-748-2

No 649-122-00-1

NOTA H

NOTA K

- ES : gases (petróleo), reciclado de la unidad de benceno, ricos en hidrógeno ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida por el reciclado de los gases de la unidad de benceno. Compuesta principalmente de hidrógeno con pequeñas cantidades de monóxido de carbono e hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : gasser (råolie), benzenenhed recirkulations-, hydrogenrige ; Raffinaderigas  
[En sammensat blanding af carbonhydrider opnået ved at recirkulere gasserne fra benzenenheden. Den består primært af hydrogen med forskellige små mængder carbonmonoxid og carbonhydrider,  $C_1$  til og med  $C_6$ .]
- DE : Gase (Erdöl), Benzolanlage Recycling, Wasserstoff-reich ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Recycling der Gase der Benzolanlage. Besteht in erster Linie aus Wasserstoff mit verschiedenen geringen Mengen Kohlenmonoxid und Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αερια (πετρελαίου), ανακύκλωσης μονάδας βενζολίου, πλούσια σε υδρογόνο· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με ανακύκλωση των αερίων της μονάδας βενζολίου. Συνίσταται πρωτίστως από υδρογόνο με διάφορες μικροποσότητες μονοξειδίου άνθρακα και υδρογονανθράκων με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Gases (petroleum), benzene unit recycle, hydrogen-rich ; Refinery gas  
[A complex combination of hydrocarbons obtained by recycling the gases of the benzene unit. It consists primarily of hydrogen with various small amounts of carbon monoxide and hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_6$ .]
- FR : gaz de recyclage (pétrole), production du benzène, riches en hydrogène ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenues par recyclage des gaz de l'unité de production du benzène. Se compose principalement d'hydrogène, avec de petites quantités de monoxyde de carbone et d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_6$ .]
- IT : gas (r-trolio), riciclo dall'impianto benzene, ricchi di idrogeno ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta riciclando i gas dell'impianto benzene. È costituita principalmente da idrogeno con varie piccole quantità di ossido di carbonio e idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_6$ .]
- NL : gassen (aardolie), benzeen-installatie-terugvoer, rijk aan waterstof ; Raffinaderigas  
[Een complexe verzameling koolwaterstoffen, verkregen door terugvoer van de gassen uit de benzeen-installatie. Bestaat voornamelijk uit waterstof met verscheidene kleine hoeveelheden koolmonoxide en koolwaterstoffen,  $C_1$  tot en met  $C_6$ .]
- PT : gases (petróleo), reciclo da unidade de benzeno, ricos em hidrogénio ; Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos obtida por reciclagem dos gases de unidade de benzeno. É constituída principalmente por hidrogénio com pequenas quantidades variáveis de monóxido de carbono e hidrocarbonetos com números de átomos de carbono na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 68477-68-9

EEC No 270-749-8

No 649-123-00-7

NOTA H

NOTA K

- ES : gases (petroleo), aceite de mezcla, ricos en hidrógeno y nitrógeno ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida por destilación de un aceite de mezcla. Compuesta principalmente de hidrógeno y nitrógeno con pequeñas cantidades de monóxido de carbono, dióxido de carbono e hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA : gasser (råolie), blandingsolie-, hydrogen- og nitrogenrige ; Raffinaderigas  
[En sammensat blanding af carbonhydrider opnået ved destillation af en blandingsolie. Den består primært af hydrogen og nitrogen med forskellige små mængder carbonmonoxid, carbon dioxide og aliphatiske carbonhydrider, overvejende  $C_1$  til og med  $C_4$ .]
- DE : Gase (Erdöl), Verschnittöl, Wasserstoff-Stickstoff-reich ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation eines Verschnittöles. Besteht in erster Linie aus Wasserstoff und Stickstoff mit verschiedenen geringen Mengen Kohlenmonoxid, Kohlendioxid und aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL : αερία (πετρέλαιου), ελαίου ανάμειξης, πλούσια σε υδρογόνο-άζωτο· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη ελαίου ανάμειξης. Συνίσταται πρωτίστως από υδρογόνο και άζωτο με διάφορες μικροποσότητες μονοξειδίου άνθρακα, διοξειδίου άνθρακα και αλειφατικών υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN : Gases (petroleum), blend oil, hydrogen-nitrogen-rich ; Refinery gas  
[A complex combination of hydrocarbons obtained by distillation of a blend oil. It consists primarily of hydrogen and nitrogen with various small amounts of carbon monoxide, carbon dioxide, and aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR : gaz d'huile mélangée (pétrole), riches en hydrogène et en azote ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par distillation d'une huile mélangée. Se compose principalement d'hydrogène et d'azote, avec de petites quantités de monoxyde et de dioxyde de carbone, et d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ .]
- IT : gas (petrolio), da olio di miscela, ricco in idrogeno-azoto ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta per distillazione di un olio di miscela. È costituita principalmente da idrogeno e azoto con varie piccole quantità di ossido di carbonio, anidride carbonica e idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL : gassen (aardolie), mengolie, rijk aan waterstof en stikstof ; Raffinaderigas  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van een mengolie. Bestaat voornamelijk uit waterstof en stikstof, met verscheidene kleine hoeveelheden koolmonoxide, kooldioxide en alifatische koolwaterstoffen, voornamelijk  $C_1$  tot en met  $C_4$ .]
- PT : gases (petróleo), de mistura de hidrocarbonetos, ricos em hidrogénio e azoto ; Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos obtida por destilação de uma mistura de hidrocarbonetos. É constituída principalmente por hidrogénio e azoto com pequenas quantidades variáveis de monóxido de carbono, dióxido de carbono, e hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ .]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-77-0

EEC No 270-759-2

No 649-124-00-2

NOTA H

NOTA K

- ES: gases (petróleo), productos de cabeza del extractor de nafta reformada catalíticamente, Gas de refinería  
[Combinación compleja de hidrocarburos obtenida por la estabilización de nafta reformada catalíticamente. Compuesta de hidrógeno e hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA: gasser (råolie), katalytisk reformeret naphtha stripper-topfraktioner; Raffinaderigas  
[En sammensat blanding af carbonhydrier opnået ved stabiliseringen af katalytisk reformeret naphtha. Den består af hydrogen og mættede, aliphatiske carbonhydrier, overvejende  $C_1$  ul og med  $C_4$ .]
- DE: Gase (Erdöl), katalytisch reformierte Naphtha Stripper Kopf; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen aus der Stabilisierung katalytisch reformierter Naphtha. Besteht aus Wasserstoff und gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL: αέρια (πετρελαίου), κορυφής απογυμνωτή καταλυτικά αναμορφωμένης νάφθας προϊόντων. Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την σταθεροποίηση καταλυτικά αναμορφωμένης νάφθας. Συνίσταται από υδρογόνο και κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN: Gases (petroleum), catalytic reformed naphtha stripper overheads; Refinery gas  
[A complex combination of hydrocarbons obtained from stabilization of catalytic reformed naphtha. Its consists of hydrogen and saturated hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR: gaz de tête (pétrole), rectification du naphtha de reformage catalytique; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures issue de la stabilisation de naphtha de reformage catalytique. Se compose d'hydrogene et d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ .]
- IT: gas (petrolio), nafta dal reforming catalitico, teste dello stripper; Gas di raffinera  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione di nafta riformata cataliticamente. È costituita da idrogeno e idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL: gassen (aardolie), katalytisch gereformeerde nafta strippertopprodukten; Raffinaderijgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de stabilisatie van katalytisch gereformeerde nafta. Bestaat uit waterstof en verzadigde alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT: gases (petróleo), de cabeça do estabilizador da nafta do reforming catalítico, Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos obtida por estabilização da nafta do reforming catalítico. É constituída por hidrogenio e hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  ate  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-80-5

EEC No 270-761-3

No 649-125-00-8

NOTA H

NOTA K

- ES Gases (petróleo), reciclado de  $C_{6-8}$  en el reformador catalítico ; Gas de refinería  
[Combinación compleja de hidrocarburos producida por destilación de productos de una alimentación de  $C_6$ - $C_8$  reformada catalíticamente y reciclada para conservar el hidrógeno. Compuesta principalmente de hidrógeno. También puede contener pequeñas cantidades de monóxido de carbono, dióxido de carbono, nitrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA gasser (råolie),  $C_{6-8}$ -katalytisk reformer recirkulations- ; Raffinaderigas  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkter fra katalytisk reformering af  $C_6$ - $C_8$ -føde, og recirkuleret for at bevare hydrogen. Den består primært af hydrogen. Den kan også indeholde varierende små mængder carbonmonoxid, carbondioxid, nitrogen og carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE Gase (Erdöl),  $C_{6-8}$  katalytische Reformer Recycle ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus katalytischem Reforming von  $C_6$  bis  $C_8$ -Beschickung und recycled zur Erhaltung von Wasserstoff. Besteht in erster Linie aus Wasserstoff. Kann auch verschiedene geringe Mengen Kohlenmonoxid, Kohlendioxid, Stickstoff und Kohlenwasserstoffe mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$  enthalten.]
- EL αερία (πετρελαίου), ανακύκλωσης καταλυτικού αναμορφωτήρα  $C_{6-8}$  ; Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη προϊόντων καταλυτικής αναμόρφωσης τροφοδότησης  $C_{6-8}$  και ανακύκλωση για διατήρηση του υδρογόνου. Συνίσταται πρωτίστως από υδρογόνο. Μπορεί επίσης να περιέχει διάφορες μικροποσότητες μονοξειδίου άνθρακα, διοξειδίου άνθρακα, αζώτου και υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN Gases (petroleum),  $C_{6-8}$  catalytic reformer recycle ; Refinery gas  
[A complex combination of hydrocarbons produced by distillation of products from catalytic reforming of  $C_6$ - $C_8$  feed and recycled to conserve hydrogen. It consists primarily of hydrogen. It may also contain various small amounts of carbon monoxide, carbon dioxide, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR gaz de recyclage (pétrole), reformage catalytique de charges en  $C_{6-8}$  ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant du reformage catalytique de charges en  $C_{6-8}$  et recyclée pour récupérer l'hydrogène. Se compose principalement d'hydrogène. Peut aussi contenir de petites quantités de monoxyde et de dioxyde de carbone, d'azote et d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT gas (petrolio),  $C_{6-8}$  riciclo di reforming catalitico ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti dal reforming catalitico di una carica  $C_6$ - $C_8$  e riciclata per recuperare l'idrogeno. È costituita principalmente da idrogeno. Può anche contenere varie piccole quantità di ossido di carbonio, anidride carbonica, azoto e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL gassen (aardolie),  $C_{6-8}$ -katalytische reformator terugvoer ; Raffinaderigas  
[Een complexe verzameling van koolwaterstoffen, verkregen door destillatie van producten van de katalytische reformering van  $C_{6-8}$ -aanvoer en teruggevoerd om waterstof te behouden. Bestaat voornamelijk uit waterstof. Kan ook verscheidene kleine hoeveelheden koolmonoxide, kooldioxide, stikstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ , bevatten.]
- PT gases (petróleo), do reciclo do reformer catalítico da fracção  $C_{6-8}$  ; Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos produzida por destilação de produtos do reforming catalítico de fracção  $C_{6-8}$  e reciclada para conservar hidrogénico. É constituída principalmente por hidrogénio. Pode também conter pequenas quantidades variáveis de monóxido de carbono, dióxido de carbono, azoto, e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentraçào*


Cas No 68477-81-6

EEC No 270-762-9

No 649-126-00-3

NOTA H

NOTA K

- ES : gases (petróleo), reformador catalítico de  $C_{6-8}$ ; Gas de refinería  
[Combinación compleja de hidrocarburos producida por destilación de productos del reformado catalítico de una alimentación de  $C_6-C_8$ . Compuesta de hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_4$  e hidrógeno.]
- DA : gasser (råolie),  $C_{6-8}$ -katalytisk reformer-; Raffinaderigas  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkter fra katalytisk reformering af  $C_6-C_8$ -føde. Den består af carbonhydrider,  $C_1$  til og med  $C_4$ , og hydrogen.]
- DE : Gase (Erdöl),  $C_{6-8}$  Katalytische Reformier; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus katalytischem Reforming von  $C_6-C_8$ -Beschickung. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_4$  und Wasserstoff.]
- EL : αέρια (πετρελαίου),  $C_{6-8}$  καταλυτικού αναμορφωτήρα· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη προϊόντων καταλυτικής αναμόρφωσης τροφοδότησης  $C_{6-8}$ . Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_4$  και υδρογόνο.]
- EN : Gases (petroleum),  $C_{6-8}$  catalytic reformer; Refinery gas  
[A complex combination of hydrocarbons produced by distillation of products from catalytic reforming of  $C_6-C_8$  feed. It consists of hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_4$  and hydrogen.]
- FR : gaz (pétrole), reformage catalytique de charges en  $C_{6-8}$ ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par distillation de produits issus de reformage catalytique de charges en  $C_{6-8}$ . Se compose d'hydrogène et d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_1-C_4$ .]
- IT : gas (petrolio),  $C_{6-8}$ , da reforming catalitico; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti dal reforming catalitico di una carica  $C_6-C_8$ . È costituita da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1-C_4$  e da idrogeno.]
- NL : gassen (aardolie),  $C_{6-8}$ -katalytisch reformator; Raffinaderijgas  
[Een complexe verzameling koolwaterstoffen, gevormd door destillatie van producten van de katalytische reformering van  $C_{6-8}$ -aanvoer. Bestaat uit koolwaterstoffen,  $C_1$  tot en met  $C_4$ , en waterstof.]
- PT : gases (petróleo), do reformer catalítico da fracção  $C_{6-8}$ ; Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos do reforming catalítico da fracção  $C_{6-8}$ . É constituída por hidrocarbonetos com números de átomos de carbono na gama de  $C_1$  até  $C_4$  e hidrogénio.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-82-7

EEC No 270-763-4

No 649-127-00-9

NOTA H

NOTA K

- ES: gases (petróleo), reciclo de  $C_{6-8}$  del reformador catalítico, ricos en hidrógeno; Gas de refinería
- DA: gasser (råolie),  $C_{6-8}$ -katalytisk reformer recirkulations-, hydrogenrige; Raffinaderigas
- DE: Gase (Erdöl),  $C_{6-8}$ -durch katalytisch reformiertes Recycling, wasserstoffreich; Raffineriegas
- EL: αέρια (πετρελαίου), ανακύκλωμα  $C_{6-8}$  καταλυτικού αναμορφωτήρα, πλούσια σε υδρογόνο· Καύσιμο αέριο διυλιστηρίου
- EN: Gases (petroleum),  $C_{6-8}$  catalytic reformer recycle, hydrogen-rich; Refinery gas
- FR: gaz (pétrole), recyclage de reformage catalytique en  $C_{6-8}$ -riches en hydrogène; Gaz de raffinerie
- IT: gas (petrolio), riciclo reformer catalitico di  $C_{6-8}$ , arricchiti in idrogeno; Gas di raffineria
- NL: gassen (aardolie),  $C_{6-8}$  katalytische reformator terugvoer, rijk aan waterstof; Raffinaderigas
- PT: gases (petróleo), reciclados  $C_{6-8}$  do reforming catalítico, ricos em hidrogénio; Gás de refinaria

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R: 45
	S: 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68477-84-9

EEC No 270-766-0

No 649-128-00-4

NOTA H

NOTA K

- ES:** gases (petróleo), corriente de reflujo de  $C_2$ ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida por la extracción de hidrógeno de una corriente de gas que se compone principalmente de hidrógeno con pequeñas cantidades de nitrógeno, monóxido de carbono, metano, etano y etileno. Contiene en su mayor parte hidrocarburos tales como metano, etano y etileno con pequeñas cantidades de hidrógeno, nitrógeno y monóxido de carbono.]
- DA:** gasser (råolie),  $C_2$ -returstrøms-; Raffinaderigas  
[En sammensat blanding af carbonhydrider opnået ved ekstraktionen af hydrogen fra en gasstrøm, som primært består af hydrogen med små mængder nitrogen, carbonmonoxid, methan, ethan og ethylen. Den består overvejende af carbonhydrider, såsom methan, ethan og ethylen, med små mængder hydrogen, nitrogen og carbonmonoxid.]
- DE:** Gase (Erdöl),  $C_2$ -Rücklauf; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Extraktion von Wasserstoff aus einem Gaslauf, der in erster Linie aus Wasserstoff mit geringen Mengen Stickstoff, Kohlenmonoxid, Methan, Ethan und Ethylen besteht. Enthält vorherrschend Kohlenwasserstoffe wie Methan, Ethan und Ethylen mit geringen Mengen Wasserstoff, Stickstoff und Kohlenmonoxid.]
- EL:** αέρια (πετρελαιο), ρεύμα επιστροφής  $C_2$ ; Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την εξαγωγή υδρογόνου από ρεύμα αερίου, το οποίο συνίσταται πρωτίστως από υδρογόνο με μικρές ποσότητες αζώτου, μονοξειδίου άνθρακα, μεθανίου, αιθανίου και αιθυλενίου. Περιέχει κυρίως υδρογονάνθρακες όπως μεθάνιο, αιθάνιο και αιθυλένιο με μικρές ποσότητες υδρογόνου, αζώτου και μονοξειδίου άνθρακα.]
- ENG:** Gases (petroleum),  $C_2$  return stream; Refinery gas  
[A complex combination of hydrocarbons obtained by the extraction of hydrogen from a gas stream which consists primarily of hydrogen with small amounts of nitrogen, carbon monoxide, methane, ethane, and ethylene. It contains predominantly hydrocarbons such as methane, ethane, and ethylene with small amounts of hydrogen, nitrogen and carbon monoxide.]
- FR:** gaz (pétrole), retour en  $C_2$ ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par extraction de l'hydrogène dans un mélange gazeux composé principalement d'hydrogène et de petites quantités d'azote, de monoxyde de carbone, de méthane, d'éthane et d'éthylène. Contient principalement des hydrocarbures tels que du méthane, de l'éthane et de l'éthylène, avec de petites quantités d'hydrogène, d'azote et de monoxyde de carbone.]
- IT:** gas (petrolio), corrente di ritorno  $C_2$ ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta per estrazione di idrogeno da una corrente gassosa costituita principalmente da idrogeno con piccole quantità di azoto, ossido di carbonio, metano, etano ed etilene. Contiene prevalentemente idrocarburi quali metano, etano ed etilene, con piccole quantità di idrogeno, azoto e ossido di carbonio.]
- NL:** gassen (aardolie),  $C_2$ -terugstroom; Raffinaderijgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de extractie van waterstof uit een gasstroom die voornamelijk bestaat uit waterstof met kleine hoeveelheden stikstof, koolmonoxide, methaan, ethaan en ethyleen. Bevat voornamelijk koolwaterstoffen als methaan, ethaan en ethyleen met kleine hoeveelheden waterstof, stikstof en koolmonoxide.]
- PT:** gases (petróleo), fluxo de retorno em  $C_2$ ; Gás de refinação  
[Uma combinação complexa de hidrocarbonetos obtida pela extração de hidrogénio de uma corrente gasosa constituída principalmente por hidrogénio com pequenas quantidades de azoto, monóxido de carbono, metano, etano, e etileno. Contém predominantemente hidrocarbonetos tais como metano, etano, e etileno com pequenas quantidades de hidrogénio, azoto e monóxido de carbono.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-92-9

EEC No 270-774-4

No 649-129-00-X

NOTA H

NOTA K

- ES : gases (petróleo), secos y con azufre, unidad de concentración de gas ; Gas de refinería  
[Combinación compleja de gases secos de una unidad de concentración de gas. Compuesta de hidrógeno, sulfuro de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{11}$ .]
- DA : gasser (råolie), tørre sure, gaskoncentreringsenhed aftræks- ; Raffinaderigas  
[Den sammensatte blanding af tørre gasser fra en gaskoncentreringsenhed. Den består af hydrogen, hydrogenulfid og carbonhydrid, overvejende  $C_1$  til og med  $C_{11}$ .]
- DE : Gase (Erdöl), trocken sauer, Gaskonzentrationsanlage-Ab- ; Raffineriegas  
[Komplexe Kombination von trockenen Gasen aus einer Gaskonzentrationsanlage. Besteht aus Wasserstoff, Schwefelwasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{11}$ .]
- EL : αερια (πετρελαίου), όξινα ξηρά, εκλυόμενα από μονάδα συμπύκνωσης αερίου· Καύσιμο αέριο διυλιστηρίου  
[Ο πολύπλοκος συνδυασμός ξηρών αερίων μονάδας συμπύκνωσης αερίου. Συνίσταται από υδρογόνο, υδρόθειο και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{11}$ .]
- EN : Gases (petroleum), dry sour, gas-concn.-unit-off ; Refinery gas  
[The complex combination of dry gases from a gas concentration unit. It consists of hydrogen, hydrogen sulfide and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{11}$ .]
- FR : gaz acides secs résiduels (pétrole), unité de concentration des gaz ; Gaz de raffinerie  
[Combinaison complexe de gaz secs issue d'une unité de concentration des gaz. Se compose d'hydrogène, d'hydrogène sulfure et d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_{11}$ .]
- IT : gas (petrolio), secchi leggermente acidi, dall'impianto di concentrazione gas ; Gas di raffineria\*  
[Combinazione complessa di gas secchi provenienti dall'impianto di concentrazione gas. È costituita da idrogeno, idrogeno solforato e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{11}$ .]
- NL : gassen (aardolie), droge zure, gasconcentratie-installatie-uitstoot- ; Raffinaderigas  
[De complexe verzameling droge gassen die wordt verkregen uit een gasconcentratie-installatie. Bestaat uit waterstof, waterstofsulfide en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{11}$ .]
- PT : gases (petróleo), ácidos secos, de uma unidade de concentração de gases ; Gas de refinaria  
[A combinação complexa de gases secos produzidos numa unidade de concentração de gases. É constituída por hidrogénio, sulfureto de hidrogénio e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{11}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 . R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-93-0

EEC No 270-776-5

No 649-130-00-5

NOTA H  
NOTA K

- ES: gases (petróleo), destilación en el reabsorbedor de concentración de gas ; Gas de refinería  
[Combinación compleja de hidrocarburos producida por destilación de productos de corrientes de gas combinadas en un reabsorbedor de concentración de gas. Compuesta en su mayor parte de hidrógeno, monóxido de carbono, dióxido de carbono, nitrógeno, sulfuro de hidrógeno e hidrocarburos con un número de carbonos en el intervalo de  $C_1$  a  $C_{12}$ .]
- DA: gasser (råolie), gaskoncentrering reabsorberdestillations- ; Raffinaderigas  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkter fra blandede gasstrømme i en gaskoncentreringsreabsorber. Den består overvejende af hydrogen, carbonmonoxid, carbondioxid, nitrogen, hydrogensulfid og carbonhydrider,  $C_1$  til og med  $C_{12}$ .]
- DE: Gase (Erdöl), Gaskonzentration Reabsorber Destillation ; Raffineregas  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus kombinierten Gasläufen in einem Gaskonzentrationsreabsorber. Besteht vorherrschend aus Wasserstoff, Kohlenmonoxid, Kohlendioxid, Stickstoff, Schwefelwasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_{12}$ .]
- EL: αερια (πετρελαίου), απόσταξης επαναπορροφητήρα συμπύκνωσης αερίου· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη προϊόντων κοινών ρευμάτων αερίου σε επαναπορροφητήρα συμπύκνωσης αερίου. Συνίσταται κυρίως από υδρογόνο, μονοξείδιο άνθρακα, διοξείδιο άνθρακα, άζωτο υδροθείο και υδρογονανθράκες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_{12}$ .]
- EN: Gases (petroleum), gas concn. reabsorber distn. ; Refinery gas  
[A complex combination of hydrocarbons produced by distillation of products from combined gas streams in a gas concentration reabsorber. It consists predominantly of hydrogen, carbon monoxide, carbon dioxide, nitrogen, hydrogen sulfide and hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_{12}$ .]
- FR: gaz (pétrole), réabsorbeur de concentration des gaz, distillation ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits tirés de divers mélanges gazeux dans un réabsorbeur de concentration de gaz. Se compose principalement d'hydrogène, de monoxyde et de dioxyde de carbone, d'azote, d'hydrogène sulfuré et d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_{12}$ .]
- IT: gas (petrolio), distillazione riassorbitore concentrazione gas ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da correnti gassose combinate in un riassorbitore di concentrazione gas. È costituita prevalentemente da idrogeno, ossido di carbonio, anidride carbonica, azoto, acido solfidrico e idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_{12}$ .]
- NL: gassen (aardolie), gasconcentratie-herabsorbeerder-destillatie ; Raffinaderigas  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door destillatie van produkten van gecombineerde gasstromen in een gasconcentratie-herabsorbeerder. Bestaat voornamelijk uit waterstof, koolmonoxide, kooldioxide, stikstof, waterstofsulfide en koolwaterstoffen,  $C_1$  tot en met  $C_{12}$ .]
- PT: gases (petróleo), da destilação da coluna de reabsorção de bases concentrados ; Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos de misturas de correntes gasosas numa coluna de reabsorção de um processo de concentração de gases. É constituída predominantemente por hidrogénio, monóxido de carbono, dióxido de carbono, azoto, sulfureto de hidrogenio e hidrocarbonetos com números de átomos de carbono na gama de  $C_1$  até  $C_{12}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-96-3

EEC No 270-779-1

No 649-131-00-0

NOTA H

NOTA K

- ES : gases (petróleo), aparato de absorción de hidrógeno ; Gas de refinería  
[Combinación compleja obtenida por absorción de hidrógeno de una corriente rica en hidrógeno. Compuesta de hidrógeno, monóxido de carbono, nitrógeno y metano con pequeñas cantidades de hidrocarburos de  $C_2$ .]
- DA : gasser (råolie), hydrogenabsorber-aftræks- ; Raffinaderigas  
[En sammensat blanding opnået ved at absorbere hydrogen fra en hydrogenrig strøm. Den består af hydrogen, carbonmonoxid, nitrogen og methan med små mængder  $C_2$ -carbonhydrider.]
- DE : Gase (Erdöl), Wasserstoff Absorber Ab- ; Raffineriegas  
[Komplexe Kombination, erhalten durch Wasserstoffabsorption aus einem Wasserstoff-reichen Lauf. Besteht aus Wasserstoff, Kohlenmonoxid, Stickstoff und Methan mit geringen Mengen von  $C_2$ -Kohlenwasserstoffen.]
- EL : αερια (πετρελαιο), εκλυόμενα από απορροφητήρα υδρογόνου· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται με απορρόφηση από ρεύμα πλούσιο σε υδρογόνο. Συνίσταται κυρίως από υδρογόνο, μονοξείδιο άνθρακα, άζωτο και μεθάνιο με μικροποσότητες υδρογονανθράκων  $C_2$ .]
- EN : Gases (petroleum), hydrogen absorber off ; Refinery gas  
[A complex combination obtained by absorbing hydrogen from a hydrogen rich stream. It consists of hydrogen, carbon monoxide, nitrogen, and methane with small amounts of  $C_2$  hydrocarbons.]
- FR : gaz résiduels (pétrole), absorption d'hydrogène ; Gaz de raffinerie  
[Combinaison complexe obtenue par absorption d'hydrogène dans un mélange riche en hydrogène. Se compose d'hydrogène, de monoxyde de carbone, d'azote et de méthane, avec de petites quantités d'hydrocarbures en  $C_2$ .]
- IT : gas (petrolio), da assorbitore idrogeno . Gas di raffineria  
[Combinazione complessa ottenuta per assorbimento di idrogeno da una corrente ricca di idrogeno. È costituita da idrogeno, ossido di carbonio, azoto e metano, con piccole quantità di idrocarburi  $C_2$ .]
- NL : gassen (aardolie), waterstofabsorbator-uitstoot- ; Raffinaderigas  
[Een complexe combinatie die wordt verkregen door het absorberen van waterstof uit een waterstofrijke stroom. Het bestaat uit waterstof, koolmonoxide, stikstof en methaan met kleine hoeveelheden  $C_2$ -koolwaterstoffen.]
- PT : gases (petróleo), da coluna de absorção de hidrogénio ; Gás de refinaria  
[Uma combinação complexa obtida por absorção de hidrogenio a partir de uma fracção rica em hidrogénio. É constituída por hidrogénio, monóxido de carbono, azoto, e metano com pequenas quantidades de hidrocarbonetos em  $C_2$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68477-97-4

EEC No 270-780-7

No 649-132-00-6

NOTA H

NOTA K

- ES : gases (petróleo), ricos en hidrógeno ; Gas de refinería  
[Combinación compleja separada como un gas de gases hidrocarbonados por enfriamiento. Compuesta principalmente de hidrógeno con pequeñas cantidades de monóxido de carbono, nitrógeno, metano e hidrocarburos de C<sub>2</sub>.]
- DA : gasser (råolie), hydrogenrige ; Raffinaderigas  
[En sammensat blanding separeret som en gas fra carbonhydridgasser ved afkøling. Den består primært af hydrogen med forskellige små mængder carbonmonoxid, nitrogen, methan og C<sub>2</sub>-carbonhydrider.]
- DE : Gase (Erdöl), Wasserstoff-reich ; Raffineriegas  
[Komplexe Kombination, durch Kühlen als Gas aus Kohlenwasserstoffgasen abgetrennt. Besteht in erster Linie aus Wasserstoff mit verschiedenen geringen Mengen Kohlenmonoxid, Stickstoff, Methan and C<sub>2</sub>-Kohlenwasserstoffen.]
- EL : αέρια (πετρελαίου), πλούσια σε υδρογόνο· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που διαχωρίζεται σαν αέριο από αέριους υδρογονάνθρακες με ψύξη. Συνίσταται κυρίως από υδρογόνο με διάφορες μικροποσότητες μονοξειδίου άνθρακα, αζώτου, μεθανίου και υδρογονανθράκων C<sub>2</sub>.]
- EN : Gases (petroleum), hydrogen-rich ; Refinery gas  
[A complex combination separated as a gas from hydrocarbon gases by chilling. It consists primarily of hydrogen with various small amounts of carbon monoxide, nitrogen, methane, and C<sub>2</sub> hydrocarbons.]
- FR : gaz (pétrole), riches en hydrogène ; Gaz de raffinerie  
[Combinaison complexe séparée sous forme gazeuse d'hydrocarbures gazeux par refroidissement. Se compose principalement d'hydrogène, avec de petites quantités de monoxyde de carbone, d'azote, de méthane et d'hydrocarbures en C<sub>2</sub>.]
- IT : gas (petrolio), ricchi di idrogeno ; Gas di raffineria  
[Combinazione complessa separata in forma di gas da gas idrocarburi mediante raffreddamento. È costituita principalmente da idrogeno con varie piccole quantità di ossido di carbonio, azoto, metano e idrocarburi C<sub>2</sub>.]
- NL : gassen (aardolie), waterstof-rijk ; Raffinaderijgas  
[Een complexe combinatie die wordt afgescheiden als een gas uit diverse koolwaterstofgassen door koeling. Bestaat voornamelijk uit waterstof met verscheidene kleine hoeveelheden koolmonoxide, stikstof, methaan en C<sub>2</sub>-koolwaterstoffen.]
- PT : gases (petróleo), ricos em hidrogénio ; Gás de refinaria  
[Uma combinação complexa separada como um gás por arrefecimento de uma fracção de hidrocarbonetos gasosos. É constituída principalmente por hidrogénio com pequenas quantidades variáveis de monóxido de carbono, azoto, metano, e hidrocarbonetos em C<sub>2</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-98-5

EEC No 270-781-2

No 649-133-00-1

NOTA H

NOTA K

- ES : gases (petróleo), reciclado del aceite de mezcla en el aparato para el tratamiento con hidrogeno, ricos en hidrógeno y nitrógeno ; Gas de refinería  
[Combinación compleja obtenida del aceite de mezcla tratado con hidrógeno y reciclado. Compuesta principalmente de hidrógeno y nitrógeno con pequeñas cantidades de monóxido de carbono, dióxido de carbono e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_7$ .]
- DA : gasser (råolie), hydrogenbehandler blandingsolierecirkulations-, hydrogen- og nitrogenrige ; Raffinaderigas  
[En sammensat blanding opnået fra recirkuleret hydrogenbehandlet blandingsolie. Den består primært af hydrogen og nitrogen med forskellige små mængder carbonmonoxid, carbondioxid og carbonhydrider, overvejende  $C_1$  til og med  $C_7$ .]
- DE : Gase (Erdöl), Wasserstoffbehandlungs- Verschnittöl Recycle, Wasserstoff-Stickstoff-reich ; Raffineriegas  
[Komplexe Kombination, erhalten aus Recycling von mit Wasserstoff behandeltem Verschnittöl. Besteht in erster Linie aus Wasserstoff und Stickstoff mit verschiedenen geringen Mengen Kohlenmonoxid, Kohlendioxid und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_7$ .]
- EL : αερια (πετρελαίου), ανακυκλωμένου κατεργασμένου με υδρογόνο ελαίου ανάμειξης, πλούσια σε υδρογόνο-άζωτο  
Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται από ανακυκλωμένο κατεργασμένο με υδρογόνο έλαιο ανάμειξης. Συνίσταται κυρίως από υδρογόνο και άζωτο με διάφορες μικροποσότητες μονοξειδίου άνθρακα, διοξειδίου άνθρακα και υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_7$ .]
- EN : Gases (petroleum), hydrotreater blend oil recycle, hydrogen-nitrogen-rich ; Refinery gas  
[A complex combination obtained from recycled hydrotreated blend oil. It consists primarily of hydrogen and nitrogen with various small amounts of carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_7$ .]
- FR : gaz de recyclage (pétrole), huile mélangée hydrotraitée, riches en hydrogène et en azote ; Gaz de raffinerie  
[Combinaison complexe obtenue par recyclage d'huile mélangée hydrotraitée. Se compose principalement d'hydrogène et d'azote, avec de petites quantités de monoxyde et de dioxyde de carbone, et d'hydrocarbures dont le nombre de carbonos se situe en majeure dans la gamme  $C_1$ - $C_7$ .]
- IT : gas (petrolio), riciclo olio di miscela idrotrattato, ricchi di idrogeno-azoto ; Gas di raffineria  
[Combinazione complessa ottenuta da olio di miscela idrotrattato riciclato. È costituita principalmente da idrogeno e azoto con varie piccole quantità di ossido di carbonio, anidride carbonica e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_7$ .]
- NL : gassen (aardolie), waterstofbehandelaar-mengolie-terugvoer-, rijk aan waterstof en stikstof ; Raffinadenigas  
[Een complexe combinatie die wordt verkregen uit teruggevoerde met waterstof behandelde mengolie. Bestaat voornamelijk uit waterstof en stikstof met diverse kleine hoeveelheden koolmonoxide, kooldioxide en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_7$ .]
- PT : gases (petróleo), de reciclo de misturas de hidrocarbonetos da unidade de tratamento com hidrogénio, ricos em hidrogénio e azoto ; Gás de refinaria  
[Uma combinação complexa obtida de misturas de hidrocarbonetos de gás de reciclo tratado com hidrogénio. É constituído principalmente por hidrogénio e azoto com pequenas quantidades variáveis de monóxido de carbono, dióxido de carbono e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_7$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 68478-00-2

EEC No 270-783-3

No 649-134-00-7

NOTA H  
NOTA K

- ES : gases (petróleo), reciclado, ricos en hidrógeno ; Gas de refinería  
[Combinación compleja obtenida de los gases del reactor reciclados. Compuesta principalmente de hidrógeno con pequeñas cantidades de monóxido de carbono, dióxido de carbono, nitrógeno, sulfuro de hidrógeno e hidrocarburos alifáticos saturados con un número de carbonos dentro del intervalo de  $C_1$  a  $C_{12}$ ]
- DA : gasser (råolie), recirkulations-, hydrogenrige ; Raffinaderigas  
[En sammensat blanding opnået fra recirkulerede reaktorgasser. Den består primært af hydrogen med forskellige små mængder carbonmonoxid, carbondioxid, nitrogen, hydrogensulfid og mættede, aliphatiske carbonhydrider,  $C_1$  til og med  $C_{12}$ ]
- DE : Gase (Erdöl), Recycle, Wasserstoff-reich ; Raffinenegas  
[Komplexe Kombination, erhalten aus Recycling von Reaktorgasen. Besteht in erster Linie aus Wasserstoff mit verschiedenen geringen Mengen Kohlenmonoxid, Kohlendioxid, Stickstoff, Schwefelwasserstoff und gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_{12}$ ]
- EL : αερια (πετρελαίου), ανακύκλωσης, πλούσια σε υδρογόνο· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται από ανακυκλωμένα αέρια αντιδραστήρα. Συνίσταται κυρίως από υδρογόνο με διάφορες μικροποσότητες μονοξειδίου άνθρακα, διοξειδίου άνθρακα, αζώτου, υδροθείου και αλειφατικών υδρογονανθράκων με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_{12}$ ]
- EN : Gases (petroleum), recycle, hydrogen-rich ; Refinery gas  
[A complex combination obtained from recycled reactor gases. It consists primarily of hydrogen with various small amounts of carbon monoxide, carbon dioxide, nitrogen, hydrogen sulfide, and saturated aliphatic hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_{12}$ ]
- FR : gaz de recyclage (pétrole), riches en hydrogène ; Gaz de raffinerie  
[Combinaison complexe obtenue par recyclage des gaz de réacteur. Se compose principalement d'hydrogène, avec de petites quantités de monoxyde et de dioxyde de carbone, d'azote, d'hydrogène sulfuré et d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_{12}$ ]
- IT : gas (petrolio), riciclo, ricchi di idrogeno ; Gas de raffinaria  
[Combinazione complessa ottenuta da gas di reattore riciclati. È costituita principalmente da idrogeno con varie piccole quantità di ossido di carbonio, anidride carbonica, azoto, idrogeno solforato e idrocarburi alifatici saturati con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_{12}$ ]
- NL : gassen (aardolie), terugvoer-, waterstof-rijk ; Raffinadenigas  
[Een complexe combinatie die wordt verkregen uit teruggevoerde reaktorgassen. Bestaat voornamelijk uit waterstof met diverse kleine hoeveelheden koolmonoxide, kooldioxide, stikstof, waterstofsulfide en verzadigde alifatische koolwaterstoffen,  $C_1$  tot en met  $C_{12}$ ]
- PT : gases (petróleo), de reciclo, ricos em hidrogénio ; Gás de refinaria  
[Uma combinação complexa obtida dos gases de reciclo. É constituída principalmente por hidrogénio com pequenas quantidades anáveis de monóxido de carbono, dióxido de carbono, azoto, sulfureto de hidrogénio, e hidrocarbonetos alifáticos saturados com numeros de átomos de carbono na gama de  $C_1$  até  $C_{12}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-01-3

EEC No 270-784-9

No 649-135-00-2

NOTA H

NOTA K

- ES : gases (petróleo), composición del reformador, ricos en hidrógeno ; Gas de refinería  
[Combinación compleja obtenida de los reformadores. Compuesta principalmente de hidrógeno con pequeñas cantidades de monóxido de carbono e hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_7$ .]
- DA : gasser (råolie), reformer make-up-, hydrogenrige ; Raffinaderigas  
[En sammensat blanding opnået fra reformerne. Den består primært af hydrogen med forskellige små mængder carbonmonoxid og aliphatiske carbonhydrider, overvejende  $C_1$  til og med  $C_7$ .]
- DE : Gase (Erdöl), Reformer Zusammensetzung, Wasserstoff-reich, Raffineriegas  
[Komplexe Kombination, erhalten aus den Reformern. Besteht in erster Linie aus Wasserstoff mit verschiedenen geringen Mengen Kohlenmonoxid und aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_7$ .]
- EL : αερια (πετρελαίου), συμπληρώματος αναμορφωτήρα, πλούσια σε υδρογόνο· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται από τους αναμορφωτήρες. Συνίσταται πρωτίστως από υδρογόνο με διάφορες μικροποσότητες μονοξειδίου άνθρακα και αλειφατικών υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_7$ .]
- EN : Gases (petroleum), reformer make-up, hydrogen-rich ; Refinery gas  
[A complex combination obtained from the reformers. It consists primarily of hydrogen with various small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_7$ .]
- FR : gaz d'appoint (pétrole), reformage, riches en hydrogène : Gaz de raffinerie  
[Combinaison complexe issue des unités de reformage. Se compose principalement d'hydrogène, avec de petites quantités de monoxyde de carbone et d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_7$ .]
- IT : gas (petrolio), condizionamento impianto reforming, ricchi di idrogeno ; Gas di raffineria  
[Combinazione complessa ottenuta dagli apparecchi di reforming. È costituita principalmente da idrogeno con vane piccole quantità di ossido di carbonio e idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_7$ .]
- NL : gassen (aardolie), reformator- : rzamel-, waterstof-rijk ; Raffinaderigas  
[Een complexe combinatie die wordt verkregen uit de reformatoren. Bestaat voornamelijk uit waterstof met diverse kleine hoeveelheden koolmonoxide en alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_7$ .]
- PT : gases (petróleo), de make-up do reformer catalítico, ricos em hidrogénio ; Gás de refinaria  
[Uma combinação complexa obtida do efluente dos reformers. É constituída por principalmente de hidrogénio com pequenas quantidades variáveis de monóxido de carbono e hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_7$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68478-02-4

EEC No 270-785-4

No 649-136-00-8

NOTA H

NOTA K

- ES : gases (petróleo), reformado en el aparato para el tratamiento con hidrógeno ; Gas de refinería  
[Combinación compleja obtenida del proceso de reformado y tratamiento con hidrógeno. Compuesta principalmente de hidrógeno, metano y etano con pequeñas cantidades de sulfuro de hidrógeno e hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_3$  a  $C_7$ .]
- DA : gasser råolie), reformeringshydrogenbehandler ; Raffinaderigas  
[En sammensat blanding opnået fra reformeringshydrogenbehandlingsprocessen. Den består primært af hydrogen, methan og ethan med forskellige små mængder hydrogensulfid og aliphatiske carbonhydrider, overvejende  $C_3$  til og med  $C_7$ .]
- DE : Gase (Erdöl), Reforming Wasserstoffbehandler ; Raffineriegas  
[Komplexe Kombination, erhalten aus dem Reforming-Wasserstoffbehandlungsverfahren. Besteht in erster Linie aus Wasserstoff, Methan und Ethan mit verschiedenen geringen Mengen Schwefelwasserstoff und aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_3$  bis  $C_7$ .]
- EL : αέρια (πετρελαίου), αναμόρφωσης με κατεργασία με υδρογόνο· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την αναμόρφωση με κατεργασία με υδρογόνο. Συνίσταται πρωτίστως από υδρογόνο, μεθάνιο και αιθάνιο με διάφορες μικροποσότητες υδροθείου και αλειφατικών υδρογονανθράκων με αριθμό ατόμων άνθρακα στην περιοχή κυρίως από  $C_3$  ως και  $C_7$ .]
- EN : Gases (petroleum), reforming hydrotreater ; Refinery gas  
[A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen, methane, and ethane with various small amounts of hydrogen sulfide and aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_7$ .]
- FR : gaz (pétrole), hydrotraitement du reformage ; Gaz de raffinerie  
[Combinaison complexe résultant de l'hydrotraitement lors du reformage. Se compose principalement d'hydrogène, de méthane et d'éthane, avec de petites quantités d'hydrogène sulfuré et d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majeure partie dans la gamme  $C_3$ - $C_7$ .]
- IT : gas (petrolio), idrotrattamento, reforming ; Gas de raffinaria  
[Combinazione complessa ottenuta dal processo di idrotrattamento-reforming. È costituita principalmente da idrogeno, metano ed etano con varie piccole quantità di acido solfidrico e idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_3$ - $C_7$ .]
- NL : gassen (aardolie), reformerende waterstofbehandelaar ; Raffinaderigas  
[Een complexe combinatie die wordt verkregen uit het reformerende waterstofbehandelingsproces. Bestaat voornamelijk uit waterstof, methaan en ethaan met diverse kleine hoeveelheden waterstofsulfide en alifatische koolwaterstoffen, overwegend  $C_3$  tot en met  $C_7$ .]
- PT : gases (petróleo), da unidade de hydroforming ; Gás de refinaria  
[Uma combinação complexa obtida do processo de hydroforming. É constituída predominantemente por hidrógeno, metano, e etano com pequenas quantidades variáveis de sulfureto de hidrógeno e hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_3$  até  $C_7$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-03-5

EEC No 270-787-5

No 649-137-00-3

NOTA H

NOTA K

- ES: gases (petróleo), reformado en el aparato para el tratamiento con hidrogeno, ricos en hidrógeno y metano ; Gas de refineria  
[Combinación compleja obtenida del proceso de reformado y tratamiento con hidrógeno. Compuesta principalmente de hidrogeno y metano con pequeñas cantidades de monóxido de carbono, dióxido de carbono, nitrógeno e hidrocarburos alifáticos saturados con un numero de carbonos en su mayor parte dentro del intervalo de  $C_2$  a  $C_4$ ]
- DA: gasser (råolie), reformeringshydrogenbehandler-, hydrogen- og methanrige ; Raffinaderigas  
[En sammensat blanding opnået fra reformeringshydrogenbehandlingsprocessen. Den består primært af hydrogen og methan med forskellige små mængder carbonmonoxid, carbondioxid, nitrogen og mættede, aliphatiske carbonhydrider, overvejende  $C_2$  til og med  $C_4$ ]
- DE: Gase (Erdöl), Reforming Wasserstoffbehandler, Wasserstoff-Methan-reich ; Raffineriegas  
[Komplexe Kombination, erhalten aus dem Reforming-Wasserstoffbehandlungsverfahren. Besteht in erster Linie aus Wasserstoff und Methan mit verschiedenen geringen Mengen Kohlenmonoxid, Kohlendioxid, Stickstoff und gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_2$  bis  $C_4$ ]
- EL: αερια (πετρελαίου), αναμόρφωσης με κατεργασία με υδρογόνο πλούσια σε υδρογόνο-μεθάνιο· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται από την αναμόρφωση με κατεργασία με υδρογόνο. Συνίσταται πρωτίστως από υδρογόνο και μεθάνιο με διάφορες μικροποσότητες μονοξειδίου άνθρακα, διοξειδίου άνθρακα, αζώτου και κορεσμένων αλειφατικών υδρογονανθράκων με αριθμό ατόμων άνθρακα στην περιοχή από  $C_2$  ως και  $C_4$ ]
- EN: Gases (petroleum), reforming hydrotreater, hydrogen-methane-rich ; Refinery gas  
[A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen and methane with various small amounts of carbon monoxide, carbon dioxide, nitrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_2$  through  $C_4$ ]
- FR: gaz (pétrole), hydrotraitement du reformage, riches en hydrogene et en méthane ; Gaz de raffinerie  
[Combinaison complexe résultant de l'hydrotraitement lors du reformage. Se compose principalement d'hydrogene et de methane, avec de petites quantités de monoxyde et de dioxyde de carbone, d'azote et d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_2$ - $C_4$ ]
- IT: gas (petrolio), idrotrattamento-reforming, ricchi di idrogeno-metano ; Gas di raffineria  
[Combinazione complessa ottenuta dal processo di idrotrattamento-reforming. È costituita principalmente da idrogeno e metano con varie piccole quantità di ossido di carbonio, anidride carbonica, azoto e idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_2$ - $C_4$ ]
- NL: gassen (aardolie), reformerende waterstofbehandelaar, rijk aan waterstof en methaan ;  
[Een complexe combinatie die wordt verkregen uit het reformerende waterstofbehandelingsproces. Bestaat voornamelijk uit waterstof en methaan met diverse kleine hoeveelheden koolmonoxide, kooldioxide, stikstof en verzadigde alifatische koolwaterstoffen overwegend  $C_2$  tot en met  $C_4$ ]
- PT: gases (petróleo), da unidade de hydroforming, ricos em hidrogénio e metano , Gás de refinaria  
[Uma combinação complexa obtida do processo de hydroforming. É constituída predominantemente por hidrogenio e metano com pequenas quantidades variáveis de monóxido de carbono, dióxido de carbono, azoto e hidrocarbonetos alifáticos saturados com numeros de átomos de carbono predominantemente na gama de  $C_2$  ate  $C_4$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-04-6

EEC No 270-788-0

No 649-138-00-9

NOTA H

NOTA K

- ES : gases (petróleo), composición del reformado en el aparato para el tratamiento con hidrógeno, ricos en hidrógeno ; Gas de refinería  
[Combinación compleja obtenida del proceso de reformado y tratamiento con hidrógeno. Compuesta principalmente de hidrógeno con pequeñas cantidades de monóxido de carbono e hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : gasser (råolie), reformeringshydrogenbehandler make-up-, hydrogenrige ; Raffinaderigas  
[En sammensat blanding opnået fra reformeringshydrogenbehandlingsprocessen. Den består primært af hydrogen med forskellige små mængder carbonmonoxid og aliphatiske carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE : Gase (Erdöl), Reforming Wasserstoffbehandler Zusammensetzung, Wasserstoff-reich ; Raffineriegas  
[Komplexe Kombination, erhalten aus dem Reforming-Wasserstoffbehandlungsverfahren. Besteht in erster Linie aus Wasserstoff mit verschiedenen geringen Mengen Kohlenmonoxid und aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αέρια (πετρελαίου), συμπλήρωσης μονάδας υδρογονοκατεργασίας αναμόρφωσης, πλούσια σε υδρογόνο· Καυσίμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται από την υδρογονοκατεργασία αναμόρφωσης. Συνίσταται πρωτίστως από υδρογόνο και ποικίλες μικροποσότητες μονοξειδίου άνθρακα και αλειφατικών υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Gases (petroleum), reforming hydrotreater make-up, hydrogen-rich ; Refinery gas  
[A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen with various small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz d'appoint (pétrole), hydrotraitement du reformage, riches en hydrogene ; Gaz de raffinerie  
[Combinaison complexe résultant de l'hydrotraitement lors du reformage. Se compose principalement d'hydrogène, avec de petites quantités de monoxyde et carbone et d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT : gas (petrolio), condizionamento impianto idrotrattamento-reforming, ricchi di idrogeno ; Gas di raffineria  
[Combinazione complessa ottenuta dal processo di idrotrattamento-reforming. È costituita principalmente da idrogeno con varie piccole quantità di ossido di carbonio e idrocarburi alifatici con numero di atomi nell'intervallo  $C_1$ - $C_6$ .]
- NL : gassen (aardolie), reformerende waterstofbehandelaar aanvullings-, waterstof-rijk , Raffinaderigas  
[Een complexe combinatie die wordt verkregen uit het reformerende waterstofbehandelingsproces. Bestaat voornamelijk uit waterstof met diverse kleine hoeveelheden koolmonoxide en alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gases (petróleo), de make-up da unidade de hydroforming, ricos em hidrogénio , Gás de refinaria  
[Uma combinação complexa obtida do processo de hydroforming. É constituída predominantemente por hidrogénio com pequenas quantidades variáveis de monóxido de carbono e hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="375 443 395 465" style="text-align: center;">T</div> <div data-bbox="336 495 432 584" style="text-align: center;">  </div> <div data-bbox="948 495 1018 517" style="text-align: right;">R : 45</div> <div data-bbox="948 546 1050 568" style="text-align: right;">S : 53-45</div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-05-7

EEC No 270-789-6

No 649-139-00-4

NOTA H

NOTA K

- ES: gases (petróleo), destilación de los productos de craqueo termico : Gas de refineria  
[Combinación compleja producida por destilación de productos de un proceso de craqueo térmico. Compuesta de hidrógeno, sulfuro de hidrógeno, monóxido de carbono, dióxido de carbono e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA: gasser (råolie), termisk krakning destillations- ; Raffinaderigas  
[En sammensat blanding fremskullet ved destillation af produkterne fra en termisk krakningsproces. Den består af hydrogen, hydrogensulfid, carbonmonoxid, carbondioxid og carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE: Gase (Erdöl), thermisches Kracken Destillation ; Raffineriegas  
[Komplexe Kombination, hergestellt durch Destillation von Produkten aus einem thermischen Krackverfahren. Besteht aus Wasserstoff, Schwefelwasserstoff, Kohlenmonoxid, Kohlendioxid und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL: αερια (πετρελαίου), απόσταξης θερμικής πυρόλυσης· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που παράγεται με απόσταξη προϊόντων από θερμική πυρόλυση. Συνίσταται από υδρογόνο, υδρόθειο, μονοξείδιο άνθρακα, διοξείδιο άνθρακα, και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN: Gases (petroleum), thermal cracking distn. ; Refinery gas  
[A complex combination produced by distillation of products from a thermal cracking process. It consists of hydrogen, hydrogen sulfide, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR: gaz (pétrole), distillation du craquage thermique ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage thermique. Se compose d'hydrogène, d'hydrogène sulfuré, de monoxyde et de dioxyde de carbone, et d'hydrocarbures dont le nombre de carbones se situe en majeure dans la gamme  $C_1$ - $C_6$ .]
- IT: gas (petrolio), distillazione da cracking termico ; Gas di raffineria  
[Combinazione complessa ottenuta per distillazione di prodotti provenienti da un processo di cracking termico. È costituita da idrogeno, idrogeno solforato, ossido di carbonio, anidride carbonica e idrocarburi con numero di atomi di carbonio, prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL: gassen (aardolie), thermisch kraken-destillatie- ; Raffinaderijgas  
[Een complexe combinatie die wordt gevormd door desulfatie van produkten van een thermisch kraakproces. Bestaat uit waterstof, waterstofsulfide, koolmonoxide, kooldioxide en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT: gases (petróleo), da destilação dos produtos do cracking termico ; Gás de refinaria  
[Uma combinação complexa obtida produzida por destilação de produtos de um processo de cracking térmico. É constituída por hidrogénio, sulfureto de hidrogénio, monóxido de carbono, dióxido de carbono e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Classificac  n, Klasificering, Einstufung, Ταξινόμηση, Classification, Classificac  o, Classificac  o, Indeling, Classifica  o*

Carc. Cat. 2, R 45

*Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling,  tiquette, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*L mites de concentrac  n, Konzentrationsgr nser, Konzentrationsgrenzwerte,  ρια συγκ ντρωσης, Concentration limits, L mites de concentration, Limiti di concentrazione, Concentratiegrenzen, L mites de concentra  o*




Cas No 68478-25-1

EEC No 270-805-1

No 649-140-00-X

NOTA H

NOTA K

- ES : gas de cola (petróleo), aparato de absorción para el refraccionamiento de productos del craqueador catalítico ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida del refraccionamiento de productos de un proceso de craqueo catalítico. Compuesta de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{12}$ ]
- DA : slutgas (råolie), katalytisk krakker refraktioneringsabsorber ; Raffinaderigas  
[En sammensat blanding af carbonhydrider opnået ved fraktionering af produkter fra en katalytisk krakningsproces. Den består af hydrogen og carbonhydrider, overvejende  $C_1$  til og med  $C_{12}$ ]
- DE : Endgas (Erdöl), katalytische Krack Refraktionierung Absorber ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen aus der Refraktionierung von Produkten aus einem katalytischen Krackverfahren. Besteht aus Wasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{12}$ ]
- EL : αεριο ουρας (πετρελαίου), απορροφητήρα κλασμάτωσης μονάδας καταλυτικής πυρόλυσης· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από επανακλασμάτωση προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογόνο και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{12}$ ]
- EN : Tail gas (petroleum), catalytic cracker refractionation absorber ; Refinery gas  
[A complex combination of hydrocarbons obtained from refractionation of products from a catalytic cracking process. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{12}$ ]
- FR : gaz résiduels (pétrole), refractionnement du craquage catalytique, absorbeur ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures issue du refractionnement des produits d'un craquage catalytique. Se compose d'hydrogene et d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_{12}$ ]
- IT : gas di coda (petrolio), dall'assorbitore di rifrazionamento dell'apparecchiatura di cracking catalitico ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta dal rifrazionamento dei prodotti di un processo di cracking catalitico. È costituita da idrogeno e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{12}$ ]
- NL : restgas (aardolie), katalytische kraker-refractioneringsabsorbator ; Raffinaderigas  
[Een complexe verzameling koolwaterstoffen, verkregen door refractionering van produkten uit een katalytisch kraakproces. Bestaat uit waterstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{12}$ ]
- PT : gas residual (petróleo), da torre de absorção de uma unidade de retraccionamento de um cracker catalítico ; Gas de refinaria  
[Uma combinação complexa de hidrocarbonetos obtida do refraccionamento de produtos de uma processo de cracking catalítico. É constituída por hidrogénio e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  ate  $C_{12}$ ]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rosulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-27-3

EEC No 270-807-2

No 649-141-00-5

NOTA H

NOTA K

- ES: gas de cola (petróleo), separador de nafta reformada catalíticamente ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida del reformado catalítico de nafta de primera destilación. Compuesta de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA: slutgas (råolie), katalytisk reformeret naphtha separator- ; Raffinaderigas  
[En sammensat blanding af carbonhydrider opnået ved den katalytiske reformering af straight-run naphtha. Den består af hydrogen og carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE: Endgas (Erdöl), katalytisch reformierte Naphtha Separator ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen aus katalytischem Reformieren von straight-run Naphtha. Besteht aus Wasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL: αεριο ουρας (πετρελαίου), διαχωριστήρα καταλυτικά αναμορφωμένης νάφθας- Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από την καταλυτική αναμόρφωση νάφθας απευθείας απόσταξης. Συνίσταται από υδρογόνο και υδρογονάνθρακες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN: Tail gas (petroleum), catalytic reformed naphtha separator ; Refinery gas  
[A complex combination of hydrocarbons obtained from the catalytic reforming of straight run naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR: gaz résiduels (pétrole), séparateur de naphtha de reformage catalytique ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures résultant du reformage catalytique de naphtha de distillation directe. Se compose d'hydrogène et d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT: gas di cosa (petrolio), separatore nafta riformata cataliticamente ; Gas di raffineria  
[Combinazione complessa di idrocarburi dal reforming catalitico di nafta di prima distillazione. E costituita da idrogeno e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL: restgas (aardolie), katalytisch gereformeerde nafta-afscheider ; Raffinaderigas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de katalytische reformering van door directe fractionering verkregen nafta. Bestaat uit waterstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT: gas residual (petróleo), do separador da nafta do reforming catalítico ; Gas de refinação  
[Uma combinação complexa de hidrocarbonetos obtida dos produtos do reforming catalítico da nafta de destilação directa. E constituída por hidrogénio e hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiō, Classificazione, Indeling, Classificaçāo*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentraci3n, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçāo*


Cas No 68478-28-4

EEC No 270-808-8

No 649-142-00-0

NOTA H

NOTA K

- ES : gas de cota (petróleo), estabilizador de nafta reformada catalíticamente ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida de la estabilización de nafta reformada catalíticamente. Compuesta de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : slutgas (råolie), katalytisk reformeret nafta stabilizer- ; Raffinadengas  
[En sammensat blanding af carbonhydrider opnået ved stabiliseringen af katalysk reformeret nafta. Den består af hydrogen og carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE : Endgas (Erdöl), katalytisch reformierte Naphtha Stabilisator ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen aus der Stabilisierung katalytisch reformierter Naphtha. Besteht vorherrschend aus Wasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αέριο ουράς (πετρελαίου), σταθεροποιητήρα καταλυτικά αναμορφωμένης νάφθας- Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από την σταθεροποίηση καταλυτικά αναμορφωμένης νάφθας. Συνίσταται από υδρογόνο και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Tail gas (petroleum), catalytic reformed naphtha stabilizer ; Refinery gas  
[A complex combination of hydrocarbons obtained from the stabilization of catalytic reformed naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz résiduels (pétrole), stabilisateur de nafta de reformage catalytique ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures résultant de la stabilisation du nafta de reformage catalytique. Se compose d'hydrogène et d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT : gas di coda (petrolio), stabilizzatore nafta riformata cataliticamente ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione di nafta riformata cataliticamente. E costituita da idrogeno e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$  -  $C_6$ .]
- NL : restgas (aardolie), katalytisch gereformeerde nafta-stabilisator ; Raffinadenigas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de stabilisatie van katalytisch gereformeerde nafta. Bestaat uit waterstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gas residual (petróleo), do estabilizador de nafta do reforming catalítico ; Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos obtida da estabilização de nafta do reforming catalítico. É constituída por hidrogénio e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68478-29-5

EEC No 270-809-3

No 049-143-00-6

NOTA H

NOTA K

- ES : gas de cola (petróleo), separador del aparato para el tratamiento con hidrógeno del destilado craqueado ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida por tratamiento de los destilados craqueados con hidrógeno en presencia de un catalizador. Compuesta de hidrógeno e hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>7</sub>.]
- DA : slutgas (råolie), krakket destillat hydrogenbehandlerseparator- ; Raffinadengas  
[En sammensat blanding af carbonhydrider opnår ved at behandle krakkede destillater med hydrogen i tilstedeværelse af en katalysator. Den består af hydrogen og mættede, aliphatiske carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>7</sub>.]
- DE : Endgas (Erdöl); gekracktes Destillat Wasserstoffbehandler Separator ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln gekrackter Destillate mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Wasserstoff und gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>7</sub>.]
- EL : αεριο ουρας (πετρελαιο), διαχωριστήρα μονάδας υδρογονοκατεργασίας πυρολυμένου αποστάγματος· Καυσίμο αεριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία πυρολυμένων αποσταγμάτων με υδρογόνο παρουσία καταλυτή. Συνίσταται από υδρογόνο και κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>7</sub> περίπου.]
- EN : Tail gas (petroleum), cracked distillate hydrotreater separator ; Refinery gas  
[A complex combination of hydrocarbons obtained by treating cracked distillates with hydrogen in the presence of a catalyst. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>7</sub>.]
- FR : gaz résiduels (pétrole), hydrotraitement de distillat de craquage, séparateur ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par traitement de distillats de craquage à l'hydrogène en présence d'un catalyseur. Se compose d'hydrogène et d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe en majeure partie dans la gamme C<sub>1</sub>-C<sub>7</sub>.]
- IT : gas di coda (petrolio), separatore di idrotrattamento del distillato crackizzato ; Gas di raffinazione  
[Combinazione complessa di idrocarburi ottenuta trattando con idrogeno in presenza di un catalizzatore, distillati crackizzati. È costituita da idrogeno e idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>7</sub>.]
- NL : restgas (aardolie), gekraakt destillaat waterstofbehandelaarsafscheider ; Raffinaderijgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de behandeling van gekraakte destillaten met waterstof in de aanwezigheid van een katalysator. Bestaat uit waterstof en verzadigde alifatische koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>7</sub>.]
- PT : gas residual (petróleo), do separador da unidade de tratamento com hidrogénio de destilados de cracking ; Gas de refinaria  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de destilados de cracking com hidrogénio na presença de um catalisador. É constituída por hidrogénio e hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>7</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="365 441 387 468" data-label="Text">T</div> <div data-bbox="327 490 424 584" data-label="Image"> </div> <div data-bbox="928 495 1008 521" data-label="Text">R : 45</div> <div data-bbox="928 546 1038 573" data-label="Text">S : 53-45</div>
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*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*




Cas No 68478-30-8

EEC No 270-810-9

No 649-144-00-1

NOTA H


NOTA K

- ES : gas de cola (petróleo), separador de nafta de primera destilación hidrodesulfurada ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida por hidrodesulfuración de nafta de primera destilación. Compuesta de hidrógeno e hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : slutgas (råolie), hydroafsvovlet straight-run naphtha separator- ; Raffinaderigas  
[En sammensat blanding af carbonhydrider opnået ved hydroafsvovling af straight-run naphtha. Den består af hydrogen og mættede, aliphatiske carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE : Endgas (Erdöl), hydrodesulfurierte straight-run Naphtha Separator ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen aus der Hydrodesulfurierung von straight-run Naphtha. Besteht aus Wasserstoff und gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αεριο ουρας (πετρελαίου), διαχωριστήρα υδρογοναποθειωμένης νάφθας απευθείας απόσταξης. Καύσιμο αέριο διωλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από υδρογονοαποθείωση νάφθας απευθείας απόσταξης. Συνίσταται από υδρογόνο και κορεσμένους αλειφατικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως από  $C_1$  ως και  $C_6$  περίπου.]
- EN : Tail gas (petroleum), hydrodesulfurized straight-run naphtha separator ; Refinery gas  
[A complex combination of hydrocarbons obtained from hydrodesulfurization of straight-run naphtha. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz résiduels (pétrole), séparateur de naphta de distillation directe hydrodésulfuré ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par hydrodésulfuration de naphta de distillation directe. Se compose d'hydrogène et d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT : gas di coda (petrolio), separatore nafta di prima distillazione idrodesolforata ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta per idrodesolforazione di nafta di prima distillazione. È costituita da idrogeno e idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL : restgas (aardolie), waterstofontzwavelde door directe fractionering verkregen nafta-afscheider ; Raffinaderijgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de waterstofontzwaveling van door directe fractionering verkregen nafta. Bestaat uit waterstof en verzadigde alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gas residual (petróleo), do separador da nafta de destilação directa hidrogenodessulfurizada ; Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos obtida da hidrogenodessulfurização de nafta de destilação directa. É constituída por hidrogénio e hidrocarbonetos alifáticos saturados com numeros de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68513-14-4

EEC No 270-999-8

No 649-145-00-7

NOTA H

NOTA K

- ES : gases (petróleo), productos de cabeza del estabilizador de nafta de primera destilación reformada catalíticamente ; Gas de refinería  
[Combinación compleja de hidrocarburos obtenida del reformado catalítico de nafta de primera destilación seguida por fraccionamiento del efluente total. Compuesta de hidrógeno, metano, etano y propano.]
- DA : gasser (råolie), katalytisk reformeret straight-run naphtha stabilizer-topfraktioner ; Raffinaderigas  
[En sammensat blanding af carbonhydrider opnået ved den katalytiske reformering af straight-run naphtha, efterfulgt af fraktionering af det totale udløb. Den består af hydrogen, methan, ethan og propan.]
- DE : Gase (Erdöl), katalytisch reformierte straight-run Naphtha Stabilisierer Kopf ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus katalytischem Reforming von straight-run Naphtha, gefolgt durch Fraktionierung des gesamten Ausflusses. Besteht aus Wasserstoff, Methan, Ethan und Propan.]
- EL : αερια (πετρελαίου), προϊόντων κορυφής σταθεροποιητή καταλυτικά αναμορφωμένης απευθείας νάφθας· Καύσιμο αεριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την καταλυτική αναμόρφωση απευθείας νάφθας που ακολουθείται από κλασμάτωση της ολικής απορροής. Συνίσταται από υδρογόνο, μεθάνιο, αιθάνιο και προπάνιο.]
- EN : Gases (petroleum), catalytic reformed straight-run naphtha stabilizer overheads ; Refinery gas  
[A complex combination of hydrocarbons obtained from the catalytic reforming of straight-run naphtha followed by fractionation of the total effluent. It consists of hydrogen, methane, ethane and propane.]
- FR : gaz (pétrole), reformage catalytique de naphtha de distillation directe, produits de tête du stabilisateur ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par reformage catalytique de naphtha de distillation directe, puis fractionnement de la totalité de l'effluent. Se compose d'hydrogène, de méthane, d'éthane et de propane.]
- IT : gas (petrolio), tagli di testa nafta di prima distillazione sottoposta a reforming catalitico ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta dal reforming catalitico di nafta di prima distillazione, seguito da frazionamento dell'effluente totale. È costituita da idrogeno, metano, etano e propano.]
- NL : gassen (aardolie), topprodukten uit stabilisator van katalytisch gereformeerde door directe fractionering verkregen nafta ; Raffinaderigas  
[Een complexe verzameling koolwaterstoffen, verkregen door de katalytische reformering van door directe fractionering verkregen nafta gevolgd door fractionering van de totale uitstroom. Bestaat uit waterstof, methaan, ethaan en propaan.]
- PT : gases (petróleo), de cabeça do estabilizador do reforming catalítico da nafta de destilação directa ; Gás de refinaria  
[Uma combinação complexa de hidrocarbonetos obtida do reforming catalítico de nafta de destilação directa seguido de fraccionamento do efluente total. É constituída por hidrogénio, metano, etano e propano.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Røtulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68513-18-8

EEC No 271-003-4

No 649-146-00-2

NOTA H

NOTA K

- ES : gases (petróleo), efluente del reformador con tambor de expansión súbita a alta presión ; Gas de refinaria  
[Combinación compleja producida por expansión súbita a alta presión del efluente del reactor del reformado. Compuesta principalmente de hidrógeno con pequeñas cantidades de metano, etano y propano.]
- DA : gasser (råolie), reformer-udløbs højtryks-flashkammer aftræks- ; Raffinaderigas  
[En sammensat blanding fremstillet ved højtryks-flashing af udløbet fra reformeringsreaktoren. Den består primært af hydrogen med forskellige små mængder methan, ethan og propan.]
- DE : Gase (Erdöl), Reformier Ausfluß Hochdruck Entspannungstrommel Ab- ; Raffineriegas  
[Komplexe Kombination, hergestellt durch Hochdruck-Entspannung des Abflusses aus dem Reformier-Reaktor. Besteht in erster Linie aus Wasserstoff mit verschiedenen geringen Mengen Methan, Ethan und Propan.]
- EL : αερια (πετρελαίου), απορροής αναμορφωτήρα εκλυόμενα από δοχείο εκτόνωσης υψηλής πίεσης. Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που παράγεται με υψηλής πίεσης απότομη εκτόνωση της απορροής από τον αντιδραστήρα αναμόρφωσης. Συνίσταται πρωτίστως από υδρογόνο με διάφορες μικρές ποσότητες μεθανίου, αιθανίου και προπανίου.]
- EN : Gases (petroleum), reformer effluent high-pressure flash drum off ; Refinery gas  
[A complex combination produced by the high-pressure flashing of the effluent from the reforming reactor. It consists primarily of hydrogen with various small amounts of methane, ethane, and propane.]
- FR : gaz résiduels (pétrole), effluent de reformage, ballon de détente à haute pression ; Gaz de raffinerie  
[Combinaison complexe produite par détente à haute pression de l'effluent du réacteur de reformage. Se compose principalement d'hydrogène, avec de petites quantités de méthane, d'éthane et de propane.]
- IT : gas (petrolio), dal flashing ad alta pressione dell'effluente del reforming ; Gas di raffinaria  
[Combinazione complessa prodotta mediante flashing ad alta pressione dell'effluente del reattore di reforming. È costituita principalmente da idrogeno, con varie piccole quantità di metano, etano e propano.]
- NL : gassen (aardolie), reformatoruitstroom hoge druk 'dampvutuitstoot- ; Raffinaderigas  
[Een complexe combinatie die wordt gevormd door het afdampen onder hoge druk van de uitstroom uit de reformeringsreactor. Bestaat voornamelijk uit waterstof met uiteenlopende kleine hoeveelheden methaan, ethaan en propaan.]
- PT : gases (petróleo), do tanque de flash a alta pressão do efluente do reformer ; Gás de refinaria  
[Uma combinação complexa produzida pela separação a alta pressão do efluente do reactor de reforming. É constituída principalmente por hidrogénio com pequenas quantidades variáveis de metano, etano, e propano.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68513-19-9

EEC No 271-005-5

No 649-147-00-8

NOTA H

NOTA K

- ES: gases (petróleo), effluente del reformador con tambor de expansión súbita a baja presión; Gas de refinería  
[Combinación compleja producida por expansión súbita a baja presión del effluente del reactor de reformado. Compuesta principalmente de hidrógeno con pequeñas cantidades de metano, etano y propano.]
- DA: gasser (råolie), reformer-udløbs lavtryks-flashkammer attræks-, Raffinaderigas  
[En sammensat blanding fremstillet ved lavtryks-flashing af udløbet fra reformeringsreaktoren. Den består primært af hydrogen med forskellige små mængder methan, ethan og propan.]
- DE: Gase (Erdöl), Reformier Ausfluß Niederdruck Entspannungstrommel Ab-, Raffineriegas  
[Komplexe Kombination, hergestellt durch Niederdruck-Entspannung des Abflusses aus dem Reformier-Reaktor. Besteht in erster Linie aus Wasserstoff mit verschiedenen geringen Mengen Methan, Ethan und Propan.]
- EL: αέρια (παιτρελαίου), απορροής αναμορφωτήρα εκλύόμενα από δοχείο εκτόνωσης χαμηλής πίεσης· Καυσίμο αέριο διωλιστηρίου  
[Πολύπλοκος συνδυασμός που παράγεται με απότομη εκτόνωση χαμηλής πίεσης της απορροής του αντιδραστήρα αναμορφωσης. Συνίσταται κυρίως από υδρογόνο με διάφορες μικρές ποσότητες μεθανίου, αιθανίου και προπανίου.]
- EN: Gases (petroleum), reformer effluent low-pressure flash drum off; Refinery gas  
[A complex combination produced by low-pressure flashing of the effluent from the reforming reactor. It consists primarily of hydrogen with various small amounts of methane, ethane, and propane.]
- FR: gaz résiduels (pétrole), effluent de reformage, ballon de détente à basse pression; Gaz de raffinerie  
[Combinaison complexe produite par détente à basse pression de l'effluent du réacteur de reformage. Se compose principalement d'hydrogène, avec de petites quantités de méthane, d'éthane et de propane.]
- IT: gas (petrolio), dal flashing a bassa pressione dell'effluente del reforming, Gas di raffinaria  
[Combinazione complessa prodotta mediante flashing a bassa pressione dell'effluente del reattore di reforming. È costituita principalmente da idrogeno, con varie piccole quantità di metano, etano e propano.]
- NL: gassen (aardolie), reformator-uitstroom lage druk afdampvat uitstoot-, Raffinaderigas  
[Een complexe combinatie die wordt gevormd door het afdampen onder lage druk van de uitstroom uit de reformeringsreactor. Bestaat voornamelijk uit waterstof met uiteenlopende kleine hoeveelheden methaan, ethaan en propaan.]
- PT: gases (petróleo), do tanque de flash a baixa pressão do effluente do reformer; Gás de refinaria  
[Uma combinação complexa produzida por separação a baixa pressão do effluente do reactor de reforming. É constituída principalmente por hidrogénio com pequenas quantidades variáveis de metano, etano, e propano.]

*Clasificación, Klasifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

	<p>R : 45</p> <p>S : 53-45</p>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68527-15-1

EEC No 271-258-1

No 649-148-00-3

NOTA H

NOTA K

- ES: gases (petróleo), destilación de gas de refinería de petróleo; Gas de refinería  
[Combinación compleja separada por destilación de una corriente de gas con hidrógeno, monóxido de carbono, dióxido de carbono e hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_4$  u obtenidos por craqueo de etano y propano. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ , hidrógeno, nitrógeno y monóxido de carbono.]
- DA: gasser (råolie), olieraffinaderigas destillationsaftræks-; Raffinaderigas  
[En sammensat blanding separeret ved destillation af en gasstrøm, indeholdende hydrogen, carbonmonoxid, carbon dioxide og carbonhydrider,  $C_1$  til og med  $C_4$ , eller opnået ved krakning af ethan og propan. Den består af carbonhydrider, overvejende  $C_1$  til og med  $C_4$ , hydrogen, nitrogen og carbonmonoxid.]
- DE: Gase (Erdöl), Öl Raffinerie Gasdestillation Ab-; Raffineriegas  
[Komplexe Kombination, durch Destillation eines Wasserstoffes, Kohlenmonoxid, Kohlendioxid und Kohlenwasserstoffe mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_4$  enthaltenden Gaslaufes getrennt oder durch Kracken von Ethan und Propan erhalten. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ , Wasserstoff, Stickstoff und Kohlenmonoxid.]
- EL: αερια (πετρελαίου), εξόδου απόσταξης αερίου διυλιστηρίου πετρελαίου· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που διαχωρίζεται με απόσταξη αερίου ρεύματος το οποίο περιέχει υδρογόνο, μονοξείδιο άνθρακα, διοξείδιο άνθρακα και υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή  $C_1$  ως και  $C_4$  ή λαμβάνεται με πυρόλυση αιθανίου και προπανίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ , υδρογόνο, άζωτο και μονοξείδιο άνθρακα.]
- EN: Gases (petroleum), oil refinery gas distn. off; Refinery gas  
[A complex combination separated by distillation of a gas stream containing hydrogen, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_4$  or obtained by cracking ethane and propane. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ , hydrogen, nitrogen, and carbon monoxide.]
- FR: gaz résiduels (pétrole), distillation des gaz de raffinage de l'huile; Gaz de raffinerie  
[Combinaison complexe séparée par distillation d'un mélange gazeux contenant de l'hydrogène, du monoxyde et du dioxyde de carbone, et des hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_4$ , ou bien obtenue par craquage de l'éthane et du propane. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ , d'hydrogène, d'azote et de monoxyde de carbone.]
- IT: gas (petrolio), da distillazione gas di raffineria di petrolio; Gas di raffineria  
[Combinazione complessa separata per distillazione di una corrente di gas contenente idrogeno, ossido di carbonio, anidride carbonica e idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_4$  o ottenuta per cracking di etano e propano. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ , idrogeno, azoto e ossido di carbonio.]
- NL: gassen (aardolie), olieraffinage-gasdestillatie uitstoot-; Raffinaderijgas  
[Een complexe combinatie die wordt afgescheiden door destillatie van een gasstroom die waterstof, koolmonoxide, kooldioxide en koolwaterstoffen,  $C_1$  tot en met  $C_4$  bevat of verkregen door het kraken van ethaan en propaan. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ , waterstof, stikstof en koolmonoxide.]
- PT: gases (petróleo), da destilação de gás de refinaria; Gás de refinaria  
[Uma combinação complexa separada por destilação de uma corrente gasosa contendo hidrogénio, monóxido de carbono, dióxido de carbono e hidrocarbonetos com números de átomos de carbono na gama de  $C_1$  até  $C_4$  ou obtida por cracking de etano e propano. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ , hidrogénio, azoto, e monóxido de carbono.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação,*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68602-82-4

EEC No 271-623-5

No 649-149-00-9

NOTA H

NOTA K

- ES : gases (petróleo), productos de cabeza del despentanizador del aparato para tratamiento con hidrógeno de la unidad de benceno ; Gas de refinería  
[Combinación compleja producida por el tratamiento de la alimentación de la unidad de benceno con hidrógeno en presencia de un catalizador seguido de despentanización. Compuesta principalmente de hidrógeno, etano y propano con cantidades pequeñas de nitrógeno, monóxido de carbono, dióxido de carbono e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ . Puede contener trazas de benceno.]
- DA : gasser (råolie), benzenenhed hydrogenbehandler depentanizer-topfraktioner ; Raffinaderigas  
[En sammensat blanding fremstillet ved at behandle føden fra benzenenheden med hydrogen i tilstedeværelse af en katalysator, efterfulgt af depentanisering. Den består primært af hydrogen, ethan og propan med forskellige små mængder nitrogen, carbonmonoxid, carbondioxid og carbonhydrider, overvejende  $C_1$  til og med  $C_6$ . Den kan indeholde spormængder af benzen.]
- DE : Gase (Erdöl), Benzoleinheit Wasserstoffbehandler Entpentanisierer Kopf ; Raffinergas  
[Komplexe Kombination, hergestellt durch Behandeln der Beschickung aus einer Benzolanlage mit Wasserstoff in Gegenwart eines Katalysators, gefolgt durch Entpentanisieren. Besteht in erster Linie aus Wasserstoff, Ethan und Propan mit verschiedenen geringen Mengen Stickstoff, Kohlenmonoxid, Kohlendioxid und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ . Kann Spuren Benzol enthalten.]
- EL : αερία (πετρελαίου), προϊόντα κορυφής αποπεντανωτήρα μονάδας υδρογονοκατεργασίας βενζολίου Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία πρώτης ύλης που προέρχεται από τη μονάδα βενζολίου με υδρογόνο παρουσία καταλύτη και η οποία ακολουθείται από αποπεντανώση. Συνίσταται κυρίως από υδρογόνο, αιθάνιο και προπάνιο μαζί με διάφορες μικροποσότητες αζώτου, μονοξειδίου άνθρακα, διοξειδίου άνθρακα και υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ . Μπορεί να περιέχει ίχνη βενζολίου.]
- EN : Gases (petroleum), benzene unit hydrotreater depentanizer overheads ; Refinery gas  
[A complex combination produced by treating the feed from the benzene unit with hydrogen in the presence of a catalyst followed by depentanizing. It consists primarily of hydrogen, ethane and propane with various small amounts of nitrogen, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ . It may contain trace amounts of benzene.]
- FR : gaz (pétrole), unité de production du benzène, hydrotraitement, produits de tête du depentaniseur ; Gaz de raffinerie  
[Combinaison complexe produite par traitement de la charge issue de l'unité de production du benzène avec de l'hydrogène en présence d'un catalyseur, puis par dépentanisation. Se compose principalement d'hydrogène, d'éthane et de propane, avec de petites quantités d'azote, de monoxyde et de dioxyde de carbone, et d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_1$ - $C_6$ . Peut contenir des traces de benzène.]
- IT : gas (petrolio), frazioni di testa del depentanizzatore di idrotattamento dell'unità benzene ; Gas di raffineria  
[Combinazione complessa prodotta per trattamento della carica proveniente dall'unità benzene con idrogeno in presenza di un catalizzatore, seguito da depentanizzazione. È costituita principalmente da idrogeno, etano e propano con varie piccole quantità di azoto, ossido di carbonio, anidride carbonica e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ . Può contenere tracce di benzene.]
- NL : gassen (aardolie), benzeen-installatie waterstofbehandelaar depentanizer-topprodukten ; Raffinaderigas  
[Een complexe combinatie die wordt gevormd door de behandeling van het materiaal uit de benzeen-installatie met waterstof in de aanwezigheid van een katalysator gevolgd door depentanisering. Bestaat voornamelijk uit waterstof, ethaan en propaan met verscheidene kleine hoeveelheden stikstof, koolmonoxide, kooldioxide en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ . Kan sporen benzeen bevatten.]
- PT : gases (petróleo), de cabeça do despentanizador da unidade de tratamento com hidrogénio da unidade de benzeno ; Gás de refinaria  
[Uma combinação complexa produzida por tratamento da carga da unidade de benzeno com hidrogénio na presença de um catalisador seguido de despentanização. É constituída principalmente por hidrogénio, etano e propano com pequenas quantidades variáveis de azoto, monóxido de carbono, dióxido de carbono e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ . Pode conter vestígios de benzeno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68602-84-6

EEC No 271-625-6

No 649-150-00-4

NOTA H

NOTA K

- ES: gases (petróleo), aparato de absorción secundario, fraccionador de los productos de cabeza del craqueador catalítico fluidizado; Gas de refinería  
[Combinación compleja producida por el fraccionamiento de los productos de cabeza del proceso de craqueo catalítico en el craqueador catalítico fluidizado. Compuesta de hidrógeno, nitrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_7$ .]
- DA: gasser (råolie), sekundære absorberaftræks-, fluidiserede katalytisk krækker-topfraktioner fraktionerings-; Raffinadegas  
[En sammensat blanding fremstillet ved fraktioneringen af topfraktionsprodukterne fra den katalytiske krækningsproces i den fluidiserede katalytiske krækker. Den består af hydrogen, nitrogen og carbonhydrider, overvejende  $C_1$  til og med  $C_7$ .]
- DE: Gase (Erdöl), sekundäre Absorber Ab-, verflüssigte katalytische Krack Kopf Fraktionator; Raffineriegas  
[Komplexe Kombination, erhalten durch Fraktionierung der Kopfprodukte aus dem katalytischen Krackverfahren in der Fließbettkrackanlage. Besteht aus Wasserstoff, Stickstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_7$ .]
- EL: αερία (πετρελαίου), εκλυόμενα από δευτερεύοντα απορροφητήρα, προϊόντων κορυφής μονάδας κλασμάτωσης μονάδας καταλυτικής πυρόλυσης σε ρευστοστερεά κλίνη. Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που παράγεται με την κλασμάτωση των προϊόντων κορυφής από καταλυτική πυρόλυση σε μονάδα καταλυτικής πυρόλυσης σε ρευστοστερεά κλίνη. Συνίσταται από υδρογόνο, άζωτο και υδρογονάνθρακες με αριθμό ατόμων ανθράκα στην περιοχή κυρίως από  $C_1$  έως και  $C_7$ .]
- EN: Gases (petroleum), secondary absorber off, fluidized catalytic cracker overheads fractionator; Refinery gas  
[A complex combination produced by the fractionation of the overhead products from the catalytic cracking process in the fluidized catalytic cracker. It consists of hydrogen, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_7$ .]
- FR: gaz résiduels (pétrole), absorbeur secondaire, fractionnement des produits de tête du craquage catalytique fluide; Gaz de raffinerie  
[Combinaison complexe produite par fractionnement des produits de tête résultant du procédé du craquage catalytique dans le réacteur de craquage catalytique fluide. Se compose d'hydrogène, d'azote et d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_1$ - $C_7$ .]
- IT: gas (petrolio), da assorbitore secondario, frazionamento frazioni di testa cracking catalitico fluidizzato, Gas di raffinaria  
[Combinazione complessa ottenuta per frazionamento di prodotti di testa provenienti dal processo di cracking catalitico nell'impianto di cracking catalitico fluidizzato. È costituito da idrogeno, azoto e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_7$ .]
- NL: gassen (aardolie), secundaire absorbeerder-uitstoot-, fractionator van topprodukten uit fluïde katalytische kraker; Raffinaderiigas  
[Een complexe combinatie die wordt gevormd door de fractionering van de topprodukten uit het katalytisch kraakproces in de fluïde katalytische kraker. Bestaat uit waterstof, stikstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_7$ .]
- PT: gases (petróleo), da coluna de absorção secundária, do fraccionador dos produtos de cabeça do cracker catalítico de leito fluidizado; Gas de refinaria  
[Uma combinação complexa produzida pelo fraccionamento dos produtos de cabeça do processo de cracking catalítico no cracker catalítico de leito fluidizado. É constituída por hidrogénio, azoto, e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_7$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68607-11-4

EEC No 271-750-6

No 649-151-00-X

NOTA H

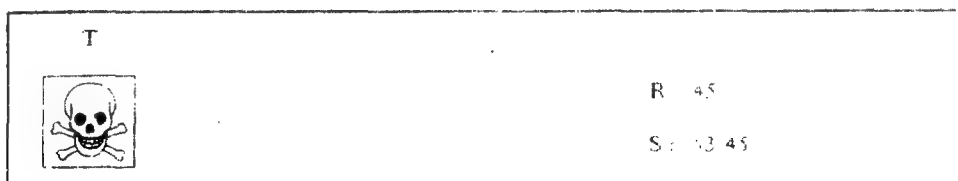
NOTA K

- ES: productos del petróleo, gases de refinería; Gas de refinería  
[Combinación compleja compuesta principalmente de hidrógeno con cantidades pequeñas, etano y propano.]
- DA: raolieprodukter, raffinaderigasser; Raffinaderigas  
[En sammensat blanding, som primært består af hydrogen med forskellige små mængder methan, ethan og propan.]
- DE: Erdölprodukte, Raffineriegase; Raffineriegas  
[Komplexe Kombination, die in erster Linie aus Wasserstoff mit verschiedenen geringen Mengen Methan, Ethan und Propan besteht.]
- EL: προϊόντα πετρελαίου, αέρια διυλιστηρίου· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που αποτελείται κυρίως από υδρογόνο και διάφορες μικροποσότητες μεθανίου, αιθανίου και προπανίου.]
- EN: Petroleum products, refinery gases; Refinery gas  
[A complex combination which consists primarily of hydrogen with various small amounts of methane, ethane, and propane.]
- FR: produits pétroliers, gaz de raffinerie; Gaz de raffinerie  
[Combinaison complexe constituée principalement d'hydrogène, avec des petites quantités de méthane, d'éthane et de propane.]
- IT: prodotti del petrolio gas di raffineria; Gas di raffineria  
[Combinazione complessa costituita principalmente da idrogeno con varie piccole quantità di metano, etano e propano.]
- NL: aardolieprodukten, raffinage-gassen; Raffinaderigas  
[Een complexe verzameling, die voornamelijk bestaat uit waterstof met verscheidene kleine hoeveelheden methaan, ethaan en propaan.]
- PT: produtos petrolíferos, gases de refinação; Gás de refinação  
[Uma combinação complexa constituída principalmente por hidrogénio com pequenas quantidades variáveis de metano, etano, e propano.]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Car. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem



Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentrações


Cas No 68783-06-2

EEC No 272-182-1

No 649-152-00-5

NOTA H

NOTA K

- ES gases (petroleo), separador a baja presion de hidrocraqueo , Gas de refineria  
[Combinación compleja obtenida por la separación líquido-vapor del effluente del reactor del proceso de hidrocraqueo. Compuesta fundamentalmente de hidrógeno e hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo C<sub>1</sub> a C<sub>11</sub>.]
- DA gasser (råolie), hydrokrakning lavtryks-separator- , Raffinadengas  
[En sammensat blanding opnået ved væske-damp-separationen af udløbet fra hydrokrakningsprocesreaktoren. Den består overvejende af hydrogen og mættede carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>11</sub>.]
- DE Gase (Erdöl), Hydrokracken Niedrigdruck Separator , Raffineriegas  
[Komplexe Kombination, erhalten durch Flüssigkeit-Dampf-Trennung des Reaktorausflusses beim Hydrocrackverfahren. Besteht vorherrschend aus Wasserstoff und gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>11</sub>.]
- EL αέρια (πετρελαίου), χαμηλής πίεσης διαχωριστήρα υδρογονοπυρόλυσης. Καύσιμο αέριο διυλιστηρίου  
[Πολυπλοκός συνδυασμός που παραγεται με τον διαχωρισμό υγρού-ατμού, των εκροών του αντιδραστήρα υδρογονοπυρόλυσης. Συνίσταται κυρίως από υδρογόνο και κορεσμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>11</sub>.]
- EN Gases (petroleum), hydrocracking low-pressure separator , Refinery gas  
[A complex combination obtained by the liquid-vapor separation of the hydrocracking process reactor effluent. It consists predominantly of hydrogen and saturated hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>11</sub>.]
- FR gaz (pétrole), séparateur à basse pression, hydrocraquage , Gaz de raffinerie  
[Combinaison complexe obtenue par séparation liquide-vapeur de l'effluent du réacteur d'hydrocraquage. Se compose principalement d'hydrogene et d'hydrocarbures saturés dont le nombre de carbones se situe en majeure partie dans la gamme C<sub>1</sub>-C<sub>11</sub>.]
- IT gas (petrolio), hydrocracking, dal separatore a basse pressione , Gas di raffineria  
[Combinazione complessa ottenuta mediante separazione liquido-vapore dell'effluente del reattore del processo di hydrocracking. E' costituita prevalentemente da idrogeno e idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>11</sub>.]
- NL gassen (aardolie), waterstofkraken lage-druk-afscheider , Raffinaderijgas  
[Een complexe combinatie die wordt verkregen door de vloeistof-damp scheiding van de uitstroom uit de waterstofkraakproces-reactor. Bestaat voornamelijk uit waterstof en verzadigde koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>11</sub>.]
- PT gases (petróleo), do separador de baixa pressão do hidrocracking , Gas de refinaria  
[Uma combinação complexa obtida por separação líquido vapor do effluente do reactor do processo de hidrocracking. É constituída predominantemente por hidrogenio e hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>11</sub>.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T		
		R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68814-67-5

EEC No 272-338-9

No 649-153-00-0

NOTA H

NOTA K

- ES : gases (petróleo), refinería ; Gas de refinería  
[Combinación compleja obtenida de diversas operaciones de refino de petróleo. Compuesta de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo C<sub>1</sub> a C<sub>7</sub>.]
- DA : gasser (råolie), raffinaderi ; Raffinaderigas  
[En sammensat blanding opnået fra forskellige råolieraffineringsoperationer. Den består af hydrogen og carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>7</sub>.]
- DE : Gase (Erdöl), Raffinerie ; Raffineriegas  
[Komplexe Kombination aus verschiedenen Erdöl-Raffinerievorgängen. Besteht aus Wasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>7</sub>.]
- EL : αερια (πετρελαίου), διυλιστηρίου· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται από διάφορες διαδικασίες διύλισης πετρελαίου. Συνίσταται από υδρογόνο και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>7</sub>.]
- EN : Gases (petroleum), refinery ; Refinery gas  
[A complex combination obtained from various petroleum refining operations. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>7</sub>.]
- FR : gaz de raffinerie (pétrole) ; Gaz de raffinerie  
[Combinaison complexe obtenue par divers procédés de raffinage du pétrole. Se compose d'hydrogène et d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme C<sub>1</sub>-C<sub>7</sub>.]
- IT : gas (petrolio), di raffineria ; Gas di raffineria  
[Combinazione complessa ottenuta da varie operazioni di raffinazione del petrolio. È costituita da idrogeno e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>7</sub>.]
- NL : gassen (aardolie), raffinage ; Raffinaderijgas  
[Een complexe combinatie die wordt verkregen uit verscheidene aardolieraffinage-operaties. Bestaat uit waterstof en koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>7</sub>.]
- PT : gases (petróleo), de refinaria ; Gás de refinaria  
[Uma combinação complexa obtida de várias operações de refinação de petróleo. É constituída predominantemente por hidrogénio e hidrocarbonetos com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>7</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68814-90-4

EEC No 272-343-6

No 649-154-00-6

NOTA H

NOTA K

- ES gases (petroleo), separador de productos del reformador al platino ; Gas de refineria  
Combinacion compleja obtenida del reformado quimico de naftenos a productos aromaticos. Compuesta de hidrógeno e hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_2$  a  $C_4$ .]
- DA gasser (råolie), platformer-produkter separatoratræks- ; Raffinaderigas  
[En sammensat blanding opnået fra den kemiske reformering af naphthener til aromater. Den består af hydrogen og mættede aliphatiske carbonhydrider, overvejende fra  $C_2$  til og med  $C_4$ .]
- DE Gase (Erdöl), Platformerprodukte Separator Ab- ; Raffineriegas  
[Komplexe Kombination, erhalten aus chemischem Reforming von Naphthenen in Aromaten. Besteht aus Wasserstoff und gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_2$  bis  $C_4$ .]
- EL αερια (πετρελαιο), εξόδου διαχωριστήρα προϊόντων μονάδας αναμόρφωσης με καταλύτη λευκόχρυσου· Καύσιμο αεριο διυλιστηρίου  
[Πολυπλοκός συνδυασμός που λαμβάνεται από τηνχημική αναμόρφωση ναφθενίων σε αρωματικά. Συνίσταται από υδρογόνο και κεκορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατομών άνθρακα στην περιοχή από  $C_2$  ως και  $C_4$ .]
- EN Gases (petroleum), platformer products separator off ; Refinery gas  
[A complex combination obtained from the chemical reforming of naphthenes to aromatics. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_2$  through  $C_4$ .]
- FR gaz résiduels (pétrole), séparateur de produits de platformat ; Gaz de raffinerie  
[Combinaison complexe obtenue lors du reformage chimique de naphthènes en aromatiques. Se compose d'hydrogène et d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme  $C_2$ - $C_4$ .]
- IT gas (petrolio), dai separatore di prodotti di platforming , Gas di raffineria  
Combinazione complessa ottenuta dal reforming chimico dei nafteni a composti aromatici. È costituita da idrogeno e idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_2$ - $C_4$ .]
- NL gassen (aardolie), platinareformatorproduktenafscheider-uitstoot- ; Raffinaderijgas  
[Een complexe combinatie die wordt verkregen uit de chemische reformering van naftenen tot aromaten. Bestaat uit waterstof en verzadigde alifatische koolwaterstoffen, overwegend  $C_2$  tot en met  $C_4$ .]
- PT gases (petroleo), do separador dos produtos do platformer ; Gás de refineria  
[Uma combinação complexa obtida do reforming químico de naftenos a aromáticos. É constituída por hidrogénio e hidrocarbonetos alifáticos saturados com numeros de atomos de carbono predominantemente na gama de  $C_2$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68911-58-0

EEC No 272-775-5

No 649-155-00-1

NOTA H

NOTA K

- ES: gases (petróleo), estabilizador para el despentanizador de querosina con azufre tratada con hidrógeno; Gas de refinería  
[Combinación compleja obtenida de la estabilización en el despentanizador de querosina tratada con hidrógeno. Compuesta principalmente de hidrógeno, metano, etano y propano con cantidades pequeñas de nitrógeno, sulfuro de hidrógeno, monóxido de carbono e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_7$ .]
- DA: gasser (råolie), hydrogenbehandlet sur petroleum depentanizer stabilisatoraftræks-; Raffinaderigas  
[Den sammensatte blanding opnået fra depentanizer-stabiliseringen af hydrogenbehandlet petroleum. Den består primært af hydrogen, methan, ethan og propan med forskellige små mængder af nitrogen, hydrogensulfid, carbonmonoxid og carbonhydrider, overvejende fra  $C_4$  til og med  $C_7$ .]
- DE: Gase (Erdöl), mit Wasserstoff behandelte saure Kerosin Entpentanisierer Stabilisierer Ab-; Raffineriegas  
[Komplexe Kombination, erhalten aus der Entpentanisierter-Stabilisierung von mit Wasserstoff behandeltem Kerosin. Besteht in erster Linie aus Wasserstoff, Methan, Ethan und Propan mit verschiedenen geringen Mengen Stickstoff, Schwefelwasserstoff, Kohlenmonoxid und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_7$ .]
- EL: αερία (πετρελαιο), εξόδου, σταθεροποιητή αποπροπανιωτήρα υδρογονοκατεργασμένης αγλύκαστης κηροζίνης; Καύσιμο αέριο διυλιστηρίου  
[Ο πολύπλοκος συνδυασμός που λαμβάνεται από την σταθεροποίηση υδρογονοκατεργασμένης κηροζίνης αποπροπανιωτήρα. Συνίσταται πρωτίστως από υδρογόνο, μεθάνιο και προπάνιο μαζί με ποικίλες μικροποσότητες αζώτου, υδροθείου, μονοξειδίου άνθρακα και υδρογονάνθρακων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_7$ .]
- EN: Gases (petroleum), hydrotreated sour kerosine depentanizer stabilizer off; Refinery gas  
[The complex combination obtained from the depentanizer stabilization of hydrotreated kerosine. It consists primarily of hydrogen, methane, ethane, and propane with various small amounts of nitrogen, hydrogen sulfide, carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_7$ .]
- FR: gaz (pétrole), kérosène sulfureux hydrotraité, stabilisateur du dépentaniseur; Gaz de raffinerie  
[Combinaison complexe issue de la stabilisation des produits de dépentanisation de kérosène hydrotraité. Se compose principalement d'hydrogène, de méthane, d'éthane et de propane, avec de petites quantités d'azote, d'hydrogène sulfuré, de monoxyde de carbone et d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_7$ .]
- IT: gas (petrolio), dalla stabilizzazione in depentanizzatore di cherosene «sour» idrotrattato; Gas di raffineria  
[Combinazione complessa ottenuta dalla stabilizzazione in depentanizzatore di cherosene idrotrattato. È costituita principalmente da idrogeno, metano, etano e propano con varie piccole quantità di azoto, idrogeno solforato, monossido di carbonio e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_7$ .]
- NL: gassen (aardolie), uitstootgassen uit depentanisor-stabilisator van waterstofbehandelde stinkende kerosine; Raffinaderigas  
[De complexe combinatie die wordt verkregen uit de depentanisorstabilisatie van waterstofbehandelde kerosine. Bestaat voornamelijk uit waterstof, methaan, ethaan en propan alsmede variërende kleine hoeveelheden stikstof, waterstofsulfide, koolmonoxide en koolwaterstoffen, overwegend  $C_4$  en  $C_7$ .]
- PT: gases (petróleo), do despentanizador estabilizador de petróleo com enxofre tratado com hidrogénio; Gás de refinaria  
[Uma combinação complexa obtida da estabilização no despentanizador de petróleo tratado com hidrogénio. É constituída principalmente por hidrogénio, metano, etano, e propano com pequenas quantidades variáveis de azoto, sulfureto de hidrogénio, monóxido de carbono e hidrocarbonetos com números de átomos de carbono predominantemente na gama  $C_4$  até  $C_7$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68911-59-1

E C No 272 / 76-0

No 649 156-00-7

NOTA H

NOTA K

- ES gases (petroleo), tambor de expansion subita para querosina con azufre tratada con hidrogeno , Gas de refinaria  
[Combinacion compleja obtenida del tambor de expansion subita de la unidad de tratamiento con hidrogeno de querosina con azufre en presencia de un catalizador. Compuesta principalmente de hidrogeno y metano con cantidades pequeñas de nitrógeno, monóxido de carbono e hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de C<sub>2</sub> a C<sub>4</sub>.]
- DA gasser (råolie), hydrogenbehandlet sur petroleum flashkammer , Raffinaderigas  
[En sammensat blanding opnået fra flashkammeret fra enheden der behandler sur petroleum med hydrogen i tilstedeværelse af en katalysator. Den består primært af hydrogen og methan med forskellige små mængder af nitrogen, carbonmonoxid, og carbonhydrokarter, overvejende fra C<sub>2</sub> til og med C<sub>4</sub>.]
- DE Gase (Erdöl), mit Wasserstoff behandelte saure Kerosin Entspannungströmmel , Raffineriegas  
[Komplexe Kombination, erhalten aus der Entspannungströmmel der Anlage in der sauren Kerosin mit Wasserstoff in Gegenwart eines Katalysators behandelt wird. Besteht in erster Linie aus Wasserstoff und Methan mit verschiedenen geringen Mengen Stickstoff, Kohlenmonoxid und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>2</sub> bis C<sub>4</sub>.]
- EL αερια (πετρελαιο), δοχείου εκτονωσης υδρογονοκαταργασμένης, αγλυκαστής κηροζίνης. Καυσίμο αερίο διυλίου τήριου  
[Πολυπλοκός συνδυασμός που λαμβάνεται από το δοχείο εκτονώσεως της μονάδας κατεργασίας αγλυκαστής κηροζίνης με υδρογόνο παρουσία καταλύτη. Συνίσταται πρωτίστως από υδρογόνο και μεθάνιο μαζί με ποικίλες μικροποσότητες αζώτου, μονοξείδιο οξυγόνου άνθρακα και υδρογονάνθρακων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>2</sub> έως και C<sub>4</sub>.]
- EN Gases (petroleum), hydrotreated sour kerosine flash drum , Refinery gas  
[A complex combination obtained from the flash drum of the unit treating sour kerosine with hydrogen in the presence of a catalyst. It consists primarily of hydrogen and methane with various small amounts of nitrogen, carbon monoxide, and hydrocarbons having carbon numbers predominantly in the range of C<sub>2</sub> through C<sub>4</sub>.]
- FR gaz (petrole), kerosene sulfureux hydrotrante ballon de détente , Gaz de raffinerie  
[Combinaison complexe issue de l'unité assurant l'hydrogenation catalytique de kerosene sulfureux. Le compose principiellement d'hydrogene et de methane avec de petites quantites d'azote, de monoxyde de carbone et d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme C<sub>2</sub>-C<sub>4</sub>.]
- IT gas (petrolio), da flash drum di cherosene + sour + idrotrattato , Gas di raffinaria  
[Combinazione complessa ottenuta dal flash drum di l'unità di trattamento di cherosene + sour + con idrogeno in presenza di un catalizzatore. È costituita principalmente da idrogeno e metano con varie piccole quantità di azoto, ossido di carbonio e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>2</sub>-C<sub>4</sub>.]
- NL gassen (aardolie), waterstofbehandelde stinkende kerosine-afdamppvat , Raffinaderigas  
[Een complexe combinatie die wordt verkregen uit het afdampvat van de installatie waarin stinkende kerosine in de aanwezigheid van een katalysator met waterstof wordt behandeld. Bestaat voornamelijk uit waterstof en methaan afzede van verschillende kleine hoeveelheden stikstof, koolmonoxide en koolwaterstoffen overwegend C<sub>2</sub> tot en met C<sub>4</sub>.]
- PT gases (petroleo), do tanque de flash de petroleo com enxofre tratado com hidrogenio , Gas de refinaria  
[Uma combinação complexa obtida do tanque de flash da unidade de tratamento de petroleo contendo enxofre com hidrogenio na presença de um catalisador. É constituída principalmente por hidrogenio e metano com pequenas quantidades variáveis de azoto, monóxido de carbono e hidrocarbonetos com numeros de atomos de carbonio predominantemente na gama de C<sub>2</sub> ate C<sub>4</sub>.]



*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificação, Inaeling, Classificação*

Carc Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-01-7

EEC No 272-873-8

No 649-157-00-2

NOTA H

NOTA K

- ES gases (petróleo), extractor para la desulfuración del destilado en la unidad de refino ; Gas de refinería  
[Combinación compleja rectificada del producto líquido del proceso de desulfuración en la unidad de refino. Compuesta de sulfuro de hidrógeno, metano, etano y propano.]
- DA gasser (råolje), destillat unifiner afsøvlningsstripper aftræks- ; Raffinaderigas  
[En sammensat-blanding strippt fra væskeproduktet fra unifiner afsøvlningsprocessen. Den består af hydrogensulfid, methan, ethan og propan.]
- DE Gase (Erdöl), Destillat Unifiner Desulfurierung Stripper Ab- ; Raffineriegas  
[Komplexe Kombination, gestrippt aus dem flüssigen Produkt des Unifiner Desulfurierungsverfahrens. Besteht aus Schwefelwasserstoff, Methan, Ethan und Propan.]
- EL αερία (πετρελαίου), εξόδου απογυμνωτή μονάδας αποθείωσης αποστάγματος με την μέθοδο *unifining*. Καύσιμο αεριο-διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται με απογύμνωση από το υγρό προϊόν της αποθείωσης με την μέθοδο *unifining*. Συνίσταται από υδροθείο, μεθάνιο, αιθάνιο και προπάνιο.]
- EN Gases (petroleum), distillate unifiner desulfurization stripper off ; Refinery gas  
[A complex combination stripped from the liquid product of the unifiner desulfurization process. It consists of hydrogen sulfide, methane, ethane, and propane.]
- FR gaz résiduels de rectification (pétrole), désulfuration *Unifining* de distillats ; Gaz de raffinerie  
[Combinaison complexe séparée par rectification du produit liquide de la désulfuration *Unifining*. Se compose d'hydrogène sulfuré, de méthane, d'éthane et de propane.]
- IT gas (petrolio), distillato, dallo stripper del processo di desolfurazione « *unifining* » ; Gas di raffineria  
[Combinazione complessa ottenuta per stripping dal prodotto liquido del processo di desolfurazione « *unifining* ». È costituita da idrogeno solforato, metano, etano e propano.]
- NL gassen (aardolie), destillaat-unifiner-ontzwaveling stripperuitstoot- ; Raffinaderijgas  
[Een complexe combinatie gestript van het vloeibare produkt van het unifiner-ontzwavelingsproces. Bestaat uit waterstofsulfide, methaan, ethaan en propaan.]
- PT gases (petróleo), do stripper do destilado da dessulfurização unifiner ; Gás de refinaria  
[Uma combinação complexa separada do produto líquido do processo de dessulfurização unifiner. É constituída por sulfureto de hidrogenio, metano, etano, e propano.]

*Classification Klassifizierung Einstufung Ταξινόμηση, Classification, Classification Classificazione Indeling Classificação*

Carc Cat 2, R 45

*\*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R : 45
	S : 53-45

*Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-02-8

EEC No 272-874-3

No 649-158-00-8

NOTA H

NOTA K

- ES : gases (petroleo), fraccionamiento en el craqueador catalítico fluidizado ; Gas de refinería  
[Combinación compleja producida por el fraccionamiento del producto de cabeza del proceso de craqueo catalítico fluidizado. Compuesta de hidrógeno, sulfuro de hidrógeno, nitrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{10}$ .]
- DA : gasser (råolie), fluidiseret katalytisk krakker fraktioneringsaftræks- ; Raffinaderigas  
[En sammensat blanding fremstillet ved fraktioneringen af topfraktionsproduktet fra den fluidiserede katalytiske krakningsproces. Den består af hydrogen, hydrogensulfid, nitrogen og carbonhydrider, overvejende fra  $C_1$  til og med  $C_{10}$ .]
- DE : Gase (Erdöl), Flußbettcracking Fraktionierung Ab- ; Raffineriegas  
[Komplexe Kombination, erhalten durch Fraktionierung des Kopfproduktes aus dem Fließbettcrackverfahren. Besteht aus Wasserstoff, Schwefelwasserstoff, Stickstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{10}$ .]
- EL : αερία (πετρελαίου), εξόδου κλασμάτωσης μονάδας καταλυτικής πυρόλυσης σε ρευστοστερεά κλίνη· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που παράγεται με την κλασμάτωση του προϊόντος κορυφής της καταλυτικής πυρόλυσης σε ρευστοστερεά κλίνη. Συνίσταται από υδρογόνο, υδροθείο, άζωτο και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{10}$ .]
- EN : Gases (petroleum), fluidized catalytic cracker fractionation off ; Refinery gas  
[A complex combination produced by the fractionation of the overhead product of the fluidized catalytic cracking process. It consists of hydrogen, hydrogen sulfide, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{10}$ .]
- FR : gaz résiduels de fractionnement (pétrole), craquage catalytique fluide ; Gaz de raffinerie  
[Combinaison complexe produite par fractionnement du produit de tête résultant du craquage catalytique fluide. Se compose d'hydrogène, d'hydrogène sulfuré, d'azote et d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_{10}$ .]
- IT : gas (petrolio), dal frazionamento del cracking catalitico fluidizzato ; Gas di raffineria  
[Combinazione complessa ottenuta per frazionamento del prodotto di testa del processo di cracking catalitico fluidizzato. È costituita da idrogeno, idrogeno solforato, azoto, e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{10}$ .]
- NL : gassen (aardolie), gefluidiseerde katalytische kraker-fractioneringsuitstoot- ; Raffinaderijgas  
[Een complexe combinatie die wordt gevormd door de fractionering van het topproduct van het gefluidiseerde katalytische kraakproces. Bestaat uit waterstof, waterstofsulfide, stikstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{10}$ .]
- PT : gases (petroleo), do fraccionamento dos produtos do cracker catalítico de leito fluidizado ; Gás de refinaria  
[Uma combinação complexa obtida pela fraccionamento do produto de cabeça do processo de cracking catalítico em leito fluidizado. É constituída por hidrogenio, sulfureto de hidrogenio, azoto, e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  ate  $C_{10}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limstes de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-03-9

EEC No 272-875-9

No 649-159-00-3

NOTA H

NOTA K

- ES : gases (petroleo), aparato de absorción auxiliar para la depuración en el craqueador catalítico fluidizado ; Gas de refinería  
[Combinación compleja producida por la depuración del gas de cabeza del craqueador catalítico fluidizado. Compuesta de hidrógeno, nitrógeno, metano, etano y propano.]
- DA : gasser (råolie), fluidiseret katalytisk krækker skrubning, sekundære absorberatræks- ; Raffinaderigas  
[En sammensat blanding fremstillet ved at skrubbe topfraktionsgassen fra den fluidiserede, katalytiske krækker. Den består af hydrogen, nitrogen, methan, ethan og propan.]
- DE : Gase (Erdöl), Flußbettcrackung Auswaschen sekundärer Absorber Ab- ; Raffineriegas  
[Komplexe Kombination, hergestellt durch Auswaschen des Kopf-gases aus dem Fließbettcracker. Enthält Wasserstoff, Stickstoff, Methan, Ethan und Propan.]
- EL : αερια (πετρελαιο), εξόδου δευτερεύοντος απορροφητήρα καταιωνιστήρα μονάδας καταλυτικής πυρόλυσης σε ρευστοστερεά κλίνη· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που παράγεται με το πλύσιμο σε καταιωνιστήρα του αερίου κορυφής, από μονάδα καταλυτικής πυρόλυσης σε ρευστοστερεά κλίνη. Συνίσταται από υδρογόνο, άζωτο, μεθάνιο, αιθάνιο και προπάνιο.]
- EN : Gases (petroleum), fluidized catalytic cracker scrubbing secondary absorber off ; Refinery gas  
[A complex combination produced by scrubbing the overhead gas from the fluidized catalytic cracker. It consists of hydrogen, nitrogen, methane, ethane and propane.]
- FR : gaz résiduels d'absorbeur secondaire (pétrole), lavage des gaz de craquage catalytique fluide ; Gaz de raffinerie  
[Combinaison complexe produite par lavage du gaz de tête issu du réacteur de craquage catalytique fluide. Se compose d'hydrogène, d'azote, de méthane, d'éthane et de propane.]
- IT : gas (petrolio), da assorbitore secondario di scrubbing dell'impianto di cracking catalitico fluidizzato ; Gas di raffineria  
[Combinazione con, l'essa prodotta con lo scrubbing del gas di testa proveniente dall'impianto di cracking catalitico fluidizzato. È costituita da idrogeno, azoto, metano, etano e propano.]
- NL : gassen (aardolie), gefluïdiseerde katalytische kraker-gaszuivering secundair absorptievat-uitstoot- ; Raffinaderigas  
[Een complexe combinatie die wordt gevormd door de gaszuivering van topgas uit de gefluïdiseerde katalytische kraker. Bestaat uit waterstof, stikstof, methaan, ethaan en propaan.]
- PT : gases (petróleo), da torre de absorção secundária da separação de gases de um cracker catalítico de leito fluidizado ; Gás de refinaria  
[Uma combinação complexa obtida por lavagem do gás de cabeça de um cracker catalítico de leito fluidizado. É constituída por hidrogénio, azoto, metano, etano e propano.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-04-0

EEC No 272-876-4

No 649-160-00-9

NOTA H

NOTA K

- ES gases (petróleo), extractor para la desulfuración del destilado pesado en el aparato para el tratamiento con hidrógeno, Gas de refinería  
[Combinación compleja rectificada del producto líquido del proceso de desulfuración del destilado pesado en el aparato para el tratamiento con hidrógeno. Compuesta de hidrógeno, sulfuro de hidrógeno e hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ ]
- DA gasser (råolie), tungt destillat, hydrogenbehandlerafsøvler stripper aftræks-, Raffinaderigas  
[En sammensat blanding stripet fra væskeprodukter fra det tunge destillat fra hydrogenbehandler-afsvøvlingsprocessen. Den består af hydrogen, hydrogensulfid og mættede aliphatiske carbonhydnder, overvejende fra  $C_1$  til og med  $C_4$ ]
- DE Gase (Erdöl), schweres Destillat Wasserstoffbehandler Desulfurierung Stripper\*Ab-, Raffineriegas  
[Komplexe Kombination, gestrippt aus dem flüssigen Produkt des schweren Destillates aus dem Wasserstoffbehandlungs-Desulfurierungsverfahren. Besteht aus Wasserstoff, Schwefelwasserstoff und gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ ]
- EL αέρια (πυρρίλαιου), εξόδου απογυμνωτή αποβείωσης μονάδας υδρογονοκατεργασίας βαρέος αποσταγματος  
Καυσίμο αέριο διυλιστηρίου  
[Πετρέλαιο, συνδυασμός που έχει απογυμνωθεί από το υγρό προϊόν της αποβείωσης μονάδας υδρογονοκατεργασίας βαρέος αποσταγματος. Συνίσταται από υδρογόνο, υδρόθειο και κηκορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ ]
- EN Gases (petroleum), heavy distillate hydrotreater desulfurization stripper off, Refinery gas  
[A complex combination stripped from the liquid product of the heavy distillate hydrotreater desulfurization process. It consists of hydrogen, hydrogen sulfide, and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ ]
- FR gaz résiduels de rectification (pétrole), désulfuration par hydrotraitement de distillat lourd, Gaz de raffinerie  
[Combinaison complexe séparée par rectification du produit liquide résultant de la désulfuration par hydrotraitement d'un distillat lourd. Se compose d'hydrogène, d'hydrogène sulfure et d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_4$ ]
- IT gas (petrolio), da stripper di desolfrazione di idrotrattamento di distillato pesante, Gas di raffinaria  
[Combinazione complessa ottenuta per stripping dal prodotto liquido del processo di desolfrazione dell'idrotrattamento del distillato pesante. È costituita da idrogeno solforato e idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ ]
- NL gassen (aardolie), zwaar destillaat waterstofbehandelingsontzwareling stripper-uitstoot-, Raffinaderigas  
[Een complexe combinatie die wordt gestript uit het vloeibare produkt uit het waterstofbehandelingsontzwarelingsproces van zwaar destillaat. Bestaat uit waterstof, waterstofsulfide en verzadigde alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ ]
- PT gases (petróleo), do stripper da unidade de hidrogenodessulfurização de um destilado pesado, Gas de refinaria  
[Uma combinação complexa separado do produto líquido de um processo de hidrogenodessulfurização de um destilado pesado. É constituída por hidrogénio, sulfureto de hidrogénio e hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification Classification, Classificazione Indeling, Classificação*

Carc. Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgr.enzen, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçào*


Cas No 68919-07-3

EEC No 272-880-6

No 649-161-00-4

NOTA H

NOTA K

- ES : gases (petróleo), estabilizador del reformador al platino, fraccionamiento de los productos finales ligeros ; Gas de refinería  
[Combinación compleja obtenida por el fraccionamiento de los productos finales ligeros de los reactores de platino de la unidad del reformador al platino. Compuesta de hidrógeno, metano, etano y propano.]
- DA : gasser (råolie), platformerstabilizer aftræks-, fraktionering af lette produkter ; Raffinaderigas  
[En sammensat blanding opnået ved fraktioneringen af de lette produkter fra platinreaktorerne fra platformerenheden. Den består af hydrogen, methan, ethan og propan.]
- DE : Gase (Erdöl), Platformer Stabilisator Ab-, leichte Bestandteile Fraktionierung ; Raffineriegas  
[Komplexe Kombination, erhalten durch Fraktionierung der leichten Bestandteile des Platinreaktors der Platformeranlage. Besteht aus Wasserstoff, Methan, Ethan und Propan.]
- EL : αερία (πετρελαίου), εξερχόμενα από σταθεροποιητή αναμορφωτήρα, με καταλύτη λευκόχρυσο, κλασμάτωσης ελαφρών τελικών προϊόντων· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται με κλασμάτωση των ελαφρών τελικών προϊόντων των αντιδραστήρων με καταλύτη λευκόχρυσο της μονάδας του αναμορφωτήρα. Συνίσταται από υδρογόνο, μεθάνιο, αιθάνιο και προπάνιο.]
- EN : Gases (petroleum), platformer stabilizer off, light ends fractionation ; Refinery gas  
[A complex combination obtained by the fractionation of the light ends of the platinum reactors of the platformer unit. It consists of hydrogen, methane, ethane and propane.]
- FR : gaz résiduels (pétrole), stabilisateur de reformage *Platforming*, fractionnement des coupes légères ; Gaz de raffinerie  
[Combinaison complexe obtenue par fractionnement des coupes légères issues des réacteurs au platine de l'unité de reformage *Platforming*. Se compose d'hydrogène, de méthane, d'éthane et de propane.]
- IT : gas (petrolio), dallo stabilizzatore di platforming, frazionamento componenti leggeri ; Gas di raffineria  
[Combinazione complessa ottenuta per frazionamento dei componenti leggeri dei reattori al platino dell'unità di platforming. È costituita da idrogeno, metano, etano e propano.]
- NL : gassen (aardolie), platina-reformatorstabilisatoruitstoot-, fractionering van lichte eindfracties  
[Een complexe combinatie die wordt verkregen door de fractionering van de lichte eindfracties uit de platinareactoren van de platina-reformeringsinstallatie. Bestaat uit waterstof, ethaan en propaan.]
- PT : gases (petroleo), do estabilizador do platformer, produtos de cauda leves do fraccionamento ; Gás de refinaria  
[Uma combinação complexa obtida pelo fraccionamento dos produtos de cauda leves dos reactores de platina da unidade platformer. É constituída por hidrogénio, metano, etano, e propano.]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-08-4

EEC No 272-881-1

No 649-162-00-X

NOTA H

NOTA K

- ES : gases (petróleo), torre de predestilación, destilación del petróleo crudo ; Gas de refinería  
[Combinación compleja producida de la primera torre utilizada en la destilación del petróleo crudo. Compuesta de nitrógeno e hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>7</sub>.]
- DA : gasser (råolie), preflash-tårn aftræks-, rådestillation ; Raffinaderigas  
[En sammensat blanding fremstillet fra det første tårn brugt ved destillationen af råolie. Den består af nitrogen og mættede, aliphatiske carbonhydrider, overvejende fra C<sub>1</sub> til og med C<sub>7</sub>.]
- DE : Gase (Erdöl), Vorentspannungsturm Ab-, Rohdestillation ; Raffineriegas  
[Komplexe Kombination, erhalten aus dem ersten Turm in der Rohöldestillation. Besteht aus Stickstoff und gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>7</sub>.]
- EL : αερια (πετρελαίου), εξερχόμενα στήλης προεκτόνωσης, απόσταξης αργού· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που παράγεται από την πρώτη στήλη που χρησιμοποιείται στην απόσταξη του αργού πετρελαίου. Συνίσταται από άζωτο και κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από C<sub>1</sub> ως και C<sub>7</sub>.]
- EN : Gases (petroleum), preflash tower off, crude distn. ; Refinery gas  
[A complex combination produced from the first tower used in the distillation of crude oil. It consists of nitrogen and saturated - aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>7</sub>.]
- FR : gaz résiduels de prédistillation (pétrole), distillation du pétrole brut ; Gaz de raffinerie  
[Combinaison complexe produite par la première tour utilisée dans la distillation du pétrole brut. Se compose d'azote et d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme C<sub>1</sub>-C<sub>7</sub>.]
- IT : gas (petrolio), dalla torre di « preflash », distillazione del grezzo ; Gas di raffineria  
[Combinazione complessa prodotta dalla prima torre usata per la distillazione del grezzo. È costituita da azoto e idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>7</sub>.]
- NL : gassen (aardolie), voorafdampingstorenuitstoot-, ruwe destillatie ; Raffinaderijgas  
[Een complexe combinatie die wordt gevormd in de eerste destillatietoren die wordt gebruikt bij de destillatie van ruwe olie. Bestaat uit stikstof en verzadigde alifatische koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>7</sub>.]
- PT : gases (petróleo), da coluna de pré-flash, da destilação de petróleo bruto ; Gás de refinaria  
[Uma combinação complexa produzida na coluna de pré-flash utilizada na destilação de petróleo bruto. É constituída por azoto e hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>7</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Garc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-11-9

EEC No 272-884-8

No 649-163-00-5

NOTA H

NOTA K

- ES gases (petroleo), extractor de alquitran , Gas de refineria  
[Combinacion compleja obtenida por el fraccionamiento de petroleo crudo reducido. Compuesta de hidrogeno e hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>4</sub>.]
- DA gasser (råolie), tjærestripperaftræks- , Raffinaderigas  
[En sammensat blanding opnået ved fraktioneringen af reduceret råolie. Den består af hydrogen og carbonhydnder, overvejende fra C<sub>1</sub> til og med C<sub>4</sub>.]
- DE Gase (Erdöl), Teer Stripper Ab- , Raffineriegas  
[Komplexe Kombination, erhalten durch Fraktionierung von reduziertem Rohöl. Besteht aus Wasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>4</sub>.]
- EL αερια (πετρελαιοι), εξερχομενα απο απονυμνωτηρα λισσας· Καυσιμο αεριο διυλιστηριου  
[Πολυπλοκος συνδυασμος υδρογονανθρακων που λαμβανεται με την κλασματοση ανηγμενου αργου πετρελαιου. Συνισταται απο υδρογονο και υδρου ανανθρακς με αριθμο ατομων ανθρακα κυριως στην περιοχη απο C<sub>1</sub> ως και C<sub>4</sub>.]
- FN Gases (petroleum) tar stripper off Refinery gas  
[A complex combination obtained by the fractionation of reduced crude oil. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>4</sub>.]
- FR gaz résiduels (pétrole), separation du goudron , Gaz de raffinerie  
[Combinaison complexe obtenue par fractionnement de pétrole brut réduit. Se compose d'hydrogene et d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme C<sub>1</sub> - C<sub>4</sub>.]
- IT gas (petrolio), dallo stripper del catrame , Gas di raffinaria  
[Combinazione complessa ottenuta per frazionamento di petrolio grezzo ridotto. È costituita da idrogeno e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub> - C<sub>4</sub>.]
- NL gassen (aardolie) teerstripperuitstoot- , Raffinaderijgas  
[Een complexe verzameling die wordt verkregen door de fractionering van gereduceerde ruwe olie. Bestaat uit waterstof en koolwaterstoffen overwegend C<sub>1</sub> tot en met C<sub>4</sub>.]
- PT gases (petroleo), do fraccionador do residuo atmosferico , Gas de refinaria  
[Uma combinação complexa obtida pelo fraccionamento do residuo atmosférico. É constituída por hidrogenio e hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de C<sub>1</sub> ate C<sub>4</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
\* Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68919-12-0

EEC No 272-885-3

No 649-164-00-0

NOTA H  
NOTA K

- ES gases (petroleo), extractor de la unidad de refino . Gas de refinería  
[Combinación de hidrogeno y metano obtenida por fraccionamiento de los productos de la unidad de refino]
- DA gasser (råolie), unifiner stripperaftræks- ; Raffinaderigas  
[En blanding af hydrogen og methan opnået ved fraktioneringen af produkterne fra unifiner enheden]
- DE Gase (Erdöl), Unifiner Stripper Ab- , Raffineriegas  
[Kombination von Wasserstoff und Methan, erhalten durch Fraktionieren der Produkte aus der Unifineranlage]
- EL αερια (πετρελαιο), εξαγόμενα από απογυμνωτήρα ενοποιητήρα Καύσιμο αέριο διυλιστηρίου  
[Συνδυασμός υδρογόνου και μεθανίου που λαμβάνεται με κλασμάτωση των προϊόντων από τη μονάδα ενοποιητήρα]
- EN Gases (petroleum), unifiner stripper off , Refinery gas  
[A combination of hydrogen and methane obtained by fractionation of the products from the unifiner unit]
- FR gaz résiduels (pétrole) rectificateur de l'unité *Unifining* , Gaz de raffinerie  
[Combinaison d'hydrogene et de methane obtenue par fractionnement des produits issus de l'unité *Unifining*]
- IT gas (petrolio), dallo stripper « unifining » ; Gas di raffineria  
[Combinazione di idrogeno e metano ottenuta per frazionamento dei prodotti provenienti dall'impianto di « unifining »]
- NL gassen (aardolie), unifiner stripperuitstoot- , Raffinaderigas  
[Een combinatie van waterstof en methaan die wordt verkregen door fractionering van de producten uit de unifinerinstallatie]
- PT gases (petroleo), do stripper da unidade unifiner , Gas de refinaria  
[Uma combinação de hidrogenio + metano obtida pelo fraccionamento dos produtos da unidade unifiner]

Clasificación Klassificering Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Carc Cat. 2 , R 45

Etiquetado Etikettering Kennzeichnung, Επισήμανση Labelling, Étiquetage Etichettatura, Kenmerken, Rotulagem



Límites de concentración Konzentrationsgrænser Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration Limiti di concentrazione, Concentratiegrenzen Limites de concentração




Cas No 68952-79-4

EEC No 273-173-5

No 649-165-00-6

NOTA H

NOTA K

- ES : gas de cola (petróleo), separador de nafta hidrodesulfurada catalíticamente ; Gas de refineria  
[Combinación compleja de hidrocarburos obtenida de la hidrodesulfuración de nafta. Compuesta de hidrógeno, metano, etano y propano.]
- DA : slutgas (råolie), katalytisk hydroafsvovlet naphthaseparator- ; Raffinaderigas  
[En sammensat blanding af carbonhydrider opnået ved hydroafsvovlingen af naphtha. Den består af hydrogen, methan, ethan og propan.]
- DE : Endgas (Erdöl), katalytisch hydrodesulfurierte Naphtha Separator ; Raffineriegas  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Hydrodesulfurierung von Naphtha. Besteht aus Wasserstoff, Methan, Ethan und Propan.]
- EL : αεριο ουράς (πετρελαίου), καταλυτικά υδρογονοαποθειωμένης νάφθας διαχωριστήρα· Καύσιμο αέριο διυλιστηρίου  
[Ο πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την υδρογονοαποθείωση νάφθας. Συνίσταται από υδρογόνο, μεθάνιο, αιθάνιο και προπάνιο.]
- EN : Tail gas (petroleum), catalytic hydrodesulfurized naphtha separator ; Refinery gas  
[A complex combination of hydrocarbons obtained from the hydrodesulfurization of naphtha. It consists of hydrogen, methane, ethane, and propane.]
- FR : gaz de queue (pétrole), séparateur de naphtha d'hydrodésulfuration catalytique ; Gaz de raffinerie  
[Combinaison complexe d'hydrocarbures obtenue par hydrodésulfuration catalytique du naphtha. Se compose d'hydrogène, de méthane, d'éthane et de propane.]
- IT : gas di coda (petrolio), da separatore di nafta idrodesolforata cataliticamente ; Gas di raffineria  
[Combinazione complessa di idrocarburi ottenuta dalla idrodesolforazione di nafta. È costituita da idrogeno, metano, etano e propano.]
- NL : restgas (aardolie), katalytisch met waterstof ontwazvelde nafta afscheider ; Raffinaderijgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de waterstofontzwaveling van nafta. Bestaat uit waterstof, methaan, ethaan en propaan.]
- PT : gas residual (petróleo), do separador da nafta hidrogenodessulfurizada cataliticamente ; Gás de refineria  
[Uma combinação complexa de hidrocarbonetos obtida da hidrogenodessulfuração de nafta. É constituída por hidrogénio, metano, etano, e propano.]

*Classification Kλάσση/κλάση Ein teilung Teil, νοήση Classification Classificazione Etideling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling, Étiquetage, Etichettatura Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : S3-45</p>
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*Limites de concentracion Konzentrationsgrænser Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentração*


Cas No 68952-80-7

EEC No 273-174-0

No 649-166-00-1

NOTA H

NOTA K

- ES: gas de cola (petróleo), hidrodesulfurador de nafta de primera destilación; Gas de refinería  
[Combinación compleja obtenida de la hidrodesulfuración de nafta de primera destilación. Compuesta de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_7$ .]
- DA: slugas (råolie), straight-run naphtha hydroafsvovler-; Raffinaderigas  
[En sammensat blanding opnået ved hydroafsvovlingen af straight-run naphtha. Den består af hydrogen og carbonhydnder, overvejende fra  $C_1$  til og med  $C_7$ .]
- DE: Endgas (Erdöl), straight-run Naphtha Hydrodesulfurierer; Raffinenegas  
[Komplexe Kombination, erhalten aus der Hydrodesulfurierung von straight-run Naphtha. Besteht aus Wasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_7$ .]
- EL: αεριο ουρας (πετρελαίου), απευθείας αποστάγματος νάφθας υδρογονοαποθειωτήρα· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται από την υδρογονοαποθείωση απευθείας αποστάγματος νάφθας. Συνίσταται από υδρογόνο και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_7$ .]
- EN: Tail gas (petroleum), straight-run naphtha hydrodesulfurizer; Refinery gas  
[A complex combination obtained from the hydrodesulfurization of straight-run naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_7$ .]
- FR: gaz de queue (pétrole), hydrodésulfuration de naphtha de distillation directe; Gaz de raffinerie  
[Combinaison complexe obtenue par hydrodésulfuration de naphtha de distillation directe. Se compose d'hydrogène et d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_7$ .]
- IT: gas di coda (petrolio), da idrodesolforatore di nafta di prima distillazione; Gas di raffineria  
[Combinazione complessa ottenuta dalla idrodesolforazione di nafta di prima distillazione. È costituita da idrogeno e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_7$ .]
- NL: restgas (aardolie), direct door fractionering verkregen nafta-waterstofontzwavelaar; Raffinaderigas  
[Een complexe combinatie die wordt verkregen door de waterstofontzwaveling van nafta die direct door fractionering is verkregen. Bestaat uit waterstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_7$ .]
- PT: gas residual (petróleo), do hidrogenodessulfurizador da nafta de destilação directa; Gás de refinação  
[Uma combinação complexa obtida da hidrogenodessulfurização da nafta de destilação directa. É constituída por hidrogénio e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  a  $C_7$ .]

*Clasificación Klassificering, Einstufung, Ταξινόμηση Classification Classification Classificazione Indeling Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68955-33-9

EEC No 273-269-7

No 649-167-00-7

NOTA H

NOTA K

- ES : gases (petróleo), fraccionamiento del producto de cabeza del aparato de absorción con esponja, craqueador catalítico fluidizado y desulfurizador de gasóleo ; Gas de refinería  
[Combinación compleja obtenida por el fraccionamiento de productos del craqueador catalítico fluidizado y del desulfurizador de gasóleo. Compuesta de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA : gasser (råolie), sponge absorber aftræks-, fluidiserede katalytisk krakker og gasolie afsvovler topfraktionsfraktionering ; Raffinaderigas  
[En sammensat blanding opnået ved fraktionering af produkterne fra den flydende katalytiske krakker og gasolieafsvovler. Den består af hydrogen og carbonhydrider, overvejende fra  $C_1$  til og med  $C_4$ .]
- DE : Gase (Erdöl), Schwamm Absorber Ab-, Fließbettcracker und Gasöldesulfurierter Kopffraktionierung ; Raffineriegas  
[Komplexe Kombination, erhalten durch Fraktionierung von Produkten aus dem Fließbettcracker und Gasöldesulfurierter. Besteht aus Wasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL : αέρια (πετρελαίου), ελκνόμενα από σπογγώδη απορροφητήρα, ρευστοειδούς καταλυτικού πυρολυτήρα και κλασμάτωσης προϊόντος κορυφής αποθειωτήρα ακάθαρτου πετρελαίου· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται με την κλασμάτωση προϊόντων από ρευστοειδή καταλυτικό πυρολυτήρα και αποθειωτήρα ακάθαρτου πετρελαίου. Συνίσταται από υδρογόνο και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN : Gases (petroleum), sponge absorber off, fluidized catalytic cracker and gas oil desulfurizer overhead fractionation ; Refinery gas  
[A complex combination obtained by the fractionation of products from the fluidized catalytic cracker and gas oil desulfurizer. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR : gaz résiduels d'absorbeur (pétrole), fractionnement des produits de tête de craquage catalytique fluide et de désulfuration du gazole ; Gaz de raffinerie  
[Combinaison complexe obtenue par fractionnement des produits de l'unité de craquage catalytique fluide et de l'unité de désulfuration du gazole. Se compose d'hydrogène et d'hydrocarbures dont le nombre de carbonos se situe principalement dans la gamme  $C_1$ - $C_4$ .]
- IT : gas (petrolio), da torre di assorbimento a spugna, frazionamento prodotti di testa impianti di cracking a letto fluido e desolfurazione gasolio ; Gas di raffineria  
[Combinazione complessa ottenuta con il frazionamento dei prodotti provenienti dall'impianto di cracking a letto fluido e dal desolfatore del gasolio. È costituita da idrogeno e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL : gassen (aardolie), sponsabsorptievat-uitstoot-, topproduktfraktionering van gefluidiseerde katalytische kraker en gasolie-ontzwavelaar ; Raffinaderigas  
[Een complexe combinatie die wordt verkregen door de fractionering van producten uit de gefluidiseerde katalytische kraker en gasolie-ontzwavelaar. Bestaat uit waterstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT : gases (petróleo), da coluna de absorção (leanoil), do fraccionamento de produtos do cracker catalítico de leito fluidizado e do produto de cabeça do dessulfurizador de gasóleo ; Gas de refinaria  
[Uma combinação complexa obtida pelo fraccionamento dos produtos de um craker catalítico de leito fluidizado e do dessulfurizador de gasóleo. É constituída por hidrogénio e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  a  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68989-88-8

EEC No 273-563-5

No 649-168-00-2

NOTA H

NOTA K

- ES gases (petróleo), destilación de petróleo crudo y craqueo catalítico, Gas de refinera  
[Combinación compleja producida por la destilación de petróleo crudo y procesos de craqueo catalítico. Compuesta de hidrógeno, sulfuro de hidrógeno, nitrógeno, monóxido de carbono e hidrocarburos olefinicos y parafinicos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA gasser (råolie), rådestillation og katalytisk krakning, Raffinaderigas  
[En sammensat blanding fremstillet ved rå destillation og katalytiske kraknings processer. Den består af hydrogen, hydrogensulfid, nitrogen, carbonmonoxid og paraffin- og olefincarbonhydrier, overvejende  $C_1$  til og med  $C_6$ .]
- DE Gase (Erdöl), rohe Destillation und katalytisches Kracken, Raffineriegas  
[Komplexe Kombination, hergestellt durch rohe Destillation und katalytische Krackverfahren. Besteht aus Wasserstoff, Schwefelwasserstoff, Stickstoff, Kohlenmonoxid und paraffinhaltigen und olefinhaltigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C bis  $C_6$ .]
- EL αερία (πετρελαίου), αποσταξης αργού πετρελαίου και καταλυτικής πυρόλυσης. Καυσίμο αερίο διυλιστηρίου  
[Πομπλοκος συνδυασμός που παρανεται με μεθόδους αποσταξης αργού πετρελαίου και καταλυτικής πυρόλυσης. Συνίσταται από υδρογόνο, υδροθείο, αζωτο μονοξειδιο άνθρακα και παραφινικούς και ολεφινικούς υδρογονάνθρακες με αριθμο ατομων ανθρακη κυρίως στην περιοχή απο  $C_1$  ως και  $C_6$ .]
- EN Gases (petroleum), crude distn and catalytic cracking, Refinery gas  
[A complex combination produced by crude distillation and catalytic cracking processes. It consists of hydrogen, hydrogen sulfide, nitrogen, carbon monoxide and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C through  $C_6$ .]
- FR gaz (pétrole), distillation de pétrole brut et craquage catalytique, Gaz de raffinerie  
[Combinaison complexe obtenue par distillation de pétrole brut et craquage catalytique. Se compose principalement d'hydrogene, de sulfure d'hydrogene, d'azote, de monoxyde de carbone et d'hydrocarbures paraffiniques et olefiniques dont le nombre de carbonos se situe principalement dans la gamme  $C_1$ - $C_6$ .]
- gas (petrolio), da distillazione e cracking catalitico del grezzo, Gas di raffineria  
[Combinazione complessa ottenuta per distillazione del grezzo e con processi di cracking catalitico. E costituita da idrogeno, idrogeno solforato, azoto, ossido di carbonio e idrocarburi paraffinici ed olefinici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL gassen (aardolie), ruwe destillatie en katalytisch kraken, Raffinaderijgas  
[Een complexe combinatie die wordt geproduceerd door ruwe destillatie- en katalytische kraakprocessen. Bestaat uit waterstof, waterstofsulfide, stikstof, koolmonoxide en paraffinische en olefinische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT gases (petróleo), da destilação e cracking catalítico de petróleo bruto, Gas de refinaria  
[Uma combinação complexa produzida por processos de destilação e de cracking catalítico de petróleo bruto. É constituída por hidrogenio, sulfureto de hidrogenio, azoto, monoxido de carbono e hidrocarbonetos parafinicos e olefinicos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Classification Klassificering, Einstufung Ταξινόμηση Classification, Classification Classificazione Etiquetagem*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentración Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 92045-15-3

EEC No 295-397-2

No 649-169-00-8

NOTA H


NOTA K

- ES : gases (petróleo), depurador de gasóleos con dietanolamina ; Gas de refinería  
[Combinación compleja producida por desulfuración de gasóleos con dietanolamina. Compuesta en su mayor parte de sulfuro de hidrógeno, hidrógeno e hidrocarburos alifáticos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_{10}$ .]
- DA : gasser (råolie), gasolie diethanolaminskrubber-aftræks- ; Raffinaderigas  
[En sammensat blanding fremstillet ved afsøvling af gasolier med diethanolamin. Den består overvejende af hydrogensulfid, hydrogen og aliphatiske carbonhydrider, overvejende  $C_1$  til og med  $C_{10}$ .]
- DE : Gase (Erdöl), Gasöl Diethanolamin Wäscher Ab- ; Raffineriegas  
[Komplexe Kombination, hergestellt durch Desulfurierung von Gasölen mit Diethanolamin. Besteht vorherrschend aus Schwefelwasserstoff, Wasserstoff und aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_{10}$ .]
- EL : αερια (πετρελαίου), εξόδου πλυντρίδας με διαιθανολαμίνη ακαθάρτου πετρελαίου· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που παράγεται με αποθείωση ακαθάρτων πετρελαίων με διαιθανολαμίνη. Συνίσταται κυρίως από υδρόθειο, υδρογόνο και αλειφατικούς υδρογονάνθρακες με αριθμό ατομών άνθρακα στην περιοχή από  $C_1$  ως και  $C_{10}$ .]
- EN : Gases (petroleum), gas oil diethanolamine scrubber off ; Refinery gas  
[A complex combination produced by desulfurization of gas oils with diethanolamine. It consists predominantly of hydrogen sulfide, hydrogen and aliphatic hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_{10}$ .]
- FR : gaz résiduels (pétrole), lavage de gazole à la diéthanolamine ; Gaz de raffinerie  
[Combinaison complexe produite par désulfuration des gazoles à la diéthanolamine. Se compose principalement d'hydrogène sulfuré, d'hydrogène et d'hydrocarbures aliphatiques dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_{10}$ .]
- IT : gas (petrolio), scarico di scrubber di gasolio a dietanolamina ; Gas di raffineria  
[Combinazione complessa di idrocarburi prodotta dalla desolfurazione di gasolii con dietanolamina. È costituita da idrogeno solforato, idrogeno ed idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{10}$ .]
- NL : gassen (aardolie), gasolie diethanolaminegaszuiveraar-uitstoot- ; Raffinaderijgas  
[Een complexe combinatie die wordt gevormd door de ontzwaveling van gasoliën met diethanolamine. Bestaat voornamelijk uit waterstofsulfide, waterstof en alifatische koolwaterstoffen,  $C_1$  tot en met  $C_{10}$ .]
- PT : gases (petróleo), da lavagem de gasóleos com dietanolamina ; Gás de refinaria  
[Uma combinação complexa produzida por dessulfurização de gasóleos com dietanolamina. É constituída predominantemente por sulfureto de hidrogénio, hidrogénio e hidrocarbonetos alifáticos com numeros de átomos de carbono na gama de  $C_1$  ate  $C_{10}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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	<div data-bbox="943 510 1023 544">R : 45</div> <div data-bbox="943 562 1054 595">S : 53-45</div>

*Limites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraç3o*


Cas No 92045-16-4

EEC No 295-398-8

No 649-170-00-3

NOTA H

NOTA K

- ES : gases (petróleo), effluente de la hidrodesulfuración del gasóleo ; Gas de refinería  
[Combinación compleja obtenida por separación de la fase líquida del effluente de la reacción de hidrogenación. Compuesta fundamentalmente de hidrógeno, sulfuro de hidrógeno e hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>11</sub>.]
- DA : gasser (råolie), gasolie, hydroafsvovlingsudløbs- ; Raffinaderigas  
[En sammensat blanding opnået ved separation af væskefasen fra udløbet fra hydrogeneringsreaktionen. Den består overvejende af hydrogen, hydrogensulfid og aliphatiske carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>11</sub>.]
- DE : Gase (Erdöl), Gasöl Hydrodesulfurierung Ausfluß ; Raffineriegas  
[Komplexe Kombination, die man durch Abtrennen der flüssigen Phase vom Ausfluß aus der Hydrierreaktion erhält. Besteht vorherrschend aus Wasserstoff, Schwefelwasserstoff und aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>11</sub>.]
- EL : αερια (πετρελαίου), απορροής υδρογονοαποθείωσης ακαθάρτου πετρελαίου· Καύσιμο αέριο διυλιστηρίου  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με διαχωρισμό της υγρής φάσης από την απορροή της αντιόξησης υδρογόνωσης. Συνίσταται κυρίως από υδρογόνο, υδρόθειο και αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>11</sub>.]
- EN : Gases (petroleum), gas oil hydrodesulfurization effluent ; Refinery gas  
[A complex combination obtained by separation of the liquid phase from the effluent from the hydrogenation reaction. It consists predominantly of hydrogen, hydrogen sulfide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>11</sub>.]
- FR : gaz (pétrole), hydrodésulfuration du gazole, effluent ; Gaz de raffinerie  
[Combinaison complexe obtenue par séparation de la phase liquide dans l'effluent issu de la réaction d'hydrogénation. Se compose principalement d'hydrogène, d'hydrogène sulfuré et d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majeure partie dans la gamme C<sub>1</sub>-C<sub>11</sub>.]
- IT : gas (petrolio), effluente da idrodesolforazione di gasolio ; Gas di raffineria  
[Combinazione complessa ottenuta per separazione della fase liquida dall'effluente dalla reazione di idrogenazione. E costituita da idrogeno, idrogeno solforato ed idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>11</sub>.]
- NL : gassen (aardolie), gasolie waterstofontzwevelingsuitstroom ; Raffinaderijgas  
[Een complexe combinatie die wordt verkregen door afscheiding van de vloeibare fase uit de uitstroom uit de hydrogeneringsreactie. Bestaat voornamelijk uit waterstof, waterstofsulfide en alifatische koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>11</sub>.]
- PT : gases (petróleo), efluentes da hidrogenodessulfurização de gasóleo ; Gás de refinaria  
[Uma combinação complexa obtida por separação da fase líquida do effluente da reacção de hidrogenação. É constituída predominantemente por hidrogénio, sulfureto de hidrogénio e hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>11</sub>.]

Classification Klassifizierung Ταξινόμηση Classification Classificazione Classificação

Carc. Cat. 2, R 45

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura, Kenmerken Rotulagem

T	
	R : 45 S 53-45

Limits de concentration Konzentrationsgrenzen Konzentrationsgrenzuerte Όρια συγκεντρώσεως Concentration limits  
Limiti de concentracion Limiti de concentrazione Concentratiegrenzen Limites de concentraçao


Cas No 92045 17-5

EEC No 295-399-3

No 649-171-00-9

NOTA H

NOTA K

- ES gases (petróleo), purga de la hidrodesulfuración de gasóleo ; Gas de refinería  
[Combinación compleja de gases obtenida del reformador y de las purgas del reactor de hidrogenación. Compuesta fundamentalmente de hidrógeno e hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>4</sub>.]
- DA gasser (råolie), gasoliehydroafsvøvlings-udblæsnings-, Raffinaderigas  
[En sammensat blanding af gasser opnået fra reformeren og fra udblæsningerne fra hydrogeneringsreaktoren. Den består overvejende af hydrogen og aliphatiske carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>4</sub>.]
- DE Gase (Erdöl), Gasöl Hydrodesulfurierung Entlüfter ; Raffineriegas  
[Komplexe Kombination von Gasen, die man aus dem Reformier und aus den Entlüftern aus dem Hydrierreaktor erhält. Besteht vorherrschend aus Wasserstoff und aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>4</sub>.]
- EL αέρια (πετρελαιο), υδρογονοαποθείωσης ακαθάρτου πετρελαίου διαφυγή καθαρή; Καύσιμο αέριο διυλιστηρίου  
[Ποικίλο, σύνθετο μίγμα που λαμβάνεται από τη μονάδα αναμόρφωσης και από διαφυγές καθαρές από τον αντιδραστήρα υδρογόνου. Συνίσταται κυρίως από υδρογόνο και αλκυμωτικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή C<sub>1</sub> ως και C<sub>4</sub>.]
- EN Gases (petroleum), gas oil hydrodesulfurization purge, Refinery gas  
[A complex combination of gases obtained from the reformer and from the purges from the hydrogenation reactor. It consists predominantly of hydrogen and aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>4</sub>.]
- FR gaz (pétrole), hydrodesulfuration du gazole - purge, Gaz de raffinerie  
[Combinaison complexe de gaz provenant de l'unité de reformage et des purges du réacteur d'hydrogénation. Se compose principalement d'hydrogène et d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme C<sub>1</sub> à C<sub>4</sub>.]
- IT gas (petrolio), spurgo dell'idrodesolforazione del gasolio, Gas di raffineria  
[Combinazione complessa di gas ottenuta dal reformer e dallo spurgo del reattore di idrogenazione. È costituita prevalentemente da idrogeno ed idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>4</sub>.]
- NL gassen (aardolie) gasolie waterstofontzwarelingsreinigings-, Raffinaderigas  
[Een complexe verzameling gassen die wordt verkregen uit de reformator en uit de gezuiverde fracties uit de hydrogeneringsreactor. Bestaat voornamelijk uit waterstof en alifatische koolwaterstoffen overwegend C<sub>1</sub> tot en met C<sub>4</sub>.]
- PT gases (petróleo), da purga de hidrogenodessulfurização, Gás de refinaria  
[Uma combinação complexa de gases obtida do reformer e das purgas do reator de hidrogenação. É constituída predominantemente por hidrogenio e hidrocarbonetos alifáticos com numeros de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>4</sub>.]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken Rotulagem*

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*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 22045-15-6

EEC No 295-400-7

No 649-172-00-4

NOTA H

NOTA K

- ES gases (petroleo), tambor de expansion subita del efluente del hidrogenador , Gas de refineria  
[Combinacion compleja de gases obtenida por expansion subita de los efluentes después de la reacción de hidrogenación. Compuesta fundamentalmente de hidrogeno e hidrocarburos alifáticos con un numero de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>6</sub>.]
- DA gasser (råolie), hydrogenatorudløb-flashkammer-afræks- , Raffinaderigas  
[En sammensat blanding af gasser opnået fra flashen fra udløbene efter hydrogeneringsreaktionen. Den består overvejende af hydrogen og aliphatiske carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>6</sub>.]
- DE Gase (Erdöl), Hydrierreaktor Ausfluß Flashtrommel Ab- ; Raffineriegas  
[Komplexe Kombination von Gasen, die man aus dem Entspannen der Ausflüsse nach der Hydrierreaktion erhält. Besteht vorherrschend aus Wasserstoff und aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>6</sub>.]
- EL αερια (πετρελαίου), απότομη εξατμηση από δοχείο επαναρρόης υδρογονωτήρα· Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός αερίων που λαμβάνεται από ακαριαία εξατμηση των εκροών μετά την αντίδραση υδρογόνωσης. Συνίσταται κυρίως από υδρογόνο και αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>6</sub>.]
- EN Gases (petroleum), hydrogenator effluent flash drum off , Refinery gas  
[A complex combination of gases obtained from flash of the effluents after the hydrogenation reaction. It consists predominantly of hydrogen and aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>6</sub>.]
- FR : gaz résiduels (pétrole), effluent du réacteur d'hydrogenation, ballon de détente , Gaz de raffinerie  
[Combinaison complexe de gaz obtenue par détente des effluents après la réaction d'hydrogénation. Se compose principalement d'hydrogene et d'hydrocarbures aliphatiques dont le nombre de carbonos se situe en majorite dans la gamme C<sub>1</sub>-C<sub>6</sub>.]
- IT gas (petrolio), scarico da flash drum di effluente dell'idrogenatore , Gas di raffineria  
[Combinazione complessa di gas ottenuta dal flash degli effluenti dopo la reazione di idrogenazione. È costituita prevalentemente da idrogeno ed idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>6</sub>.]
- NL gassen (aardolie), hydrogenatoruitstroom-afdamppvuitstoot- , Raffinaderigas  
[Een complexe verzameling gassen die wordt verkregen uit afdampen van de uitstroomfracties na de hydrogeneringsreactie. Bestaat voornamelijk uit waterstof en alifatische koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>6</sub>.]
- PT gases (petroleo), do tanque de flash do hidrogenador , Gas de refineria  
[Uma combinação complexa de gases obtida do flash dos efluentes apos a reacção de hidrogenação. É constituída predominantemente por hidrogenio e hidrocarbonetos alifáticos com numeros de atomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>6</sub>.]

*Classification Klassifizierung Klassifizierung Klassifizierung Klassifizierung Klassifizierung Klassifizierung Klassifizierung Klassifizierung Klassifizierung*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering Kennzeichnung, Ετισημανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="370 463 389 488" data-label="Text">T</div> <div data-bbox="331 510 427 607" data-label="Image"> </div> <div data-bbox="936 512 1018 544" data-label="Text">R : 45</div> <div data-bbox="936 566 1050 595" data-label="Text">S : 53-45</div>
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*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Ορια συγκεντρώσεως Concentration limits, Limite de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçao*




Cas No 92045-19-7

EEC No 295-401-2

No 649-173-00-X

NOTA H

NOTA K

- ES: gases (petróleo), fracción residual a alta presión del craqueo a vapor de nafta ; Gas de refineria  
[Combinación compleja obtenida como una mezcla de las porciones no condensadas de los productos de un proceso de craqueo a vapor de nafta así como gases residuales obtenidos durante la preparación de productos posteriores. Compuesta fundamentalmente de hidrógeno e hidrocarburos parafínicos y olefínicos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>4</sub>, con los que también se puede mezclar gas natural.]
- DA: gasser (råolie), naphtheadampkrakning højtryksrest- ; Raffinaderigas  
En sammensat blanding opnået som en blanding af de ikke-kondenserbare dele af produktet fra en naphtheadampkrakningsproces sa vel som restgasser opnået under bearbejdningen af efterfølgende produkter. Den består overvejende af hydrogen og parafinske og olefinske carbonhydinder, overvejende C<sub>1</sub> til og med C<sub>4</sub>, hvilke kan være blandet med naturgas.]
- DE: Gase (Erdöl), Naphtha Dampkracken Hochdruck Rückstand ; Raffineriegas  
[Komplexe Kombination, die man als Gemisch der nichtkondensierbaren Portionen aus dem Produkt eines Naphtha-Dampkrackverfahrens wie auch als Rückstandsgase erhält, die während der Vorbereitung nachfolgender Produkte anfallen. Besteht vorherrschend aus Wasserstoff und paraffinhaltigen und olefinhaltigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>4</sub>. Erdgas kann auch beigemischt sein.]
- EL: αερια (πετρελαιο), υπολειμματος υψηλής πίεσης ατμοπυρόλυσης νάφθας; Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται σαν μείγμα των μη συμπυκνώσιμων τμημάτων από το προϊόν ατμοπυρόλυσης νάφθας και σαν υπολειμματικά αέρια που λαμβάνονται κατά την παραγωγή επόμενων προϊόντων. Συνίσταται κυρίως από υδρογόνο και παραφινικούς ολεφινικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> ως και C<sub>4</sub>, με τον οποίο μπορεί επίσης να αναμειχθεί και φυσικό αέριο.]
- EN: Gases (petroleum), naphtha steam cracking high-pressure residual , Refinery gas  
[A complex combination obtained as a mixture of the non-condensable portions from the product of a naphtha steam cracking process as well as residual gases obtained during the preparation of subsequent products. It consists predominantly of hydrogen and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>4</sub>, with which natural gas may also be mixed.]
- FR: gaz résiduels haute pression (pétrole), vapocraquage du naphta ; Gaz de raffinerie  
[Combinaison complexe, mélange des parties non condensables du produit résultant du vapocraquage du naphta et des gaz résiduels résultant de la préparation des produits en aval. Se compose principalement d'hydrogène et d'hydrocarbures paraffiniques et oléfiniques dont le nombre de carbonnes se situe en majorité dans la gamme C<sub>1</sub>-C<sub>4</sub>, auxquels du gaz naturel peut se trouver mélangé.]
- IT: gas (petrolio), residui di cracking con vapore ad alta pressione di nafta ; Gas di raffineria  
[Combinazione complessa ottenuta come miscela delle parti non condensabili dal prodotto di un processo di cracking con vapore di nafta oltre ai gas residui ottenuti durante la preparazione dei prodotti susseguenti. È costituita prevalentemente da idrogeno ed idrocarburi paraffinici ed olefinici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>4</sub>, con cui può trovarsi miscelato anche del gas naturale.]
- NL: gassen (aardolie), stoomkraken van nafta onder hoge druk residu- ; Raffinaderijgas  
[Een complexe combinatie die wordt verkregen als een mengsel van de niet-condenseerbare delen uit het produkt van een nafta-stoomkraakproces evenals residugassen die worden verkregen tijdens de bereiding van daaruit voortkomende produkten. Bestaat voornamelijk uit waterstof en paraffinische en olefinische koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>4</sub>, waarmee aardgas ook kan worden gemengd.]
- PT: gases (petróleo), residuais e de alta pressão do steam-cracking de nafta ; Gás de refinaria  
[Uma combinação complexa obtida como uma mistura de fracções não condensáveis dos produtos do processo de steam-cracking da nafta e de gases residuais obtidos durante a preparação dos produtos subsequentes. É constituída predominantemente por hidrogénio e hidrocarbonetos parafínicos e olefínicos com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>4</sub>, com os quais também pode estar misturado gás natural.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçao*


Cas No 92045-20-0

EEC No 295-402-8

No 649-174-00-5

NOTA H

NOTA K

- ES: gases (petroleo), reducción de viscosidad del residuo; Gas de refinería  
[Combinación compleja obtenida por reducción de la viscosidad de los residuos en un horno. Compuesta fundamentalmente de sulfuro de hidrógeno e hidrocarburos parafínicos y olefínicos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_7$ .]
- DA: gasser (råolie), restvisbreaking-aftræks-; Raffinaderigas  
[En sammensat blanding opnået fra viskositetsreduktion af rester i en ovn. Den består overvejende af hydrogensulfid og paraffinske og olefinske carbonhydrider, overvejende  $C_1$  til og med  $C_7$ .]
- DE: Gase (Erdöl), Rückstand Viskositätsbrechen Ab-; Raffineriegas  
[Komplexe Kombination, die man aus der Reduktion der Viskosität von Rückständen in einem Ofen erhält. Besteht vorherrschend aus Schwefelwasserstoff und paraffinhaltigen und olefinhaltigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_7$ .]
- EL: αερια (πετρελαίου), εξόδου μονάδας ελάτωσης ιξώδους υπολείμματος. Καύσιμο αέριο διυλιστηρίου  
[Πολύπλοκος συνδυασμός που λαμβάνεται από ελάτωση ιξώδους υπολειμμάτων σε φούρνο. Συνίσταται κυρίως από υδρόθειο και παραφινικούς και ολεφινικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_7$ .]
- EN: Gases (petroleum), residue visbaking off; Refinery gas  
[A complex combination obtained from viscosity reduction of residues in a furnace. It consists predominantly of hydrogen sulfide and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_7$ .]
- FR: gaz résiduels (pétrole), viscoréduction de résidus; Gaz de raffinerie  
[Combinaison complexe obtenue par viscoréduction des résidus dans un four. Se compose principalement d'hydrogène sulfuré et d'hydrocarbures paraffiniques et oléfiniques dont le nombre de carbonos se situe en majorité dans la gamme  $C_1$ - $C_7$ .]
- IT: gas (petrolio), residuo « visbreaking »; Gas di raffineria  
[Combinazione complessa ottenuta dalla riduzione di viscosità dei residui in una fornace. È costituita prevalentemente da idrogeno solforato ed idrocarburi paraffinici ed olefinici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_7$ .]
- NL: gassen (aardolie), residu-viscositeitsreductie-uitstoot-; Raffinaderijgas  
[Een complexe combinatie die wordt verkregen uit de reductie van de viscositeit van residuen in een oven. Bestaat voornamelijk uit waterstofsulfide en paraffinische en olefinische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_7$ .]
- PT: gases (petróleo), da viscorredução de resíduos; Gás de refinaria  
[Uma combinação complexa obtida por redução de viscosidade de resíduos num forno. É constituída predominantemente por sulfureto de hidrogénio e hidrocarbonetos parafínicos e olefínicos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_7$ .]

*Classification Klassificering Einstufung Ταξινόμηση, Classification Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado Etikettering, Kennzeichnung Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limit de concentration Konzentrationsgrenze Όρια συγκεντρώσεως, Concentration limits, limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentração*


Cas No 93924-31-3

EEC No 300-225-7

No 649-175-00-0

NOTA H  
NOTA L

- ES aceite de sedimentos (petroleo), tratado con acido Aceite de desaceitado de parafinas  
[Combinacion compleja de hidrocarburos obtenida por el tratamiento de aceite de sedimentos con acido sulfúrico. Compuesta fundamentalmente de hidrocarburos de cadena ramificada con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{15}$ ]
- DA Foots oil (råolie), syrebehandlet, Solventekstraherede eller afvoksede tunge restolier  
[En sammensat blanding af carbonhydrider opnået ved behandling af Foot's oil med svovlsyre Den består overvejende af forgrenede carbonhydrider, overvejende  $C_{10}$  til og med  $C_{15}$ ]
- DE Klauenol (Erdöl), Saure-behandelt, Weichparaffin  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln von Klauenol mit Schwefelsäure erhält Besteht vorherrschend aus Kohlenwasserstoffen mit verzweigter Kette mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{15}$ ]
- EL ελαιο Foot (πετρελίου), κατεργασμένο με οξύ Φοότς οίλ  
[Πομπύλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία ελαίου Foot με θειικό οξύ Συνίσταται κυρίως από υπομοναθράκες διακλαδισμένης αλυσίδας με αριθμό ατομών ανθράκα κυρίως στην περιοχή από  $C_{10}$  ως και  $C_{15}$ ]
- EN Foots oil (petroleum), acid-treated, Foots oil  
[A complex combination of hydrocarbons obtained by treatment of Foot's oil with sulfuric acid It consists predominantly of branched-chain hydrocarbons with carbon numbers predominantly in the range of  $C_{10}$  through  $C_{15}$ ]
- FR huile de ressuage (petrole), traitée à l'acide, Huile de ressuage  
[Combinaison complexe d'hydrocarbures obtenue par traitement de l'huile de ressuage par l'acide sulfurique Se compose principalement d'hydrocarbures à chaîne ramifiée dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$ - $C_{15}$ ]
- IT olio di sedimento (petrolio) trattato con acido Olio di trasudamento  
[Combinazione complessa di idrocarburi ottenuta per trattamento di olio di sedimento con acido solforico È costituita prevalentemente da idrocarburi a catena ramificata con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$  a  $C_{15}$ ]
- NL bezinkselolie (aardolie) zuurbehandeld, Bezinkselolie uit paraffinewas  
[Een complexe verzameling koolwaterstoffen verkregen door de behandeling van bezinkselolie met zwavelzuur Het bestaat voor namelijk uit vertakte koolwaterstoffen overwegend  $C_{10}$  tot en met  $C_{15}$ ]
- PT óleo da refinação das parafinas (petróleo), tratado com ácido Óleo de ressudação  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de óleo da refinação das parafinas com ácido sulfúrico É constituída predominantemente por hidrocarbonetos ramificados com números de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{15}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgr enzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 93924-32-4

EFC No 300-226-2

No 649-176-00-6

NOTA H

NOTA L

- ES aceite de sedimentos (petroleo), tratado con arcilla, Aceite de desaceitado de parafinas  
[Combinacion compleja de hidrocarburos obtenida por tratamiento de aceite de sedimentos con arcilla natural o modificada en un proceso por contacto o percolación para separar las trazas presentes de compuestos polares e impurezas. Compuesta fundamentalmente de hidrocarburos de cadena ramificada con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$ ]
- DA Fots oil (råolie), lerbehandlet, Solventekstraherede eller afvoksede tunge restolier  
[En sammensat blanding af carbonhydrier opnået ved behandling af Fots oil med naturligt eller modificeret ler, enten i en kontakt- eller perkolationsproces for at fjerne spor af polære forbindelser og urenheder, som er tilstede. Den består overvejende af forgrenede carbonhydrier, overvejende  $C_{20}$  til og med  $C_{40}$ ]
- DE Klauenöl (Erdöl), Ton-behandelt, Weichparaffin  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln von Klauenöl mit natürlichem oder modifiziertem Ton entweder in einem Kontakt- oder Perkolationsverfahren zur Beseitigung von Spuren polarer Verbindungen und von vorhandenen Verunreinigungen erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit verzweigter Kette mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$ ]
- EL ελαιο Fots (πετρελαιο), κατεργασμένο με άργιλλο Φότος όιλ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία ελαίου Fots με φυσική ή τροποποιημένη άργιλλο είτε με τη μέθοδο της επαφής είτε με τη μέθοδο της διήθησης για να απομακρυνθούν τα ίχνη πολικών ενώσεων και προσμίξεων που συνυπάρχουν. Συνίσταται κυρίως από υδρογονάνθρακες με διακλαδισμένες αλυσίδες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  ως και  $C_{40}$ ]
- EN Fots oil (petroleum), clay-treated, Fots oil  
[A complex combination of hydrocarbons obtained by treatment of Fots oil with natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists predominantly of branched chain hydrocarbons with carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$ ]
- FR huiles de ressuage (pétrole), traitées à l'argile; Huile de ressuage  
[Combinaison complexe d'hydrocarbures obtenue par traitement de l'huile de ressuage avec de l'argile naturelle ou modifiée, par contact ou par percolation, pour éliminer les traces de composés polaires et les impuretés. Se compose principalement d'hydrocarbures à chaîne ramifiée dont le nombre de carbones se situe en majeure partie dans la gamme  $C_{20}$ - $C_{40}$ ]
- IT olio di sedimento (petrolio), trattato con argilla, Olio di trasudamento  
[Combinazione complessa di idrocarburi ottenuti per trattamento di olio di sedimento con argilla naturale o modificata mediante un processo di contatto o di percolazione per rimuovere le tracce di composti polari ed impurezze presenti. È costituita prevalentemente da idrocarburi a catena ramificata con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$ ]
- NL bezinkselolie, met klei behandeld, Bezinkselolie uit paraffinewas  
[Een complexe verzameling koolwaterstoffen, verkregen door de behandeling van bezinkselolie met natuurlijke of aangepaste klei in ofwel een kontakt- ofwel een percolatieproces om de aanwezige sporen polaire verbindingen en onzuiverheden te verwijderen. Bestaat voornamelijk uit vertakte koolwaterstoffen  $C_{20}$  tot en met  $C_{40}$ ]
- PT oleo da refinação das parafinas (petroleo), tratado com argila, Oleo de ressudação  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento do oleo da refinação das parafinas com argila natural ou modificada por um processo quer de mistura quer de percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída predominantemente por hidrocarbonetos ramificados com numeros de atomos de carbono predominante-mente na gama de  $C_{20}$  ate  $C_{40}$ ]

Classification K. - Ιεράρχηση, Ιεράρχηση, Ταξινόμηση, Ταξινόμηση, Classificazione, Indeling, Classificação

Car. Cat. 2, R. 45

Ε. - Etiquetado, Etibettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R. 45
	S. 53-45

Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits  
 Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 68131-75-9

EEC No 268-629-5

No 649-177-00-1

NOTA H

NOTA K

- ES: gases (petróleo),  $C_{3,4}$ ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por destilación de productos del craqueo de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos dentro del intervalo de  $C_3$  a  $C_4$ , en su mayor parte propano y propileno, y con un intervalo de ebullición aproximado de  $51\text{ }^{\circ}\text{C}$  a  $-1\text{ }^{\circ}\text{C}$ .]
- DA: gasser (råolie),  $C_{3,4}$ ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkter fra krakningen af råolie. Den består af carbonhydrider,  $C_3$  til og med  $C_4$ , overvejende propan og propylen, med kogesinterval omtrent fra  $-51\text{ }^{\circ}\text{C}$  til  $-1\text{ }^{\circ}\text{C}$ .]
- DE: Gase (Erdöl),  $C_{3,4}$ ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation von Produkten aus dem Cracken von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_4$ , vorherrschend aus Propan und Propylen, und siedet im Bereich von etwa  $-51\text{ }^{\circ}\text{C}$  bis  $-1\text{ }^{\circ}\text{C}$ .]
- EL: αερία (πετρελαίου),  $C_{3,4}$ ; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη προϊόντων πυρόλυσης αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα  $C_3$  ως και  $C_4$ , κυρίως προπανίου και προπυλénιο και με περιοχή βρασμού από  $-51\text{ }^{\circ}\text{C}$  ως  $-1\text{ }^{\circ}\text{C}$  περίπου.]
- EN: Gases (petroleum),  $C_{3,4}$ ; Petroleum gas  
[A complex combination of hydrocarbons produced by distillation of products from the cracking of crude oil. It consists of hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_4$ , predominantly of propane and propylene, and boiling in the range of approximately  $-51\text{ }^{\circ}\text{C}$  to  $-1\text{ }^{\circ}\text{C}$  ( $-60\text{ }^{\circ}\text{F}$  to  $30\text{ }^{\circ}\text{F}$ )]
- FR: gaz en  $C_3$ - $C_4$  (pétrole); Gaz de pétrole  
[Combinaison complexe d'hydrocarbures produite par distillation des produits résultant du craquage de pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_3$ - $C_4$ , principalement du propane et du propylène, et dont le point d'ébullition est compris approximativement entre  $-51\text{ }^{\circ}\text{C}$  et  $-1\text{ }^{\circ}\text{C}$ .]
- IT: gas (petrolio),  $C_{3,4}$ ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti dal cracking del grezzo. È costituita da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_4$ , prevalentemente propano e propilene, e punto di ebollizione nell'intervallo da  $-51\text{ }^{\circ}\text{C}$  a  $-1\text{ }^{\circ}\text{C}$  ca.]
- NL: gassen (aardolie),  $C_{3,4}$ ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van produkten van het kraken van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_3$  tot en met  $C_4$  en voornamelijk propaan en propyleen, met een kooktraject van ongeveer  $-51\text{ }^{\circ}\text{C}$  tot  $-1\text{ }^{\circ}\text{C}$ .]
- PT: gases (petróleo),  $C_{3,4}$ ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida por destilação de produtos do cracking de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono na gama de  $C_3$  até  $C_4$ , predominantemente propano e propileno, e destila no intervalo de aproximadamente  $-51\text{ }^{\circ}\text{C}$  a  $-1\text{ }^{\circ}\text{C}$ .]

Classification Classification Classification Classification Classification Classification Classification Classification Classification Classification

Carc. Cat. 2 R 45

Etiquetas Etikettering Kennzeichnung Επισήμανση Labelling Etiquetare Etichettatura Kenmerken Rosulagem

T	
	R : 45
	S : 53-45

Limites de concentración Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως Concentration limits  
Limites de concentration Limiti di concentrazione Concentrationsgrenzen Limites de concentraçao


Cas No 68307-98-2

EEC No 269-617-2

No 649-178-00-7

NOTA H

NOTA K

- ES: gas de cola (petróleo), aparato de absorción para el fraccionamiento de nafta craqueada catalíticamente y del destilado craqueado catalíticamente; Gases de petróleo  
[Combinación compleja de hidrocarburos de la destilación de los productos de destilados craqueados catalíticamente y de nafta craqueada catalíticamente. Compuesta en su mayor parte de hidrocarburos con un número de carbonos dentro del intervalo de C<sub>1</sub> a C<sub>4</sub>.]
- DA: slutgas (råolie), katalytisk krakket destillat- og katalytisk krakket naphtha fraktioneringsabsorber-; Kulbrintegasser  
[Den sammensatte blanding af carbonhydrider fra destillationen af produkterne fra katalytisk krakkede destillater og katalytisk krakket naphtha. Den består overvejende af carbonhydrider, C<sub>1</sub> til og med C<sub>4</sub>.]
- DE: Endgas (Erdöl), katalytisch gekracktes Destillat und katalytisch gekrackte Naphtha-Fraktionierung Absorber; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus katalytisch gekrackten Destillaten und katalytisch gekrackter Naphtha. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von C<sub>1</sub> bis C<sub>4</sub>.]
- EL: αερια ουρας (πετρελαίου), καταλυτικά πυρολυμένου απόσταγματος και απορροφητήρα κλασμάτωσης καταλυτικά πυρολυμένης νάφθας. Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων από την απόσταξη των προϊόντων από την καταλυτική πυρόλυση αποσταγμάτων και καταλυτικά πυρολυμένης νάφθας. Αποτελείται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από C<sub>1</sub> ως και C<sub>4</sub>.]
- EN: Tail gas (petroleum), catalytic cracked distillate and catalytic cracked naphtha fractionation absorber; Petroleum gas  
[The complex combination of hydrocarbons from the distillation of the products from catalytic cracked distillates and catalytic cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C<sub>1</sub> through C<sub>4</sub>.]
- FR: gaz de queue (pétrole), craquage catalytique de distillat et de naphtha, absorbeur de colonne de fractionnement; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures résultant de la distillation des produits de craquage catalytique de distillats et de naphtha. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe dans la gamme C<sub>1</sub>-C<sub>4</sub>.]
- IT: gas di coda (petrolio), distillato crackizzato cataliticamente e nafta crackizzata cataliticamente, colonna di frazionamento ad assorbimento; Gas di petrolio  
[Combinazione complessa di idrocarburi della distillazione dei prodotti provenienti dal cracking catalitico di distillati e di nafta. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio nell'intervallo C<sub>1</sub>-C<sub>4</sub>.]
- NL: restgas (aardolie), uit fractioneringsabsorptievat katalytisch gekraakt destillaat en katalytisch gekraakte nafta; Petroleumgas  
[De complexe verzameling koolwaterstoffen, verkregen uit de destillatie van de produkten van katalytisch gekraakte destillaten en katalytisch gekraakte nafta. Bestaat voornamelijk uit koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>4</sub>.]
- PT: gas residual (petróleo), da coluna de absorção do destilado do cracking catalítico e do fracionamento de nafta do cracking catalítico; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos da destilação dos produtos de destilados do cracking catalítico e de nafta do cracking catalítico. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono na gama de C<sub>1</sub> até C<sub>4</sub>.]

*Clasificación Klasifisering Einstufung Ταξινόμηση Classification, Classificazione Clasificação Indeling Classificação*

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*Etiquetado Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzuerte Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen Limites de concentraçao*


Cas No 68307-99-3

EEC No 269-618-8

No 649-179-00-2

NOTA H


NOTA K

- ES : gas de cola (petróleo), estabilizador para el fraccionamiento de nafta de polimerización catalítica ; Gases de petróleo  
[Combinación compleja de hidrocarburos de los productos de estabilización del fraccionamiento de la polimerización de nafta. Compuesta en su mayor parte de hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA : slutgas (råolie), katalytisk polymeriseringsnaphtha fraktionerings-stabilizer- ; Kulbrintegasser  
[En sammensat blanding af carbonhydnder fra fraktionerings-stabiliseringsprodukterne fra polymerisering af naphtha. Den består overvejende af carbonhydnder,  $C_1$  til og med  $C_4$ .]
- DE : Endgas (Erdöl), katalytisch polymerisierte Naphtha-Fraktionierung Stabilisator ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus Produkten stabilisierter Fraktionierung aus der Polymerisation von Naphtha. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_4$ .]
- EL : αεριο ουρας (πετρελαίου), σταθεροποιητή κλασμάτωσης καταλυτικά πολυμερισμένης νάφθας· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων από τα προϊόντα σταθεροποίησης κλασμάτωσης από πολυμερισμό νάφθας. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN : Tail gas (petroleum), catalytic polymn. naphtha fractionation stabilizer ; Petroleum gas  
[A complex combination of hydrocarbons from the fractionation stabilization products from polymerization of naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_4$ .]
- FR : gaz de queue (pétrole), polymérisation catalytique de naphtha, stabilisateur de colonne de fractionnement ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures issue de la stabilisation des produits de la colonne de fractionnement dans le processus de polymérisation du naphtha. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_1$ - $C_4$ .]
- IT : gas di coda (petrolio), nafta di polimerizzazione catalitica, stabilizzante di frazionamento ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dai prodotti di stabilizzazione del frazionamento provenienti dalla polimerizzazione della nafta. È costituita principalmente da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_4$ .]
- NL : restgas (aardolie), uit fractioneringsstabilisator katalytische polymerisatie van nafta ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de fractioneringsstabilisatie-producten van de polymensatie van nafta. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$ , tot en met  $C_4$ .]
- PT : gas residual (petróleo), do estabilizador do fraccionamento da nafta polimerizada cataliticamente ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos dos produtos de estabilização do fraccionamento da polimerização da nafta. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono na gama de  $C_1$  até  $C_4$ .]

*Classificação, Kласификация, Indeksting, T-solnning, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68308-00-9	EEC No 269-619-3	No 649-180-00-8
		NOTA H NOTA K
ES	gas de cola (petróleo), estabilizador para el fraccionamiento de nafta reformada catalíticamente, libre de sulfuro de hidrógeno, Gases de petróleo [Combinación compleja de hidrocarburos obtenida de la estabilización del fraccionamiento de nafta reformada catalíticamente de la que se ha separado el sulfuro de hidrógeno por tratamiento con aminas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C <sub>3</sub> a C <sub>4</sub> .]	
DA	slugas (råolie), katalytisk reformeret naphtha fraktionerings-stabilizer-, hydrogensulfid-fri; Kulbrintegasser [En sammensat blanding af carbonhydrider, opnået ved fraktioneringsstabilisering af katalytisk reformeret naphtha, og fra hvilken hydrogensulfid er blevet fjernet ved aminbehandling. Den består overvejende af carbonhydrider, overvejende C <sub>3</sub> til og med C <sub>4</sub> .]	
DE	Endgas (Erdöl), katalytisch reformierte Naphtha-Fraktionierung Stabilisator, Schwefelwasserstoff-frei; Gase aus der Erdölverarbeitung [Komplexe Kombination von Kohlenwasserstoffen aus stabilisierter Fraktionierung von katalytisch reformierter und durch Aminbehandlung von Schwefelwasserstoff befreiter Naphtha. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C <sub>3</sub> bis C <sub>4</sub> .]	
EL	αγκυ θύρας (πετρελαιοί), σταθεροποιητή κλάσματος κατάλυτικά αναμορφωμένης νάφθας, ελεύθερο υδροθίου [Πετρέλαιο, σταθεροποιημένο από υδρογονάνθρακες που λαμβάνεται από σταθεροποίηση κλάσματος κατάλυτικά αναμορφωμένης νάφθας και στο οποίο έχει απομακρυνθεί υδροθίο με κατεργασία με αμίνη. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C <sub>3</sub> ως και C <sub>4</sub> .]	
EN	Tail gas (petroleum), catalytic reformed naphtha fractionation stabilizer, hydrogen sulfide-free. Petroleum gas A complex combination of hydrocarbons obtained from fractionation stabilization of catalytic reformed naphtha and from which hydrogen sulfide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C <sub>3</sub> through C <sub>4</sub> .]	
FR	gaz de queue (pétrole), exempts d'hydrogène sulfuré, reformage catalytique de naphtha, stabilisateur de fractionnement. Gaz de pétrole [Composé complexe d'hydrocarbures obtenu par stabilisation des produits de la séparation de fractionnement faite à l'aide d'un catalyseur réformé de naphtha et dont on a éliminé l'hydrogène sulfuré par traitement aux amines. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme C <sub>3</sub> -C <sub>4</sub> .]	
I	coda (petrolio), nafta riformata cataliticamente, stabilizzante di fraccionamento, priva di idrogeno solforato [Gas di petrolio [Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione mediante il fraccionamento di nafta riformata cataliticamente e dalla quale è stato eliminato l'idrogeno solforato mediante il trattamento con ammine. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C <sub>3</sub> -C <sub>4</sub> .]	
NL	restgas (hardolie), uit fractioneringsstabilisator katalytisch gereformeerde nafta, Petroleumgas [Een complexe verzameling koolwaterstoffen, verkregen uit fractioneringsstabilisatie van katalytisch gereformeerde nafta, waar het zwavelsulfide door amine-behandeling uit verwijderd is. Bestaat voornamelijk uit koolwaterstoffen, overwegend C <sub>3</sub> tot en met C <sub>4</sub> .]	
PT	gas de cola (petróleo), de estabilizador do fraccionamento da nafta do reforming catalítico, sem sulfureto de hidrógeno, Gases de petróleo liquefeitos [Uma combinação complexa de hidrocarbonetos obtida da estabilização do fraccionamento de nafta do reforming catalítico e da qual foi removido o sulfureto de hidrógeno por tratamento com aminas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de C <sub>3</sub> até C <sub>4</sub> .]	

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="363 443 379 465" data-label="Text">T</div> <div data-bbox="325 495 421 584" data-label="Image"> </div> <div data-bbox="938 495 1015 521" data-label="Text">R : 45</div> <div data-bbox="938 546 1046 573" data-label="Text">S : 53-45</div>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*




Cas No 68308-01-0

EEC No 269-620-9

No 649-181-00-3

NOTA H  
NOTA K

- ES : gas de cola (petróleo), extractor del aparato para el tratamiento con hidrógeno del destilado craqueado ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por tratamiento de destilados craqueados térmicamente con hidrógeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : slutgas (råolie), krakket destillat hydrogenbehandler-stripper- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved at behandle termisk krakkede destillater med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af mættede carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE : Endgas (Erdöl), gekracktes Destillat Wasserstoffbehandler Stripper ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Behandlung thermisch gekrackter Destillate mit Wasserstoff in Gegenwart eines Katalysators. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αεριο ουρας (πετρελαίου), απογυμνωτήρα υδρογονοκατεργαστήρα πυρολυμένου αποστάγματος Πετρελαιο αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία θερμικά πυρολυμένων αποσταγμάτων με υδρογόνο παρουσία καταλύτη. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Tail gas (petroleum), cracked distillate hydrotreater stripper ; Petroleum gas  
[A complex combination of hydrocarbons obtained by treating thermal cracked distillates with hydrogen in the presence of a catalyst. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz de queue (pétrole), hydrotraitement de distillats de craquage, rectificateur ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par traitement de distillats de craquage thermique à l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT : gas di coda (petrolio), distillato crackizzato, stripper di « hydrotreating » ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta trattando con idrogeno in presenza di un catalizzatore distillati crackizzati termicamente. È costituita prevalentemente da idrocarburi saturati con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL : restgas (aardolie), gekraakt destillaat waterstofbehandelingsstripper ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van thermisch gekraakte destillaten met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gas residual (petróleo), do stripper da unidade de tratamento com hidrogénio de destilados do cracking ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de destilados do cracking térmico com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

Classification Klassificering Einstufung Ταξινόμηση, Classification, Class ification Cla ssificazione Indeling Classificação

Carc Cat 2, R 45

Etiquetado Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken Rotulagem

T	
	R : 45 S : 53-45

Límites de concentración Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 68308-10-1

EEC No 269-630-3

No 649-182-00-9

NOTA H


NOTA K

- ES: gas de cola (petróleo), hidrodesulfurador para el destilado de primera destilación, libre de sulfuro de hidrógeno ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la hidrodesulfuración catalítica de los destilados de primera destilación y de los que se ha separado el sulfuro de hidrógeno por tratamiento con aminas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ ]
- DA: slutgas (råolie), straight-run destillat hydroafsvovler-, hydrogensulfidfri ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved katalytisk hydroafsvovling af straight-run destillater og fra hvilken hydrogensulfid er blevet fjernet ved aminbehandling. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_4$ ]
- DE: Endgas (Erdöl), straight-run Destillat Hydrodesulfurierer, Schwefelwasserstoff-frei ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch katalytische Hydrodesulfurierung von straight-run und von durch Aminbehandlung von Schwefelwasserstoff befreiten Destillaten. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ ]
- EL: αεριο ουρας (πετρελαίου), υδρογονοαποθειωτήρα απευθείας αποστάγματος, απαλλαγμένου υδροθείου· Πετρελαϊκό αεριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από καταλυτική υδρογονοαποθείωση απευθείας αποσταγμάτων και από τα οποία έχει απομακρυνθεί υδρόθειο με κατεργασία αμίνης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ ]
- EN: Tail gas (petroleum), straight-run distillate hydrodesulfurizer, hydrogen sulfide-free ; Petroleum gas  
[A complex combination of hydrocarbons obtained from catalytic hydrodesulfurization of straight run distillates and from which hydrogen sulfide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ ]
- FR: gaz de queue (pétrole), exempts d'hydrogène sulfuré, hydrodésulfuration de distillat direct ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par hydrodésulfuration catalytique de distillats directs et dont on a éliminé l'hydrogène sulfuré par traitement aux amines. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ ]
- IT: gas di coda (petrolio), distillato di prima distillazione dall'idrodesolforatore, privo di idrogeno solforato , Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla idrodesolforazione catalitica di frazioni di prima distillazione e dalla quale è stato separato l'idrogeno solforato mediante trattamento con ammina. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ ]
- NL: restgas (aardolie), waterstofontzwavelaar direct uit fractionering verkregen destillaat, waterstofsulfidevrij ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door katalytische waterstofontzwaveling van, direct uit fractionering verkregen, destillaten, waaruit waterstofsulfide door amine-behandeling is verwijderd. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_1$  tot en met  $C_4$ ]
- PT: gas residual (petróleo), da unidade de hidrogenodessulfurização de destilado da destilação directa sem sulfureto de hidrogénio ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida da hidrogenodessulfurização catalítica de destilados de destilação directa e da qual foi removido o sulfureto de hidrogénio por tratamento com aminas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ ]

*Classification Klassificering Einstufung Ταξινόγηση Classification Classification Classificazione Indeling Classificação*

Carc. Cat. 2. R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione Concentratiegrenzen Limites de concentraçao*


Cas. No 68308-03-2

EEC No 269-623-5

No 649-183-00-4

NOTA H

NOTA K

- ES: gas de cola (petróleo), aparato de absorción para el craqueo catalítico de gasóleo; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la destilación de productos del craqueo catalítico de gasóleo. Compuesto fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{10}$ ]
- DA: slutgas (råolie), katalytisk gasoliekraknings-absorber-; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved destillation af produkter fra den katalytiske krakning af gasolie. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_{10}$ ]
- DE: Endgas (Erdöl), Gasöl katalytisches Kracken Absorber; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus dem katalytischen Kracken von Gasöl. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{10}$ ]
- EL: αεριο ουρας (πετρελαίου), απορροφητήρα καταλυτικής πυρόλυσης ακάθαρτου πετρελαίου. Πετρελαιο αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη προϊόντων από την καταλυτική πυρόλυση ακάθαρτου πετρελαίου. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{10}$ ]
- EN: Tail gas (petroleum), gas oil catalytic cracking absorber; Petroleum gas  
[A complex combination of hydrocarbons obtained from the distillation of products from the catalytic cracking of gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{10}$ ]
- FR: gaz de queue (pétrole), craquage catalytique de gazole, absorbeur; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation de produits résultant du craquage catalytique du gazole. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_{10}$ ]
- IT: gas di coda (petrolio), cracking catalitico di gasolio, torre di assorbimento; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di prodotti del cracking catalitico del gasolio. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{10}$ ]
- NL: restgas (aardolie), absorptievat bij katalytisch kraken van gasolie; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van producten van het katalytisch kraken van gasolie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{10}$ ]
- PT: gas residual (petróleo), da torre de absorção do cracking catalítico de gasóleo; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de produtos do cracking catalítico de gasóleo. É constituída predominantemente por hidrocarbonetos com número de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{10}$ ]

*Clasificación, Klassificering, Ennötutun, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="367 443 387 465" style="text-align: center;">T</div> <div data-bbox="331 488 427 584" style="text-align: center;">  </div> <div data-bbox="946 495 1015 521" style="text-align: right;">R : 45</div> <div data-bbox="946 546 1046 573" style="text-align: right;">S : 53-45</div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68308-04-3

EEC No 269-624-0

No 649-184-00-X

NOTA H

NOTA K

- ES : gas de cola (petróleo), planta de recuperación de gas ; Gases de petróleo  
[Combinación compleja de hidrocarburos de la destilación de productos de corrientes hidrocarbonadas diversas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : slutgas (råolie), gas-genudvindingsanlægs- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fra destillationen af produkter fra diverse carbonhydridstrømme. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE : Endgas (Erdöl), Gaswiedergewinnungsanlage ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Distillation von Produkten aus verschiedenen Kohlenwasserstoffläufen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : τελικό αέριο (πετρελαίου), εγκατάσταση ανάκτησης αερίων. Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη προϊόντων από διάφορα ρεύματα υδρογονανθράκων. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Tail gas (petroleum), gas recovery plant ; Petroleum gas  
[A complex combination of hydrocarbons from the distillation of products from miscellaneous hydrocarbon streams, it consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz de queue (pétrole), unité de récupération des gaz ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits de diverses charges d'hydrocarbures. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT : gas di coda (petrolio), impianto di recupero gas ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di prodotti provenienti da correnti di idrocarburi eterogenee. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL : restgas (aardolie), gasherwinninginstallatie ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van producten van gemengde koolwaterstoffstromen. Bevat voornamelijk koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gas residual (petróleo), da unidade de recuperação de gases ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos da destilação de produtos de várias frações de hidrocarbonetos. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Etiquetierung, Etiquetage, Etiketierung, Classification, Classificazione, Indeling, Classificação*

Care Cat. 2, R 45

*Etiquetierung, Kennzeichnung, Etikettering, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68308-05-4

EEC No 269-625-6

No 649-185-00-5

NOTA H

NOTA K

- ES : gas de cola (petróleo), desetanizador de la planta de recuperación de gas ; Gases de petróleo  
[Combinación compleja de hidrocarburos de la destilación de productos de corrientes hidrocarbonadas heterogéneas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA : slutgas (råolie), gasgenudvindingsanlæg deethanizer- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fra destillationen af produkter fra diverse carbonhydridstrømme. Den består af carbonhydrider, overvejende  $C_1$  til og med  $C_4$ .]
- DE : Endgas (Erdöl), Gaswiedergewinnungsanlage Deethanisierer ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus verschiedenen Kohlenwasserstoffläufen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL : αεριο ουράς (πετρελαίου), εγκατάστασης ανάκτησης αερίου αιθανιωτήρα· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη προϊόντων από διάφορα ρεύματα υδρογονανθράκων. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN : Tail gas (petroleum), gas recovery plant deethanizer ; Petroleum gas  
[A complex combination of hydrocarbons from the distillation of products from miscellaneous hydrocarbon streams. It consists of hydrocarbon having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR : gaz de queue (pétrole), unité de récupération des gaz, déséthaniseur ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits de diverses charges d'hydrocarbures. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ .]
- IT : gas di coda (petrolio), impianto di recupero gas, deetanizzatore ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di prodotti provenienti da correnti di idrocarburi eterogenei. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL : restgas (aardolie), gasherwinningsfabriek-deëthanisator ; Petroleum gas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van producten uit verschillende koolwaterstoffstromen. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT : gas residual (petróleo) do desetanizador da unidade de recuperação de gases ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos da destilação de produtos de várias fracções de hidrocarbonetos. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Enquelado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68308-06-5

EEC No 269-626-1

No 649-186-00-0

NOTA H

NOTA K

- ES : gas de cola (petróleo), fraccionador para nafta hidrodesulfurada y destilado hidrodesulfurado, libre de ácido ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento de nafta hidrodesulfurada y del destilado de corrientes hidrocarbonadas y tratada para separar impurezas ácidas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{12}$ .]
- DA : slutgas (råolie), hydroafsvovlet destillat- og hydroafsvovlet naphtha fraktioneringskolonne-, syrefri ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktionering af hydroafsvovlet naphtha og destillatcarbonhydridstrømme og behandlet for at fjerne sure urenheder. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_{12}$ .]
- DE : Endgas (Erdöl), hydrodesulfuriertes Destillat und hydrodesulfurierter Naphtha-Fraktionator, Säurefrei ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Fraktionierung von Produkten aus hydrodesulfurierter Naphtha und Destillat-Kohlenwasserstoffläufen, behandelt zur Beseitigung von sauren Verunreinigungen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{12}$ .]
- EL : αεριο ουράς (πετρελαίου), μονάδας κλασμάτωσης υδρογονοαποθειμένου αποστάγματος και υδρογονοαποθειμένης ναφθας, απαλλαγμένο οξέος ; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από κλασμάτωση υδρογονοαποθειωμένης νάφθας και αποσταγμάτων ρευμάτων υδρογονανθράκων και που υφίσταται κατεργασία, για να απομακρυνθούν όξινες προσμίξεις. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{12}$ .]
- EN : Tail gas (petroleum), hydrodesulfurized distillate and hydrodesulfurized naphtha fractionator, acid-free ; Petroleum gas  
[A complex combination of hydrocarbons obtained from fractionation of hydrodesulfurized naphtha and distillate hydrocarbon streams and treated to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{12}$ .]
- FR : gaz de queue (pétrole) désacidifiés, hydrodésulfuration de distillat et de naphtha, colonne de fractionnement ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement de naphtha et de distillats hydrodésulfurés, et soumise à un traitement destiné à éliminer les impuretés acides. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_1$ - $C_{12}$ .]
- IT : gas di coda (petrolio), distillato idrodesolfurato e nafta idrodesolforata dal frazionatore, privi di acidi ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento di nafta idrodesolforata e correnti idrocarbunche di distillato, trattata per eliminare le impurezze acide. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalente nell'intervallo  $C_1$ - $C_{12}$ .]
- NL : restgas (aardolie), uit fracioneerder van waterstofontzweveld destillaat en waterstofontzwevelde nafta, zuurvrij ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door fractionering van waterstofontzwevelde nafta- en destillaatkoolwaterstofstromen, en behandeld om zure onzuiverheden te verwijderen. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{12}$ .]
- PT : gas residual (petróleo), do fraccionador do destilado hidrogenodessulfurizado e nafta hidrogenodessulfurizada, sem ácidos ; Gases de petróleo liquefeios  
[Uma combinação complexa de hidrocarbonetos obtida do fraccionamento de nafta hidrogenodessulfurizada e de frações de hidrocarbonetos de destilados hidrogenodessulfurizados e tratada para remoção de impurezas ácidas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{12}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 68308-07-6

EEC No 269-627-7

No 649-187-00-6

NOTA H

NOTA K

- ES: gas de cola (petróleo), extractor para gasóleo obtenido a vacío e hidrodesulfurado, libre de sulfuro de hidrógeno ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la estabilización de la extracción de gasóleo obtenido a vacío e hidrodesulfurado catalíticamente y del que se ha separado el sulfuro de hidrógeno por tratamiento con aminas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA: slutgas (råolie), hydroafsvovlet vakuumgasolie stripper-, hydrogensulfidfri ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved støjningsstabilisering af katalytisk hydroafsvovlet vakuumgasolie og fra hvilken hydrogensulfid er blevet fjernet ved aminbehandling. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE: Endgas (Erdöl), hydrodesulfuriertes Vakuumgasöl Stripper, Schwefelwasserstoff-frei ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Striping-Stabilisierung von katalytisch hydrodesulfuriertem und durch Aminbehandlung von Schwefelwasserstoff befreitem Gasöl. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL: αέριο ουράς (πετρελαίου), απογυμνωτήρα υδρογονοαποθειωμένου ακάθαρτου πετρελαίου κενού, απαλλαγμένο υδροθείου· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από σταθεροποίηση απογυμνωμένου καταλυτικά υδρογονοαποθειωμένου ακάθαρτου πετρελαίου κενού και από το οποίο έχει απομακρυνθεί υδρόθειο με κατεργασία αμίνης. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN: Tail gas (petroleum), hydrodesulfurized vacuum gas oil stripper, hydrogen sulfide-free ; Petroleum gas  
[A complex combination of hydrocarbons obtained from stripping stabilization of catalytic hydrodesulfurized vacuum gas oil and from which hydrogen sulfide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR: gaz de queue (pétrole) exempts d'hydrogène sulfuré, rectificateur de gazole sous vide hydrodésulfuré ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures résultant de la stabilisation par rectification de gazole sous vide ayant subi une hydrodésulfuration catalytique, et dont on a éliminé l'hydrogène sulfuré par traitement aux amines. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_1$ - $C_6$ .]
- IT: gas di coda (petrolio), idrodesolforato dall'impianto di stripping del gasolio, privi di idrogeno solforato ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione per stripping di gasolio sotto vuoto idrodesolforato cataliticamente e da cui è stato eliminato l'idrogeno solforato mediante trattamento con ammina. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$ .]
- NL: restgas (aardolie), stripper van waterstofontzwavelde gasolie uit vacuümdestillatie, waterstofsulfidevrij ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de stabilisatie door strippen van katalytisch waterstofontzwavelde gasolie uit vacuümdestillatie, waaruit waterstofsulfide is verwijderd door amine-behandeling. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT: gas residual (petróleo), do stripper do gasóleo de vácuo hidrogenodessulfurizado, sem sulfureto de hidrogénio ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida da estabilização por stripping de gasóleo de vácuo hidrogenodessulfurizado cataliticamente e da qual o sulfureto de hidrogénio foi removido por tratamento com aminas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Eticbetsatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68308-09-8

EEC No 269-629-8

No 649-188-00-1

NOTA H

NOTA K

- ES: gas de cola (petróleo), estabilizador de nafta ligera de primera destilación, libre de sulfuro de hidrógeno; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la estabilización del fraccionamiento de nafta ligera de primera destilación y de la que se ha separado el sulfuro de hidrógeno por tratamiento con aminas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{12}$ .]
- DA: slutgas (råolie), let straight-run naphtha stabilizer-, hydrogensulfidfri; Kulbrintegasser  
[En sammensat blandning af carbonhydrider opnået ved fraktioneringsstabilisering af straight-run naphtha og fra hvilken hydrogensulfid er blevet fjernet ved aminbehandling. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_{12}$ .]
- DE: Endgas (Erdöl), leichtes straight-run Naphtha Stabilisator, Schwefelwasserstoff-frei; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch stabilisierte Fraktionierung von leichter straight-run und durch Aminbehandlung von Schwefelwasserstoff befreiter Naphtha. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{12}$ .]
- EL: αεριο ουρας (πετρελαίου), σταθεροποιητήρα ελαφράς απευθείας νάφθας, απαλλαγμένης υδροθείου· Πετρελαϊκό αεριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από σταθεροποίηση κλασμάτωσης από ελαφρά απευθείας νάφθα και από την οποία έχει απομακρυνθεί υδροθείο με κατεργασία αμίνης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{12}$ .]
- EN: Tail gas (petroleum), light straight-run naphtha stabilizer, hydrogen sulfide-free; petroleum gas  
[A complex combination of hydrocarbons obtained from fractionation stabilization of light straight run naphtha and from which hydrogen sulfide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{12}$ .]
- FR: gaz de queue (pétrole) exempts d'hydrogène sulfuré, stabilisateur de naphtha léger de distillation directe; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement et stabilisation de naphtha léger de distillation directe, et dont on a éliminé l'hydrogène sulfuré par traitement aux amines. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$  -  $C_{12}$ .]
- IT: gas di coda (petrolio), nafta di prima distillazione dallo stabilizzatore, privi di idrogeno solforato. Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione per frazionamento di nafta di prima distillazione e da cui è stato separato l'idrogeno solforato mediante trattamento con ammina. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$  -  $C_{12}$ .]
- NL: restgas (aardolie), stabilisator lichte direct uit fractionering verkregen nafta, waterstofsulfidevrij; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door fractioneringsstabilisatie van lichte, direct uit fractionering verkregen, nafta, waaruit waterstofsulfide door amine-behandeling is verwijderd.]
- PT: gas residual (petróleo), do estabilizador da nafta leve de destilação directa, sem sulfureto de hidrogénio; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida de estabilização do fraccionamento da nafta leve de destilação directa e da qual foi removido o sulfureto de hidrogénio por tratamento com aminas. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{12}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*




Cas No 68308-11-2

EEC No 269-631-9

No 649-189-00-7

NOTA H

NOTA K

- ES : gas de cola (petróleo), desetanizador para la preparación de la alimentación para la alquilación de propano-propileno ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la destilación de los productos de reacción de propano con propileno. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA : slutgas (råolie), propan- og propylenalkyleringsføde forarbejdningsdeethanizer- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved destillation af produkterne fra reaktionen mellem propan og propylen. Den består af carbonhydrider, overvejende  $C_1$  til og med  $C_4$ .]
- DE : Endgas (Erdöl), Propan-Propylen Alkylierung Zulaufvorbereitung Deethanisierer ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation der Reaktionsprodukte von Propan mit Propylen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL : αεριο ουρας (πετρελαίου), αποαιθανωτήρα τροφοδοσίας αλκυλίωσης προπανίου-προπυλενίου· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη προϊόντων αντίδρασης προπανίου με προπυλένιο. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN : Tail gas (petroleum), propane-propylene alkylation feed prep deethanizer ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the distillation of the reaction products of propane with propylene. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR : gaz de queue (pétrole), préparation de la charge d'alkylation propane-propylène, déséthaniseur ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits de réaction du propane avec le propylène. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_4$ .]
- IT : gas di coda (petrolio), alchilazione propano-propilene, preparazione carica deetanizzatore ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione dei prodotti di reazione del propano con il propilene. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL : restgas (aardolie), propaan-propyleenalkyleringsuitvoer preparatieve deëthanisator ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van de reactieproducten van propaan met propyleen. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT : gas residual (petróleo), do desetanizador da alimentação de alquilação propano-propileno ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida da destilação dos produtos da reacção de propano com propileno. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T'	
	R : 45
	S : 53-45

*Limites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentra33o*


Cas No 68308-12-3

EEC No 269-632-4

No 649-190-00-2

NOTA H

NOTA K

- ES : gas de cola (petróleo), hidrodesulfurador para gasóleo obtenido a vacío, libre de sulfuro de hidrógeno ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la hidrodesulfuración catalítica de gasóleo obtenido a vacío y del que se ha separado el sulfuro de hidrógeno por tratamiento con aminas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA : slutgas (råolie), vakuumgasolie hydroafsvøvler-, hydrogensulfidfri ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved katalytisk hydroafsvøvling af vakuumgasolie og fra hvilken hydrogensulfid er blevet fjernet ved aminbehandling. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE : Endgas (Erdöl), Vakuumgasöl Hydrodesulfurierter, Schwefelwasserstoff-frei ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch katalytisches Hydrodesulfurieren von durch Aminbehandlung von Schwefelwasserstoff befreitem Vakuumgasöl. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL : αεριο ουρας πετρελαίου, υδρογονοαποθειωτήρια ακάθαρτου πετρελαίου κενού απαλλαγμένου από υδροθείου-Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από καταλυτική υδρογονοαποθείωση ακάθαρτου πετρελαίου κενού και από το οποίο έχει απομακρυνθεί υδρόθειο με κατεργασία αμίνης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$ .]
- EN : Tail gas (petroleum), vacuum gas oil hydrodesulfurizer, hydrogen sulfide-free ; Petroleum gas  
[A complex combination of hydrocarbons obtained from catalytic hydrodesulfurization of vacuum gas oil and from which hydrogen sulfide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR : gaz de queue (pétrole) exempts d'hydrogène sulfuré, hydrodésulfuration de gazole sous vide ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par hydrodésulfuration catalytique de gazole sous vide et dont on a éliminé l'hydrogène sulfuré par traitement aux amines. Se compose principalement d'hydrocarbures dont le nombre de carbonos se situe en majorité dans la gamme  $C_1$ - $C_6$ .]
- IT : gas di coda (petrolio), gasolio sotto vuoto dall'idrodesolforatore, privi di idrogeno solforato ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla idrodesolforazione catalitica di gasolio sotto vuoto e dalla quale è stato separato l'idrogeno solforato mediante trattamento con ammina. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_6$ .]
- NL : restgas (aardolie), waterstofontzwavelaar gasolie uit vacuümdestillatie, waterstofsulfidevrij ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit katalytische waterstofontzwaveling van, door vacuümdestillatie verkregen, gasolie, waaruit waterstofsulfide door amine-behandeling is verwijderd. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT : gas residual (petróleo), do hidrogenodessulfurizador do gasóleo de vácuo, sem sulfureto de hidrogénio ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida da hidrogenodessulfurização catalítica de gasóleo de vácuo e da qual foi removido o sulfureto de hidrogénio por tratamento com aminas. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono predominantemente na game de  $C_1$  até  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68409-99-4

EEC No 270-071-2

No 649-191-00-8

NOTA H

NOTA K

- ES : gases (petróleo), fracciones de cabeza craqueadas catalíticamente ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de productos del proceso de craqueo catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>3</sub> a C<sub>7</sub>, y con un intervalo de ebullición aproximado de -48 °C a 32 °C.]
- DA : gasser (råolie), katalytisk krakkede topfraktioner ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af produkter fra den katalytiske krækningsproces. Den består af carbonhydrider, overvejende C<sub>3</sub> til og med C<sub>7</sub>, med kogesinterval omtrent fra -48 °C til 32 °C.]
- DE : Gase (Erdöl), katalytisch gekrakte Kopfprodukte ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation von Produkten aus dem katalytischen Krackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>3</sub> bis C<sub>7</sub> und siedet im Bereich von etwa -48 °C bis 32 °C.]
- EL : αέρια (πετρελαίου), προϊόντα κορυφής καταλυτικής πυρόλυσης: Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με την απόσπαση προϊόντων από την καταλυτική πυρόλυση. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>3</sub> ως και C<sub>7</sub> και βράζει στην περιοχή από -48 °C ως 32 °C περίπου.]
- EN : Gases (petroleum), catalytic cracked overheads ; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of products from the catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>3</sub> through C<sub>7</sub> and boiling in the range of approximately -48 °C to 32 °C (-54 °F to 90 °F).]
- FR : gaz (pétrole), craquage catalytique, produits de tête ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures produite par distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme C<sub>3</sub>-C<sub>7</sub>, et dont le point d'ébullition est approximativement compris entre -48 °C et 32 °C.]
- IT : gas (petrolio), frazioni di testa crackizzate cataliticamente ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti dal processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>3</sub>-C<sub>7</sub> e punto di ebollizione nell'intervallo da -48 °C a 32 °C ca.]
- NL : gassen (aardolie), katalytisch gekraakte topfracties ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door de destillatie van producten van een katalytisch kraakproces. Bestaat uit koolwaterstoffen, overwegend C<sub>3</sub> tot en met C<sub>7</sub>, met een kooktraject van -48 °C tot 32 °C.]
- PT : gases (petróleo), de cabeça da destilação de produtos de cracking catalítico ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos do processo de cracking catalítico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de C<sub>3</sub> até C<sub>7</sub>, e destila no intervalo de aproximadamente -48 °C a 32 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68475-57-0

EEC No 270-651-5

No 649-193-00-9

NOTA H

NOTA K

ES : alcanos, C<sub>1-2</sub>; Gases de petróleo  
 DA : alkaner, C<sub>1-2</sub>; Kulbriintegasser  
 DE : Alkane, C<sub>1-2</sub>; Gase aus der Erdölverarbeitung  
 EL : αλκάνια, C<sub>1-2</sub>; Πετρελαιικό αέριο  
 EN : Alkanes, C<sub>1-2</sub>; Petroleum gas  
 FR : alcanes en C<sub>1-2</sub>; Gaz de pétrole  
 IT : alcani, C<sub>1-2</sub>; Gas di petrolio  
 NL : alkanen, C<sub>1-2</sub>; Petroleumgas  
 PT : alcanos, C<sub>1-2</sub>; Gases de petróleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45 S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68475-58-1

EEC No 270-652-0

No 649-194-00-4


NOTA H  
NOTA K

ES: alcanos,  $C_{2,3}$ ; Gases de petroleo  
 DA: alkaner,  $C_{2,3}$ ; Kulbrintegasser  
 DE: Alkane,  $C_{2,3}$ ; Gase aus der Erdölverarbeitung  
 EL: αλκάνια,  $C_{2,3}$ ; Πετρελαιο αέριο  
 EN: Alkanes,  $C_{2,3}$ ; Petroleum gas  
 FR: alcanes en  $C_{2,3}$ ; Gaz de petrole  
 IT: alcani,  $C_{2,3}$ ; Gas di petrolio  
 NL: alkanen,  $C_{2,3}$ ; Petroleumgas  
 PT: alcanos,  $C_{2,3}$ ; Gases de petroleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 68475-59-2

EEC No 270-653-6

No 649-195-00-X

NOTA H  
NOTA K

ES : alcanos,  $C_{3-4}$ ; Gases de petróleo  
 DA : alkaner,  $C_{3-4}$ ; Kulbrintegasser  
 DE : Alkane,  $C_{3-4}$ ; Gase aus der Erdölverarbeitung  
 EL : αλκάνια,  $C_{3-4}$ ; Πετρελαιο αέριο  
 EN : Alkanes,  $C_{3-4}$ ; petroleum gas  
 FR : alcanes en  $C_{3-4}$ ; Gaz de pétrole  
 IT : alcani,  $C_{3-4}$ ; Gas di petrolio  
 NL : alkanen,  $C_{3-4}$ ; Petroleumgas  
 PT : alcanos,  $C_{3-4}$ ; Gases de petróleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68475-60-5

EEC No 270-654-1

No 649-196-00-5

NOTA H


NOTA K

ES: alcanos,  $C_{4-5}$ , Gases de petroleo  
 DA: alkaner,  $C_{4-5}$ , Kulbrintegasser  
 DE: Alkane,  $C_{4-5}$ , Gase aus der Erdölverarbeitung  
 EL: αλκάνια,  $C_{4-5}$ , Πετρελαιοκό αέριο  
 EN: Alkanes,  $C_{4-5}$ , Petroleum gas  
 FR: alcanes en  $C_{4-5}$ , Gaz de pétrole  
 IT: alcani,  $C_{4-5}$ , Gas di petrolio  
 NL: alkanen,  $C_{4-5}$ , Petroleumgas  
 PT: alcanos,  $C_{4-5}$ , Gases de petroleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45 S : 53-45</p>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68476-26-6

EEC No 270-667-2

No 649-197-00-0

NOTA H  
NOTA K

- ES : gases combustibles ; Gases de petróleo  
[Combinación de gases ligeros. Compuesta en su mayor parte de hidrógeno y/o hidrocarburos de bajo peso molecular.]
- DA : brændselsgasser ; Kulbrintegasser  
[En blanding af lette gasser. Den består overvejende af hydrogen og/eller lavmolekylære carbonhydrider.]
- DE : Brenngase ; Gase aus der Erdölverarbeitung  
[Kombination leichter Gase. Besteht vorherrschend aus Wasserstoff und/oder Kohlenwasserstoffen mit niedrigem Molekulargewicht.]
- EL : καυσίμα αερίων· Πετρελαιοειδή αέρια  
[Συνδυασμός ελαφρών αερίων. Συνίσταται κυρίως από υδρογόνο ή και υδρογονάνθρακες μικρού μοριακού βάρους.]
- EN : Fuel gases ; Petroleum gas  
[A combination of light gases. It consists predominantly of hydrogen and/or low molecular weight hydrocarbons.]
- FR : gaz combustibles ; Gaz de pétrole  
[Combinaison de gaz légers. Se compose principalement d'hydrogène et/ou d'hydrocarbures de faible poids moléculaire.]
- IT : gas combustibili ; Gas di petrolio  
[Combinazione di gas leggeri. È costituita prevalentemente da idrogeno e/o idrocarburi a basso peso molecolare.]
- NL : brandstofgassen ; Petroleumgas  
[Een combinatie van lichte gassen. Bestaat voornamelijk uit waterstof en/of koolwaterstoffen met een laag molecuulgewicht.]
- PT : gases combustíveis ; Gases de petróleo liquefeitos  
[Uma combinação de gases leves. É constituída predominantemente por hidrogénio e/ou hidrocarbonetos de peso molecular baixo.]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação

Carc. Cat. 2 ; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 68476-29-9

EEC No 270-670-9

No 649-198-00-6

NOTA H

NOTA K

- ES : gases combustibles, destilados de petróleo crudo ; Gases de petróleo  
[Combinación compleja de gases ligeros producida por destilación de petróleo crudo y por reformado catalítico de nafta. Compuesta de hidrógeno e hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$  y con un intervalo de ebullición de  $-217^{\circ}\text{C}$  a  $-12^{\circ}\text{C}$ .]
- DA : brændselsgasser, råoliedestillater ; Kulbrintegasser  
[En sammensat blanding af lette gasser fremstillet ved destillation af råolie ved katalytisk reformering af naphtha. Den består af hydrogen og carbonhydrider, overvejende  $C_1$  til og med  $C_4$ , med kogesinterval omtrent fra  $-217^{\circ}\text{C}$  til  $-12^{\circ}\text{C}$ .]
- DE : Brenngase, Rohöldestillate ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von leichten Gasen, hergestellt durch Destillation von Rohöl und durch katalytisches Reformieren von Naphtha. Besteht aus Wasserstoff und Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$  und siedet im Bereich von etwa  $-217^{\circ}\text{C}$  bis  $-12^{\circ}\text{C}$ .]
- EL : αερια (πετρελαίου), αποστάγματα αργού πετρελαίου· Πετρελαιοαέριο  
[Πολύπλοκος συνδυασμός ελαφρών αερίων που παράγεται με αποσταξη αργού πετρελαίου και καταλυτική αναμόρφωση νάφθας. Συνίσταται από υδρογόνο και υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$  και με περιοχή βρασμού από  $-217^{\circ}\text{C}$  ως  $-12^{\circ}\text{C}$  περίπου.]
- EN : Fuel gases, crude oil of distillates ; Petroleum gas  
[A complex combination of light gases produced by distillation of crude oil and by catalytic reforming of naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$  and boiling in the range of approximately  $-217^{\circ}\text{C}$  to  $-12^{\circ}\text{C}$  ( $-423^{\circ}\text{F}$  to  $10^{\circ}\text{F}$ ).]
- FR : gaz combustibles, distillats de pétrole brut ; Gaz de pétrole  
[Combinaison complexe de gaz légers résultant de la distillation du pétrole brut et du reformage catalytique du naphtha. Se compose d'hydrogene et d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$  -  $C_4$  et dont le point d'ébullition est compris approximativement entre  $-217^{\circ}\text{C}$  et  $-12^{\circ}\text{C}$ .]
- IT : gas combustibili, distillati di petrolio grezzo ; Gas di petrolio  
[Combinazione complessa di gas leggeri prodotti per distillazione di petrolio grezzo e reforming catalitico di nafta. È costituita da idrogeno e idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$  -  $C_4$ , e punto di ebollizione nell'intervallo da  $-217^{\circ}\text{C}$  a  $-12^{\circ}\text{C}$ .]
- NL : brandstofgassen, destillaten van ruwe olie ; Petroleumgas  
[Een complexe verzameling lichte gassen, gevormd door destillatie van ruwe olie en door katalytische reformering van nafta. Bestaat uit waterstof en koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ , met een kooktraject van ongeveer  $-217^{\circ}\text{C}$  tot  $-12^{\circ}\text{C}$ .]
- PT : gases combustíveis, destilados de petróleo bruto ; Gases de petróleo liquefeitos  
[Uma combinação complexa de gases leves produzida por destilação de petróleo bruto e por reforming catalítico da nafta. É constituída por hidrogénio e hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$  e destila no intervalo de aproximadamente  $-217^{\circ}\text{C}$  a  $-12^{\circ}\text{C}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68476-40-4

EEC No 270-681-9

No 649-199-00-1

NOTA H  
NOTA K

ES: hidrocarburos,  $C_{3,4}$ , Gases de petroleo  
 DA: carbonhydnder,  $C_{3,4}$ , Kulbrintegasser  
 DE: Kohlenwasserstoffe,  $C_{3,4}$ , Gase aus der Erdölverarbeitung  
 EL: υδρογονάνθρακες,  $C_{3,4}$ , Πετρελαιο αεριο  
 EN: Hydrocarbons,  $C_{3,4}$ , Petroleum gas  
 FR: hydrocarbures en  $C_{3,4}$ , Gaz de pétrole  
 IT: idrocarburi,  $C_{3,4}$ , Gas di petrolio  
 NL: koolwaterstoffen,  $C_{3,4}$ , Petroleumgas  
 PT: hidrocarbonetos,  $C_{3,4}$ , Gases de petroleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45 S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentraçào*


Cas No 68476-42-6

EEC No 270-682-4

No 649-200-00-5

NOTA H

NOTA K

- ES hidrocarburos,  $C_{4,5}$ , Gases de petroleo  
 DA carbonhydnder,  $C_{4,5}$ , Kulbrintegasser  
 DE Kohlenwasserstoffe,  $C_{4,5}$ , Gase aus der Erdölverarbeitung  
 EL υδρογονανθρακες,  $C_{4,5}$ , Πετρελαιο αεριο  
 EN Hydrocarbons,  $C_{4,5}$ , Petroleum gas  
 FR hydrocarbures en  $C_{4,5}$ , Gaz de petrole  
 IT idrocarburi,  $C_{4,5}$ , Gas di petrolio  
 NL koolwaterstoffen,  $C_{4,5}$ , Petroleumgas  
 PT hidrocarbonetos,  $C_{4,5}$ , Gases de petroleo liquefeitos

Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45 S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã


Cas No 68476-49-3

EEC No 270-689-2

No 649-201-00-0

NOTA H  
NOTA K

ES : hidrocarburos,  $C_{2-4}$ , ricos en  $C_3$ , Gases de petroleo  
 DA : carbonhydrider,  $C_{2-4}$ ,  $C_3$ -rige, Kulbrintegasser  
 DE : Kohlenwasserstoffe,  $C_{2-4}$ ,  $C_3$ -reich, Gase aus der Erdölverarbeitung  
 EL : υδρογονάνθρακες,  $C_{2-4}$ , πλούσιοι σε  $C_3$ , Πετρελαιο αέριο  
 EN : Hydrocarbons,  $C_{2-4}$ ,  $C_3$ -rich, Petroleum gas  
 FR : hydrocarbures en  $C_{2-4}$ , riches en  $C_3$ , Gaz de petrole  
 IT : idrocarburi,  $C_{2-4}$ , arricchiti in  $C_3$ , Gas di petrolio  
 NL : koolwaterstoffen,  $C_{2-4}$ , rijk aan  $C_3$ , Petroleumgas  
 PT : hidrocarbonetos,  $C_{2-4}$ , ricos em  $C_3$ , Gases de petroleo liquefeitos

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45 S : 53-45</p>
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68476-85-7

EEC No 270-704-2

No 649-202-00-6


## NOTA K

- ES: gases del petróleo, licuados; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_3$  a  $C_7$ , y con un intervalo de ebullición aproximado de  $-40\text{ }^{\circ}\text{C}$  a  $80\text{ }^{\circ}\text{C}$ .]
- DA: raoliegasser, fortættede; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af råolie. Den består af carbonhydrider, overvejende  $C_3$  til og med  $C_7$ , med kogesinterval omtrent fra  $-40\text{ }^{\circ}\text{C}$  til  $80\text{ }^{\circ}\text{C}$ .]
- DE: Erdöl-gase, verflüssigt; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_3$  bis  $C_7$  und siedet im Bereich von etwa  $-40\text{ }^{\circ}\text{C}$  bis  $80\text{ }^{\circ}\text{C}$ .]
- EL: πετρελαιοῦ αέρια, υγροποιημένα· Πετρελαιοῦ αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την αποσταξη αργού πετρελαίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_3$  ως και  $C_7$  και με περιοχή βρασμού από  $-40\text{ }^{\circ}\text{C}$  ως  $80\text{ }^{\circ}\text{C}$  περίπου.]
- EN: Petroleum gases, liquefied; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_7$  and boiling in the range of approximately  $-40\text{ }^{\circ}\text{C}$  to  $80\text{ }^{\circ}\text{C}$  ( $-40\text{ }^{\circ}\text{F}$  to  $176\text{ }^{\circ}\text{F}$ ).]
- FR: gaz de pétrole liquéfiés; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_3$ - $C_7$ , et dont le point d'ébullition est compris approximativement entre  $-40\text{ }^{\circ}\text{C}$  et  $80\text{ }^{\circ}\text{C}$ .]
- IT: gas di petrolio, liquefatti; Gas di petrolio  
[Combinazione complessa di idrocarburi prodotta per distillazione del grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_3$ - $C_7$  e punto di ebollizione nell'intervallo da  $-40\text{ }^{\circ}\text{C}$  a  $80\text{ }^{\circ}\text{C}$  ca.]
- NL: aardolie-gassen, vloeibaar gemaakt; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, gevormd door de destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_3$  tot en met  $C_7$ , met een kooktraject van ongeveer  $-40\text{ }^{\circ}\text{C}$  tot  $80\text{ }^{\circ}\text{C}$ .]
- PT: gases do petróleo, liquefeitos; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de petróleo bruto. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_3$  até  $C_7$ , e destila no intervalo de aproximadamente  $-40\text{ }^{\circ}\text{C}$  a  $80\text{ }^{\circ}\text{C}$ .]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

F + , R 12	Carc Cat 2 , R 45
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

F +	T	
		R : 45-12
		S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68476-86-8

EEC No 270-705-8

No 649-203-00-1

NOTA K

- ES : gases del petróleo, licuados, desazufrados ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida sometiendo la mezcla de gases de petróleo licuados a un proceso de desazufrado para transformar los mercaptanos o para separar impurezas ácidas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ , y con un intervalo de ebullición aproximado de  $-40^{\circ}\text{C}$  a  $80^{\circ}\text{C}$ .]
- DA : raoliegasser, fortættede, sweetenede ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved at underkaste en fortættet raoliegasblanding en sweetening-proces for at omdanne mercaptaner eller for at fjerne sure urenheder. Den består af carbonhydrider, overvejende  $C_1$  til og med  $C_4$ , med koges-interval omtrent fra  $-40^{\circ}\text{C}$  til  $80^{\circ}\text{C}$ .]
- DE : Erdöl-gase, verflüssigt, gesüßt ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Einwirkung eines Süßungsverfahrens auf verflüssigtes Erdöl-gas-gemisch, um Mercaptane zu konvertieren oder um saure Verunreinigungen zu entfernen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ , und siedet im Bereich von etwa  $-40^{\circ}\text{C}$  bis  $80^{\circ}\text{C}$ .]
- EL : πετρελαιοῦ αέρια, υγροποιημένα, γλυκασμένα· Πετρελαιοῦ αέριο  
[Πολύπλοκος συνδυασμός υδροανθράκων που λαμβάνεται από υγροποιημένο αέριο μείγμα πετρελαίου με γλύκανση, για να μετατραπούν μερκαπτανες ή να απομακρυνθούν οι όξινες προσμίξεις. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ , και με περιοχή βρασμού από  $-40^{\circ}\text{C}$  ως  $80^{\circ}\text{C}$  περίπου.]
- EN : Petroleum gases, liquefied, sweetened ; Petroleum gas  
[A complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ , and boiling in the range of approximately  $-40^{\circ}\text{C}$  to  $80^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$  to  $176^{\circ}\text{F}$ ).]
- FR : gaz de pétrole liquéfiés adoucis ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue en soumettant un mélange de gaz de pétrole liquéfiés à un procédé d'adoucissement, afin de convertir les mercaptans ou d'éliminer les impuretés acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_1$ - $C_4$ , et dont le point d'ébullition est compris approximativement entre  $-40^{\circ}\text{C}$  et  $80^{\circ}\text{C}$ .]
- IT : gas di petrolio, liquefatti, addolciti ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta sottoponendo una miscela di gas di petrolio liquefatti a un processo di addolcimento per la conversione dei mercaptani o per l'eliminazione delle impurezze acide. È costituita da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_4$ , e punto di ebollizione nell'intervallo da  $-40^{\circ}\text{C}$  a  $80^{\circ}\text{C}$  ca.]
- NL : aardoliegassen, vloeibaar gemaakt, stankvrij gemaakt ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door het onderwerpen van een vloeibaar gemaakt aardoliegasmengsel aan een stankvrijmakingsproces, om mercaptanen om te zetten of zure onzuiverheden te verwijderen. Bestaat uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ , met een kooktraject van ongeveer  $-40^{\circ}\text{C}$  tot  $80^{\circ}\text{C}$ .]
- PT : gases de petróleo, liquefeitos, tratados (sweetened) ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida submetendo uma mistura de gases de petróleo liquefeitos a um processo de sweetening para converter mercaptans ou remover impurezas ácidas. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ , e destila no intervalo de aproximadamente  $-40^{\circ}\text{C}$  a  $80^{\circ}\text{C}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

F + , R 12	Carc Cat 2 , R 45
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

F +	T	
		
		R : 45-12
		S : 53-45

*Limites de concentracion, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-33-8

EEC No 270-724-1

No 649-204-00-7

NOTA H

NOTA K

- ES : gases (petróleo),  $C_{3-6}$ , ricos en isobutano ; Gases de petróleo  
[Combinación compleja de hidrocarburos de la destilación de hidrocarburos saturados e insaturados normalmente con un número de carbonos dentro del intervalo de  $C_3$  a  $C_6$ , en su mayor parte butano e isobutano. Compuesta de hidrocarburos saturados e insaturados con un número de carbonos dentro del intervalo de  $C_3$  a  $C_6$ , en su mayor parte isobutano.]
- DA : gasser (råolie),  $C_{3-6}$ , isobutanrige ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fra destillationen af mættede og umættede carbonhydrider, sædvanligvis  $C_3$  til og med  $C_6$ , overvejende butan og isobutan. Den består af mættede og umættede carbonhydrider,  $C_3$  til og med  $C_6$ , overvejende isobutan.]
- DE : Gase (Erdöl),  $C_{3-6}$ , Isobutan-reich ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus der Destillation gesättigter und ungesättigter Kohlenwasserstoffe mit Kohlenstoffzahlen, die sich gewöhnlich von  $C_3$  bis  $C_6$  erstrecken, vorherrschend von Butan und Isobutan. Besteht aus gesättigten und ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_6$ , vorherrschend Isobutan.]
- EL : αερια (πετρελαίου),  $C_{3-6}$ , πλούσια σε ισοβουτάνιο· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη κορεσμένων και ακόρεστων υδρογονανθράκων με αριθμό ατόμων άνθρακα, που συνήθως κυμαίνεται από  $C_3$  ως και  $C_6$ , κυρίως βουτάνιο και ισοβουτάνιο. Συνίσταται από κορεσμένους και ακόρεστους υδρογονανθράκες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_3$  ως και  $C_6$ , κυρίως ισοβουτάνιο.]
- EN : gases (petroleum),  $C_{3-6}$ , isobutane-rich ; Petroleum gas  
[A complex combination of hydrocarbons from the distillation of saturated and unsaturated hydrocarbons usually ranging in carbon numbers from  $C_3$  through  $C_6$ , predominantly butane and isobutane. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_6$ , predominantly isobutane.]
- FR : gaz en  $C_{3-6}$  (pétrole), riches en isobutane ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures issue de la distillation d'hydrocarbures saturés et insaturés dont le nombre de carbones varie habituellement de  $C_3$  à  $C_6$ , principalement du butane et de l'isobutane. Se compose d'hydrocarbures saturés et insaturés dont le nombre de carbones se situe dans la gamme  $C_{3-6}$  de l'isobutane en majorité.]
- IT : gas (petrolio),  $C_{3-6}$ , ricchi di isobutano ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di idrocarburi saturi e insaturi, solitamente con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_6$ , prevalentemente butano e isobutano. È costituita da idrocarburi saturi e insaturi con numero di atomi di carbonio nell'intervallo  $C_{3-6}$  prevalentemente isobutano.]
- NL : gassen (aardolie),  $C_{3-6}$ , rijk aan isobutaan ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen bij de destillatie van verzadigde en onverzadigde koolwaterstoffen, gewoonlijk  $C_3$  tot en met  $C_6$ , overwegend butaan en isobutaan. Bestaat uit verzadigde en onverzadigde koolwaterstoffen,  $C_3$  tot en met  $C_6$ , voornamelijk isobutaan.]
- PT : gases (petróleo),  $C_{3-6}$ , ricos em isobutano ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos da destilação de hidrocarbonetos saturados e insaturados normalmente com números de átomos de carbono na gama de  $C_3$  até  $C_6$ , predominantemente butano e isobutano. É constituída por hidrocarbonetos saturados e insaturados com números de átomos de carbono na gama de  $C_3$  até  $C_6$ , predominantemente isobutano.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçao*


Cas No 68477-35-0

EEC No 270-726-2

No 649-205-00-2

NOTA H

NOTA K

- ES: destilados (petróleo),  $C_{3,6}$ , ricos en piperileno, Gases de petróleo  
[Combinación compleja de hidrocarburos de la destilación de hidrocarburos alifáticos saturados e insaturados normalmente con un número de carbonos dentro del intervalo de  $C_3$  a  $C_6$ . Compuesta de hidrocarburos saturados e insaturados con un número de carbonos dentro del intervalo de  $C_3$  a  $C_6$ , en su mayor parte piperilenos.]
- DA: 'destillater (råolie),  $C_{3,6}$ , piperylenrige; Kulbrintegasser  
[En sammensat blanding af carbonhydrier fra destillationen af mættede og umættede, aliphatiske carbonhydrier, sædvanligvis  $C_3$  til og med  $C_6$ . Den består af mættede og umættede carbonhydrier,  $C_3$  til og med  $C_6$ , overvejende piperylener.]
- DE: Destillate (Erdöl),  $C_{3,6}$ , Piperylen-reich; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation gesättigter und ungesättigter aliphatischer Kohlenwasserstoffe mit Kohlenstoffzahlen, die sich gewöhnlich von  $C_3$  bis  $C_6$  erstrecken. Besteht aus gesättigten und ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_6$ , vorherrschend Piperylenen.]
- EL: αποσταγματα (πετρελαίου),  $C_{3,6}$ , πλούσια σε πιπερυλένιο· Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη κορεσμένων και ακόρεστων αλειφατικών υδρογονανθράκων με αριθμό ατόμων άνθρακα, που συνήθως κυμαίνεται από  $C_3$  ως και  $C_6$ . Συνίσταται από κορεσμένους και ακόρεστους υδρογονανθράκες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_3$  ως και  $C_6$ , κυρίως πιπερυλένια.]
- EN: Distillates (petroleum),  $C_{3,6}$ , piperylene-rich; Petroleum gas  
[A complex combination of hydrocarbons from the distillation of saturated and unsaturated aliphatic hydrocarbons usually ranging in the carbon numbers  $C_3$  through  $C_6$ . It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_6$ , predominantly piperylenes.]
- FR: distillats en  $C_{3,6}$  (pétrole), riches en pipérylène; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures issue de la distillation d'hydrocarbures aliphatiques saturés et insaturés dont le nombre de carbones varie habituellement de  $C_3$  à  $C_6$ . Se compose d'hydrocarbures saturés et insaturés dont le nombre de carbones se situe dans la gamme  $C_3$  à  $C_6$ , des pipérylènes en majorité.]
- IT: distillati (petrolio),  $C_{3,6}$ , ricchi di piperilene; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di idrocarburi alifatici saturi e insaturi, solitamente con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_6$ . È costituita da idrocarburi saturi e insaturi con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_6$ , prevalentemente piperilene.]
- NL: destillaten (aardolie),  $C_{3,6}$ , rijk aan piperyleen; Petroleum-gas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van verzadigde en onverzadigde alifatische koolwaterstoffen, gewoonlijk  $C_3$  tot en met  $C_6$ . Bestaat uit verzadigde en onverzadigde koolwaterstoffen,  $C_3$  tot en met  $C_6$ , voornamelijk piperyleen.]
- PT: destilados (petróleo),  $C_{3,6}$ , ricos em piperilenos; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos da destilação de hidrocarbonetos alifáticos saturados e insaturados normalmente com números de átomos de carbono na gama de  $C_3$  até  $C_6$ . É constituída por hidrocarbonetos saturados e insaturados com números de átomos de carbono na gama de  $C_3$  até  $C_6$ , predominantemente piperilenos.]

Κατάταξη, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2: R 45

Ετικετοποίηση, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

	R : 45
	S : 53-45

Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 68477-69-0

EEC No 270-750-3

No 649-206-00-8

NOTA H

NOTA K

- ES: gases (petróleo), productos de cabeza del separador de butano ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de la destilación de una corriente de butano. Compuesta de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>4</sub>.]
- DA: gasser (råolie), butansplitter-topfraktioner ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved destillationen af butanstrømmen. Den består af aliphatiske carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>4</sub>.]
- DE: Gase (Erdöl), Butan Spaltung Überschüsse ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation des Butanlautes. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vornehmlich im Bereich von C<sub>1</sub> bis C<sub>4</sub>.]
- EL: αερια (πετρελαίου), προϊόντα κορυφής διαχωριστήρα βουτανίου· Πετρελαιοκί αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη του ρεύματος βουτανίου. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως C<sub>1</sub> και C<sub>4</sub>.]
- EN: Gases (petroleum), butane splitter overheads ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the distillation of the butane stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>4</sub>.]
- FR: gaz de tête (pétrole), colonne de séparation du butane ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures issue de la distillation du mélange butane. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majeure partie dans la gamme C<sub>1</sub>-C<sub>4</sub>.]
- IT: gas (petrolio), frazioni di testa dello splitter del butano ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione della corrente di butano. È costituita da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>4</sub>.]
- NL: gassen (aardolie), butaansplittertopprodukten ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van de butaanstroom. Bestaat uit alifatische koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>4</sub>.]
- PT: gases (petróleo), de cabeça da coluna de separação de butano ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de uma fracção de butano. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>4</sub>.]

*Classificaton, Klassificering, Einstufung, Ταξινόμηση Classification, Classification, Classificazione Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-70-3

EEC No 270-751-9

No 649-207-00-3

NOTA H

NOTA K

- ES : gases (petróleo),  $C_{2,3}$  ; Gases de petróleo  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de fraccionamiento catalítico. Contiene en su mayor parte etano, etileno, propano y propileno.]
- DA : gasser (råolie),  $C_{2,3}$  ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af produkter fra en katalytisk fraktioneringsproces. Den indeholder overvejende ethan, ethylen, propan og propylen.]
- DE : Gase (Erdöl),  $C_{2,3}$  ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation von Produkten aus dem katalytischen Fraktionierungsverfahren. Enthält vorherrschend Ethan, Ethylen, Propan und Propylen.]
- EL : αερια (πετρελαίου),  $C_{2,3}$  ; Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων καταλυτικής κλασματούσης. Περιέχει κυρίως αιθάνιο, αιθυλένιο, προπάνιο και προπυλένιο.]
- EN : Gases (petroleum),  $C_{2,3}$  ; Petroleum gas  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic fractionation process. It contains predominantly ethane, ethylene, propane, and propylene.]
- FR : gaz en  $C_{2,3}$  (pétrole) ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un fractionnement catalytique. Contient principalement de l'éthane, de l'éthylène, du propane et du propylène.]
- IT : gas (petrolio),  $C_{2,3}$  ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da processi di frazionamento catalitico. Contiene prevalentemente etano, etilene, propano e propilene.]
- NL : gassen (aardolie),  $C_{2,3}$  ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van produkten van een katalytisch fractioneringsproces. Bevat voornamelijk ethaan, ethyleen, propaan en propyleen.]
- PT : gases (petróleo),  $C_{2,3}$  ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de fraccionamento catalítico. É constituída predominantemente por etano, etileno, propano, e propileno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-71-4

EEC No 270-752-4

No 649-208-00-9

NOTA H

NOTA K

- ES : gases (petróleo) residuos del fondo del despropanizador de gasóleo craqueado catalíticamente, libre de ácidos ricos en  $C_4$ ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida del fraccionamiento de una corriente hidrocarbonada de gasóleo craqueado catalíticamente y tratado para separar sulfuro de hidrógeno y otros componentes ácidos. Compuesta de hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_{10}$ , en su mayor parte  $C_4$ .]
- DA : gasser (råolie), katalytisk krakket gasolie depropanizer-bundfraktioner,  $C_4$ -rige syrefri; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved fraktionering af katalytisk krakket gasoliecarbonhydridstrøm og behandlet for at fjerne hydrogensulfid og andre sure komponenter. Den består af carbonhydrider,  $C_3$  til og med  $C_4$ -overvejende  $C_4$ .]
- DE : Gase (Erdöl), katalytisch gekracktes Gasöl Depropanisierer Boden,  $C_4$ -reich Säure-frei; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen aus der Fraktionierung von katalytisch gekracktem Gasöl-Kohlenwasserstoffflaut und zur Beseitigung von Schwefelwasserstoff und anderen säurehaltigen Bestandteile behandelt. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_{10}$ , vorherrschend  $C_4$ .]
- EL : αερια (πετρελαίου), προϊόντων πυθμένα αποπροπανωτήρα καταλυτικής πυρολυμένου ακαθάρτου πετρελαίου, πλούσια σε  $C_4$  ελεύθερα οξέος. Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από κλασμάτωση ρεύματος υδρογονανθράκων, καταλυτικής πυρολυμένου ακαθάρτου πετρελαίου και κατεργασία για να απομακρυνθούν το υδρογόνο, το υδρόθειο και άλλα όξινα συστατικά. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στη περιοχή από  $C_3$  ως και  $C_{10}$ , κυρίως  $C_4$ .]
- EN : Gases (petroleum), catalytic-cracked gas oil depropanizer bottoms,  $C_4$ -rich acid-free; Petroleum gas  
[A complex combination of hydrocarbons obtained from fractionation of catalytic cracked gas oil hydrocarbon stream and treated to remove hydrogen sulfide and other acidic components. It consists of hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_{10}$ , predominantly  $C_4$ .]
- FR : gaz de fond (pétrole), dépropanisation de gazole de craquage catalytique, riche en  $C_4$  et désacidifiés; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement d'un mélange de gazoie de craquage catalytique et soumise à un traitement destiné à éliminer l'hydrogène sulfuré et d'autres composants acides. Se compose d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_3$ - $C_{10}$ , principalement en  $C_4$ .]
- IT : gas (petrolio), da gasolio di cracking catalitico, frazioni di fondo del depropanizzatore, ricchi di  $C_4$  privi di acido; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento di una corrente idrocarbonica di gasolio crackizzata cataliticamente e trattata per eliminare l'idrogeno solforato e altri componenti acidi. È costituita da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_{10}$ , prevalentemente  $C_4$ .]
- NL : gassen (aardolie), bodemfracties uit depropanisator van katalytisch gekraakte gasolie,  $C_4$ -rijk zuurvrij; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de fractionering van katalytisch gekraakte gasolie-koolwaterstofstroom en behandeld om waterstofsulfide en andere zure bestanddelen te verwijderen. Bestaat uit koolwaterstoffen,  $C_3$  tot en met  $C_{10}$ , hoofdzakelijk  $C_4$ .]
- PT : gases (petróleo), produtos de cauda da coluna de despropanização do gasóleo do cracking catalítico, rico em  $C_4$  sem ácidos; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por fraccionamento do efluente de hidrocarbonetos do gasóleo do cracking catalítico e tratada para remoção de sulfureto de hidrogénio e outros compostos ácidos. É constituída por hidrocarbonetos com números de átomos de carbono na gama de  $C_3$  até  $C_{10}$ , predominantemente  $C_4$ .]

*Classification Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 68477-72-5

EEC No 270-754-5

No 649-209-00-4

NOTA H

NOTA K

- ES: gases (petróleo), residuos del fondo del desbutanizador de nafta craqueada cataliticamente, ricos en  $C_{3,5}$ ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida por estabilización de nafta craqueada cataliticamente. Compuesta de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_3$  a  $C_7$ .]
- DA: gasser (råolie), katalytisk krakket naphtha debutanizer-bundfraktioner,  $C_{3,5}$ -rige; Kulbrintegasser  
[En sammensat blanding af carbonhydrider opnået ved stabilisering af katalytisk krakket naphtha. Den består af aliphatiske carbonhydrider, overvejende  $C_3$  til og med  $C_7$ .]
- DE: Gase (Erdöl), katalytisch gekrackte Naphtha Debutanisierer Boden,  $C_{3,5}$ -reich; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Stabilisierung von katalytisch gekrackter Naphtha. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_3$  bis  $C_7$ .]
- EL: αερια (πετρελαίου), προϊόντων πυθμένα αποδουανιωτήρα καταλυτικώς πυρολυμένης νάφθας, πλούσια σε  $C_{3,5}$   
Πετρελαϊκό αέριο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από τη σταθεροποίηση καταλυτικά πυρολυμένης νάφθας. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_3$  ως και  $C_7$ .]
- EN: Gases (petroleum), catalytic-cracked naphtha debutanizer bottoms,  $C_{3,5}$ -rich; Petroleum gas  
[A complex combination of hydrocarbons obtained from the stabilization of catalytic cracked naphtha. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_7$ .]
- FR: gaz de queue (pétrole), débutanisation de naphtha de craquage catalytique, riches en  $C_{3,5}$ ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures issue de la stabilisation du naphtha de craquage catalytique. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_3$ - $C_7$ .]
- IT: gas (petrolio), nafta crackizzata cataliticamente, frazioni di fondo del debutanizzatore, ricchi di  $C_{3,5}$ ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione di nafta di cracking catalitico. È costituita da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_3$ - $C_7$ .]
- NL: gassen (aardolie), katalytisch gekraakte nafta onderste debutanisatorfracties,  $C_{3,5}$ -rijk; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen door de stabilisatie van katalytisch gekraakte nafta. Bestaat uit alifatische koolwaterstoffen, overwegend  $C_3$  tot en met  $C_7$ .]
- PT: gases (petróleo), produtos de cauda do desbutanizador de nafta do cracking catalítico, ricos em  $C_{3,5}$ ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida por estabilização da nafta do cracking catalítico. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_3$  até  $C_7$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Kotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68308-08-7

EEC No 269-628-2

No 649-210-00-X

NOTA H

NOTA K

- ES : gas de cola (petróleo), estabilizador para el fraccionamiento de nafta isomerizada ; Gases de petróleo  
[Combinación compleja de hidrocarburos obtenida de los productos de la estabilización del fraccionamiento de nafta isomerizada  
Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_4$ .]
- DA : slutgas (råolie), isomeriseret naphtha fraktioneringsstabilizer- ; Kulbrintegasser  
[En sammensat blanding af carbonhydrider udvundet fra produkter fra fraktioneringsstabiliseringen af isomeriseret naphtha. Den består overvejende af carbonhydrider, overvejende  $C_1$  til og med  $C_4$ .]
- DE : Endgas (Erdöl), isomerisierte Naphtha-Fraktionierung Stabilisator ; Gase aus der Erdölverarbeitung  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus Produkten stabilisierter Fraktionierung aus isomerisierter Naphtha. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_4$ .]
- EL : αεριο ουρας (πετρελαίου), σταθεροποιητήρα κλασμάτωσης ισομερισμένης νάφθας- Πετρελαιο αέριο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από τη σταθεροποίηση κλασμάτωσης προϊόντων από ισομερισμένη νάφθα. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_4$ .]
- EN : Tail gas (petroleum), isomerized naphtha fractionation stabilizer ; Petroleum gas  
[A complex combination of hydrocarbons obtained from the fractionation stabilization products from isomerized naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ .]
- FR : gaz de queue (pétrole), isomérisation du naphtha, stabilisateur de colonne de fractionnement ; Gaz de pétrole  
[Combinaison complexe d'hydrocarbures obtenue à partir des produits de fractionnement et stabilisation de naphtha isomérisé. Se compose principalement d'hydrocarbures dont le nombre de carbonos se situe en majorité dans la gamme  $C_1$ - $C_4$ .]
- IT : gas di coda (petrolio), nafta isomerizzata dallo stabilizzatore di frazionamento ; Gas di petrolio  
[Combinazione complessa di idrocarburi ottenuta dalla stabilizzazione per frazionamento di prodotti di isomerizzazione di nafta. È costituito prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_4$ .]
- NL : restgas (aardolie), geïsomriseerde nafta fractioneringsstabilisator ; Petroleumgas  
[Een complexe verzameling koolwaterstoffen, verkregen uit de fractioneringsstabilisatieprodukten van geïsomriseerde nafta. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_4$ .]
- PT : gas residual (petróleo), do estabilizador do fraccionamento da nafta isomerizada ; Gases de petróleo liquefeitos  
[Uma combinação complexa de hidrocarbonetos obtida da estabilização do fraccionamento dos produtos da nafta isomerizada. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_4$ .]

*Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97862-76-5

EEC No 308-126-0

No 649-211-00-5

NOTA H

NOTA L

- ES: aceites de sedimentos (petróleo), tratados con carbono; Aceite de desaceitado de parafinas  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de aceites de sedimentos con carbón activado para la separación de constituyentes en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos saturados de cadenas lineales con un número de carbonos en su mayor parte superior a  $C_{12}$ .]
- DA: Foots oil (råolie), carbonbehandlet; Solventekstraherede eller afvoksede tunge restolier  
[En sammensat blanding af carbonhydrider opnået ved behandlingen af Foots oil med aktivt kul for at fjerne sporbestande og urenheder. Den består overvejende af mættede ligekædede carbonhydrider, overvejende større end  $C_{12}$ .]
- DE: Klauenöl (Erdöl), Kohlenstoff-behandelt; Weichparaffin  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Klauenöl mit Aktivkohle erhält, um Spurenbestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ .]
- EL: ελαιο Foot (πετρελαίου), κατεργασμένο με άνθρακα· Φότος οίλ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κατεργασία ελαίου Foot με ενεργό άνθρακα για να απομακρυνθούν ιχνοσυστατικά και προσμίξεις. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες ευθείας αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{12}$ .]
- EN: Foots oil (petroleum), carbon-treated; Foots oil  
[A complex combination of hydrocarbons obtained by the treatment of Foots oil with activated carbon for the removal of trace constituents and impurities. It consists predominantly of saturated straight chain hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ .]
- FR: huile de ressuage (pétrole), traitée au charbon; Huile de ressuage  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'huile de ressuage avec du charbon actif afin d'éliminer les constituants en traces et les impuretés. Se compose principalement d'hydrocarbures saturés à chaîne droite dont le nombre de carbones est en majorité supérieur à  $C_{12}$ .]
- IT: olio di morchia (petrolio), trattato con carbone; Olio di trasudamento  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di olio di morchia con carbone attivo per eliminare costituenti in tracce ed impurezze. È costituita prevalentemente da idrocarburi saturi a catena lineare con numero di atomi di carbonio prevalentemente superiore a  $C_{12}$ .]
- NL: bezinkselolie (aardolie), met koolstof behandeld; Bezinkselolie uit paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van bezinkselolie met geactiveerde kool voor de verwijdering van sporenbestanddelen en onzuiverheden. Bestaat voornamelijk uit verzadigde niet-vertakte koolwaterstoffen, overwegend groter dan  $C_{12}$ .]
- PT: óleo da refinação das parafinas (petróleo), tratado com carvão activado; Óleo de ressudação  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento com carvão activado de óleo da refinação das parafinas para remoção de constituintes vestigiais e impurezas. É constituída predominantemente por hidrocarbonetos saturados de cadeia linear com números de átomos de carbono predominantemente superiores a  $C_{12}$ .]

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-86-2

EEC No 265-088-7

No 649-212-00-0

NOTA H

NOTA N

- ES: destilados (petróleo), fracción intermedia desazufrada; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenidos sometiendo un destilado de petróleo a un proceso de desazufrado para transformar mercaptanos o para separar impurezas ácidas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{20}$  y con un intervalo de ebullición aproximado de 150 °C a 345 °C]
- DA: destillater (råolie), sweetenede middeltunge; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnået ved at underkaste et råoliedestillat en sweetening-proces for at omdanne mercaptaner eller fjerne sure urenheder. Den består af carbonhydrider, overvejende  $C_6$  til og med  $C_{20}$ , med kogesinterval omtrent fra 150 °C til 345 °C.]
- DE: Destillate (Erdöl), gesüßte mittlere; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Aussetzen eines Erdöidestillates einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verschmutzungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{20}$  und siedet im Bereich von etwa 150 °C bis 345 °C]
- EL: αποσταγμάτα (πετρελαίου), μεσαία γλυκασμένα· Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με γλύκανση αποστάγματος πετρελαίου για να μετατραπούν μερκαπτάνες ή να απομακρυνθούν όξινες προσμίξεις. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  ως και  $C_{20}$  και με περιοχή βρασμού από 150 °C ως 345 °C περίπου.]
- EN: Distillates (petroleum), sweetened middle; Gasoil — unspecified  
[A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{20}$  and boiling in the range of approximately 150 °C to 345 °C (302 °F to 653 °F).]
- FR: distillats moyens (pétrole), adoucis; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par adoucissement d'un distillat de pétrole afin de convertir les mercaptans ou d'éliminer les impuretés acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_6$ ,  $C_{20}$  et dont le point d'ébullition est compris approximativement entre 150 °C et 345 °C.]
- IT: distillati (petrolio), frazioni intermedie addolcite; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta sottoponendo un distillato di petrolio ad un processo di addolcimento per convertire i mercaptani, o per eliminare impurezze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{20}$  e punto di ebollizione nell'intervallo 150 °C - 345 °C ca.]
- NL: destillaten (aardolie), stankvrij gemaakt midden fractie; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door een aardoliedestillaat een stankverwijderend proces te laten ondergaan, waarbij mercaptanen worden omgezet of zure onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{20}$ , met een kooktraject van ongeveer 150 °C tot 345 °C.]
- PT: destilados (petróleo), médios tratados (sweetened); Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida submetendo um destilado petrolífero a um processo de sweetening para converter mercaptans ou remover impurezas ácidas. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_6$  ate  $C_{20}$  e destila no intervalo de aproximadamente 150 °C a 345 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-90-8

EEC No 265-092-9

No 649-213-00-6

NOTA H

NOTA N

- ES : gasoleos (petróleo), refinados con disolvente ; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida como el refinado de un proceso de extracción con disolvente. Compuesta fundamentalmente de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{22}$ , y con un intervalo de ebullición aproximado de 205 °C a 400 °C]
- DA : gasolier (råolie), solventraffinerede ; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnået som raffinatet fra en solventekstraktionsproces. Den består overvejende af aliphatiske carbonhydrider, overvejende  $C_{11}$  til og med  $C_{22}$  med kogesinterval omtrent fra 205 °C til 400 °C]
- DE : Gasöle (Erdöl), Lösungsmittel-aufbereitete ; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Lösungsmittel-extraktionsverfahren. Besteht vorherrschend aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{22}$  und siedet im Bereich von etwa 205 °C bis 400 °C.]
- EL : ακαθαρτα πετρελαια (πετρελαιο), εξεγενισμένα με διαλύτη· Πετρελαιο με προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το εκχυλισμένο προϊόν εκχύλισης με διαλύτη. Συνίσταται κυρίως από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{22}$  και με περιοχή βρασμού από 205 °C ως 400 °C περίπου.]
- EN : Gas oils (petroleum), solvent-refined ; Gasoil - unspecified  
[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{22}$  and boiling in the range of approximately 205 °C to 400 °C (401 °F to 752 °F).]
- FR : gazoles (pétrole), raffinés au solvant ; Gazole — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'une extraction au solvant. Se compose principalement d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$  -  $C_{22}$  et dont le point d'ébullition est compris approximativement entre 205 °C et 400 °C.]
- IT : gasoli (petrolio), raffinati con solvente ; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di estrazione con solvente. È costituita prevalentemente da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{22}$  e punto di ebollizione nell'intervallo 205 °C - 400 °C ca.]
- NL : gasoliën (aardolie), solvent-geraffineerd ; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen als het raffinaat van een solvent-extractieproces. Bestaat voornamelijk uit alifatische koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{22}$ , met een kooktraject van ongeveer 205 °C tot 400 °C.]
- PT : gasoleos (petróleo), refinados com solvente ; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como o refinado de um processo de extração com solvente. É constituída predominantemente por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{22}$  e destila no intervalo de aproximadamente 205 °C a 400 °C.]

*Classification Klassifizierung Ein teilung Ταξινόμηση Classification Classification, Classificazione Indeling Classificação*

Carc. Cat. 2. R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentraçao*




Cas No 64741-91-9

EEC No 265-093-4

No 649-214-00-1

NOTA H

NOTA N

- ES: destilados (petróleo), fracción intermedia refinada con disolvente; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida como el refinado de un proceso de extracción con disolvente. Compuesta fundamentalmente de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{20}$  y con un intervalo de ebullición aproximado de 150 °C a 345 °C.]
- DA: destillater (råolie), solventraffinerede middeltunge; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnået som raffineret fra en solventekstraktionsproces. Den består overvejende af aliphatiske carbonhydrider, overvejende  $C_6$  til og med  $C_{20}$ , med koginterval omtrent fra 150 °C til 345 °C.]
- DE: Destillate (Erdöl), Lösungsmittel-aufbereitete mittlere; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Lösungsmittel-extraktionsverfahren. Besteht vorherrschend aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{20}$  und siedet im Bereich von etwa 150 °C bis 345 °C.]
- EL: αποσταγματα (πετρελαίου), μεσαία εξευγενισμένα με διαλύτη. Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται σαν το εκχυλισμένο προϊόν εκχύλισης με διαλύτη. Συνίσταται κυρίως από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{20}$  και με περιοχή δρασμού από 150 °C έως 345 °C περίπου.]
- EN: Distillates (petroleum), solvent-refined middle; Gasoil — unspecified  
[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{20}$  and boiling in the range of approximately 150 °C to 345 °C (302 °F to 653 °F).]
- FR: distillats moyens (pétrole), raffinés au solvant; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'une extraction au solvant. Se compose principalement d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_6$ - $C_{20}$  et dont le point d'ébullition est compris approximativement entre 150 °C et 345 °C.]
- IT: distillati (petrolio), frazione intermedia raffinata con solvente; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta in forma di raffinato da un processo di estrazione con solvente. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{20}$  e punto di ebollizione nell'intervallo 150 °C-345 °C ca.]
- NL: destillaten (aardolie), solvent-geraffineerd middelste fractie; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen als het raffinaat van een solvent-extractieproces. Bestaat voornamelijk uit alifatische koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{20}$ , met een kooktraject van ongeveer 150 °C tot 345 °C.]
- PT: destilados (petróleo), médios refinados com solvente; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida com o refinado de um processo de extração com solvente. É constituída predominantemente por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{20}$  e destila no intervalo de aproximadamente 150 °C a 345 °C.]

*Clasificación Klassifisering, Einstufung, Ταξινόμηση Classification Classification, Classificazione Indeling Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling, Étiquetage Etichettatura, Kenmerken Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 64742-12-7

EEC No 265-112-6

No 649-215-00-7

NOTA H

NOTA N

- ES : gasoleos (petróleo), tratados con ácido ; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida como un refinado de un proceso de tratamiento con ácido sulfúrico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{13}$  a  $C_{25}$  y un intervalo de ebullición aproximado de 230 °C a 400 °C.]
- DA : gasolier (råolie), syrebehandlede ; Uspecifiseret gasolie  
[En sammensat blanding af carbonhydrider opnået som et raffinat fra en svovlsyrebehandlingsproces. Den består af carbonhydrider, overvejende  $C_{13}$  til og med  $C_{25}$ , med koginterval omtrent fra 230 °C til 400 °C.]
- DE : Gasöle (Erdöl) ; Säure-behandelte ; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Verfahren durch Einwirkung von Schwefelsäure. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{13}$  bis  $C_{25}$  und siedet im Bereich von etwa 230 °C bis 400 °C.]
- EL : ακαθαρτα πετρελαιο (πετρελαίου), κατεργασμένα με οξύ· Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το εκχυλισμένο προϊόν από κατεργασία με θειικό οξύ. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{13}$  έως και  $C_{25}$  και με περιοχή βρασμού από 230 °C έως 400 °C περίπου.]
- EN : Gas oils (petroleum), acid-treated ; Gasoil — unspecified  
[A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{13}$  through  $C_{25}$  and boiling in the range of approximately 230 °C to 400 °C (446 °F to 752 °F).]
- FR : gazoles (pétrole), traités à l'acide ; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'un traitement à l'acide sulfurique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{13}$  -  $C_{25}$  et dont le point d'ébullition est compris approximativement entre 230 °C et 400 °C.]
- IT : gasolii (petrolio), trattati con acido ; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di trattamento con acido solforico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{13}$  -  $C_{25}$  e punto di ebollizione nell'intervallo 230 °C - 400 °C ca.]
- NL : gasoliën (aardolie), met zuur behandeld ; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen als een raffinaat uit een zwavelzuurbehandelingsproces. Bestaat uit koolwaterstoffen, overwegend  $C_{13}$  tot en met  $C_{25}$ , met een kooktraject van ongeveer 230 °C tot 400 °C.]
- PT : gasoleos (petróleo), tratados com ácido ; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado de um processo de tratamento com ácido sulfúrico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{13}$  até  $C_{25}$  e destila no intervalo de aproximadamente 230 °C a 400 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-13-8

EEC No 265-113-1

No 649-216-00-2

NOTA H  
NOTA N

- ES destilados (petróleo), fracción intermedia tratada con ácido, Gasoleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida como un refinado de un proceso de tratamiento con ácido sulfúrico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{20}$  y con un intervalo de ebullición aproximado de 205 °C a 345 °C]
- DA destillater (råolie), syrebehandlede middeltunge; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrier opnået som et raffinat fra en svovlsyrebehandlingsproces. Den består af carbonhydrier, overvejende  $C_{11}$  til og med  $C_{20}$ , med kogesinterval omtrent fra 205 °C til 345 °C]
- DE Destillate (Erdöl), Säure-behandelte mittlere; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Verfahren durch Einwirkung von Schwefelsäure. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{20}$  und siedet im Bereich von etwa 205 °C bis 345 °C]
- EL αποσταγμάτα (πετρελαίου), μεσαία κατεργασμένα με οξύ. Πετρέλαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται σαν εκχυλισμένο προϊόν από κατεργασία με θειικό οξύ. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{20}$  και με περιοχή βρασμού από 205 °C έως 345 °C περίπου.]
- EN Distillates (petroleum), acid-treated middle; Gasoil — unspecified  
[A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{20}$  and boiling in the range of approximately 205 °C to 345 °C (401 °F to 653 °F).]
- FR distillats moyens (pétrole), traités à l'acide; Gazole — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'un traitement à l'acide sulfurique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{20}$  et dont le point d'ébullition est compris approximativement entre 205 °C et 345 °C]
- IT distillati (petrolio), frazione intermedia trattata con acido, Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di trattamento con acido solforico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{20}$  e punto di ebollizione nell'intervallo 205 °C-345 °C ca.]
- NL destillaten (aardolie), met zuur behandelde middenfractie, Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen als het raffinaat uit een zwavelzuurbehandelingsproces. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{20}$ , met een kooktraject van ongeveer 205 °C tot 345 °C]
- PT destilados (petróleo), medios tratados com ácido, Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado de um processo de tratamento com ácido sulfúrico. É constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{20}$  e destila no intervalo de aproximadamente 205 °C a 345 °C]

*Clasificación Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-14-9

EEC No 265-114-7

No 649-217-00-8

NOTA H

NOTA N

- ES destilados (petroleo), fraccion ligera tratada con ácido, Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida como un refinado de un proceso de tratamiento con ácido sulfúrico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{16}$  y con un intervalo de ebullición aproximado de 150 °C a 290 °C]
- DA destillater (råolie), syrebehandlede lette, Uspecificeret gasolie  
[En sammensat blanding af carbonhydrier opnået som et raffinat fra en svovlsyrebehandlingsproces. Den består af carbonhydrier, overvejende  $C_6$  til og med  $C_{16}$ , med koginterval omtrent fra 150 °C til 290 °C]
- DE Destillate (Erdöl), Saure-behandelte leichte, Gasöl - nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Verfahren durch Einwirkung von Schwefelsäure. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{16}$  und siedet im Bereich von etwa 150 °C bis 290 °C]
- EL αποσταγμάτα (πετρελαίου), ελαφρά κατεργασμένα με οξύ. Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν εκχυλισμένο προϊόν από κατεργασία με θειικό οξύ. Συνίσταται από υδρογονανθράκες υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{16}$  και με περιοχή βρασμού από 150 °C έως 290 °C περίπου]
- EN Distillates (petroleum), acid-treated light, Gasoil - unspecified  
[A complex combination of hydrocarbons obtained as a raffinate from a sulfonic acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{16}$  and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F)]
- FR distillats legers (petrole), traites a l'acide, Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'un traitement a l'acide sulfonique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_6$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 150 °C et 290 °C]
- IT distillati (petrolio), frazione leggera trattata con acido, Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di trattamento con acido solfonico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{16}$  e punto di ebollizione nell'intervallo 150 °C-290 °C ca.]
- NL destillaten (aardolie), met zuur behandelde lichte fractie, Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen als het raffinaat uit een zwavelzuurbehandelingsproces. Bestaat uit koolwaterstoffen overwegend  $C_6$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 150 °C tot 290 °C]
- PT destilados (petroleo), leves tratados com acido, Gasoleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado de um processo de tratamento com ácido sulfúrico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{16}$  e destila no intervalo de aproximadamente 150 °C a 290 °C]

*Classification, Klassifizierung, Einstufung, ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Límites de concentración, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 64742-29-6

EEC No 265-129-9

No 649-218-00-3

NOTA H


NOTA N

- ES : gasoleos (petróleo), neutralizados químicamente ; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos producida por un proceso de tratamiento para separar materiales ácidos. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{25}$  y con un intervalo de ebullición aproximado de 230 °C a 400 °C.]
- DA : gasolier (rådolje), kemisk neutraliserede ; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider fremstillet ved en behandlingsproces til fjernelse af sure materialer. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{25}$ , med koginterval omfrent fra 230 °C til 400 °C.]
- DE : Gasöle (Erdöl), chemisch neutralisiert ; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch eine Behandlungsmethode zum Entfernen saurer Stoffe. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{25}$  und siedet im Bereich von etwa 230 °C bis 400 °C.]
- EL : ακαθαρτα (πετρέλαια), χημικώς εξουδετερωμένα· Πετρέλαιο με προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία για να απομακρυνθούν όξινα συστατικά. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή  $C_{11}$  έως και  $C_{25}$  και με περιοχή βρασμού από 230 °C έως 400 °C περίπου.]
- EN : Gas oils (petroleum), chemically neutralized ; Gasoil — unspecified  
[A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{25}$  and boiling in the range of approximately 230 °C to 400 °C (446 °F to 752 °F).]
- FR : gazoles (pétrole), neutralisés chimiquement ; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{25}$  et dont le point d'ébullition est compris approximativement entre 230 °C et 400 °C.]
- IT : gasoli (petrolio), neutralizzati chimicamente ; Gasolio — non specificato  
[Combinazione complessa di idrocarburi prodotta con un processo di trattamento per la rimozione delle sostanze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{25}$  e punto di ebollizione 230 °C - 400 °C ca.]
- NL : gasoliën (aardolie), chemisch geneutraliseerd ; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit een behandlingsproces om zure materialen te verwijderen. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{25}$ , met een kooktraject van ongeveer 230 °C tot 400 °C.]
- PT : gasoleos (petróleo), neutralizados químicamente ; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos produzida por um processo de tratamento para remoção de materiais ácidos. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama  $C_{11}$  ate  $C_{25}$  e destila no intervalo de aproximadamente 230 °C a 400 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 64742-30-9

EEC No 265-130-4

No 649-219-00-9

NOTA H

NOTA N

- ES : destilados (petróleo), fracción intermedia neutralizada químicamente ; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos producida por un proceso de tratamiento para separar materiales ácidos. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{20}$  y con un intervalo de ebullición aproximado de 205 °C a 345 °C.]
- DA : destillater (råolie), kemisk neutraliserede middeltunge ; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider fremstillet ved en behandlingsproces for at fjerne sure materialer. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{20}$ , med koginterval omtrent fra 205 °C til 345 °C.]
- DE : Destillate (Erdöl), chemisch neutralisierte mittlere ; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch eine Behandlungsmethode zum Entfernen saurer Stoffe. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{20}$  und siedet im Bereich von etwa 205 °C bis 345 °C.]
- EL : αποσταγματα (πετρελαίου), μεσαία χημικώς εξουδετερωμένα· Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία για να απομακρυνθούν όξινα συστατικά. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{20}$  και με περιοχή βρασμού από 205 °C έως 345 °C περίπου.]
- EN : Distillates (petroleum), chemically neutralized middle ; Gasoil — unspecified  
[A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{20}$  and boiling in the range of approximately 205 °C to 345 °C (401 °F to 653 °F).]
- FR : distillats moyens (pétrole), neutralisés chimiquement ; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$  -  $C_{20}$  et dont le point d'ébullition est compris approximativement entre 205 °C et 345 °C.]
- IT : distillati (petrolio), frazione intermedia neutralizzata chimicamente ; Gasolio — non specificato  
[Combinazione complessa di idrocarburi prodotta con un processo di trattamento per la rimozione delle sostanze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  -  $C_{20}$  e punto di ebollizione 205 °C — 345 °C ca.]
- NL : destillaten (aardolie), chemisch geneutraliseerd middenfractie ; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit een behandelingsproces om zure materialen te verwijderen. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{20}$ , met een kooktraject van ongeveer 205 °C tot 345 °C.]
- PT : destilados (petróleo), médios neutralizados quimicamente ; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos produzida por um processo de tratamento para remoção de materiais ácidos. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{20}$  e destila no intervalo de aproximadamente 205 °C a 345 °C.]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="373 459 395 483" data-label="Text">T</div> <div data-bbox="336 508 432 604" data-label="Image"> </div> <div data-bbox="938 510 1018 539" data-label="Text">R : 45</div> <div data-bbox="938 562 1050 591" data-label="Text">S : 53-45</div>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-38-7

EEC No 265-139-3

No 649-220-00-4

NOTA H

NOTA N

- ES destilados (petróleo), fracción intermedia tratada con arcilla, Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos resultante del tratamiento de una fracción de petróleo con arcilla natural o modificada, normalmente en un proceso de percolación, para separar las trazas presentes de compuestos polares e impurezas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_9$  a  $C_{20}$  y con un intervalo de ebullición aproximado de 150° a 345 °C]
- DA: destillater (råolie), lerbehandlede middeltunge, Uspecificeret gasolie  
[En sammensat blanding af carbonhydrier fremkommet ved behandling af en råoliefraktion med naturligt eller modificeret ler, enten en kontakt- eller perkoleringsproces, til fjernelse af spormængderne af polære forbindelser og tilstedeværende urenheder. Den består af carbonhydrier, overvejende  $C_9$  til og med  $C_{20}$ , med kogesinterval omtrent fra 150 °C til 345 °C]
- DE Destillate (Erdöl), Ton-behandelte mittlere; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, entsteht durch Behandeln einer Erdölfraktion mit natürlichem oder modifiziertem Ton in entweder einem Kontakt- oder Perkulationsverfahren zum Entfernen von Spuren polarer Verbindungen und von vorhandenen Verunreinigungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_9$  bis  $C_{20}$  und siedet im Bereich von etwa 150 °C bis 345 °C]
- EL αποσταγμάτα (πετρέλαιου), μεσαία κατεργασμένα με αργίλλο. Πετρέλαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που προκύπτει από κατεργασία κλασματος πετρελαιο με φυσική ή τροποποιημένη αργίλλο, συνήθως με διεργασία διήθησης για να απομακρυνθούν ιχνοποσότητες πολικών ενώσεων και υπάρχουσες προσμίξεις. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_9$  έως και  $C_{20}$  και με περιοχή βρασμού 150 °C έως 345 °C περίπου]
- EN Distillates (petroleum), clay-treated middle; Gasoil — unspecified  
[A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay, usually in a percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_9$  through  $C_{20}$  and boiling in the range of approximately 150 °C to 345 °C (302 °F to 639 °F)]
- FR distillats moyens (pétrole), traités à la terre, Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures résultant du traitement d'une fraction pétrolière avec de l'argile naturelle ou modifiée, généralement par percolation, destinée à éliminer les traces de composés polaires et les impuretés. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_9$ ,  $C_{20}$  et dont le point d'ébullition est compris approximativement entre 150 °C et 345 °C]
- IT distillati (petrolio), frazione intermedia trattata con argilla, Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di una frazione di petrolio con argilla naturale o modificata, normalmente in un processo di percolazione per eliminare le tracce di composti polari e impurezze presenti. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_9$ - $C_{20}$  e punto di ebollizione nell'intervallo 150 °C - 345 °C ca]
- NL: destillaten (aardolie), met klei behandelde middentractie, Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit de behandeling van een aardoliefractie met natuurlijke of gemodificeerde klei, gewoonlijk in een filtratieproces om sporen van polaire verbindingen en onzuiverheden te verwijderen. Bestaat uit koolwaterstoffen, overwegend  $C_9$  tot en met  $C_{20}$  met een kooktraject van ongeveer 150 °C tot 345 °C]
- PT destilados (petróleo), medios tratados com argila, Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de uma fracção petrolífera com argila natural ou modificada, normalmente por um processo de percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_9$  até  $C_{20}$  e destila no intervalo de aproximadamente 150 °C a 345 °C]

*Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-46-7

EEC No 265-148-2

No 649-221-00-X

NOTA H  
NOTA N

- ES destilados (petróleo), fracción intermedia tratada con hidrogeno ; Gasoleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrógeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{21}$  y con un intervalo de ebullición aproximado de 205 °C a 400 °C]
- DA destillater (råolie), hydrogenbehandlede middeltunge ; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrier opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{21}$ , med kogesinterval omtrent fra 205 °C til 400 °C]
- DE Destillate (Erdöl), mit Wasserstoff behandelte mittlere ; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{21}$  und siedet im Bereich von etwa 205 °C bis 400 °C]
- EL αποσταγμάτα (πετρελαίου), μεσαία κατεργασμένα με υδρογόνο· Πετρέλαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία κλασματος πετρελαίου με υδρογόνο παρουσία καταλύτη. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{21}$  και με περιοχή βρασμού από 205 °C έως 400 °C περίπου.]
- EN Distillates (petroleum), hydrotreated middle ; Gasoil — unspecified  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{21}$  and boiling in the range of approximately 205 °C to 400 °C (401 °F to 752 °F)]
- FR distillats moyens (pétrole), hydrotraités ; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{21}$  et dont le point d'ébullition est compris approximativement entre 205 °C et 400 °C.]
- IT distillati (petrolio), frazione intermedia di « hydrotreating » ; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta per trattamento di una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{21}$  e punto di ebollizione nell'intervallo 205 °C-400 °C ca.]
- NL destillaten (aardolie), met waterstof behandelde middenfractie ; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{21}$ , met een kooktraject van ongeveer 205 °C tot 400 °C]
- PT destilados (petróleo), medios tratados com hidrogenio ; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{21}$ , e destilá no intervalo de aproximadamente 205 °C a 400 °C.]

Classification Klassificering Einstufung Ταξινόγηση Classification Classification Classificazione Indeling Classificação

Carc. Cat. 2 R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rosulagem

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzuerte Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limiti di concentrazione, Concentratieprenten Limites de concentração




Cas No 64742-79-6

EEC No 265-182-8

No 649-222-00-5

NOTA H

NOTA N

- ES: gasoleos (petróleo), hidrodesulfurados; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida de una reserva de petróleo por tratamiento con hidrógeno para transformar el azufre orgánico en sulfuro de hidrógeno, que se separa. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{22}$  y un intervalo de ebullición aproximado de 230 °C a 400 °C.]
- DA: gasolier (råolie), hydroafsvovlede; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnået fra en råolie ved behandling med hydrogen for at omdanne organisk svovl til hydrogensulfid, der fjernes. Den består overvejende af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{22}$ , med kogesinterval omtrent fra 230 °C til 400 °C.]
- DE: Gasöle (Erdgas), hydrodesulfuriert; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem Erdölgrundstoff durch Behandeln mit Wasserstoff, um organischen Schwefel in Schwefelwasserstoff zu verwandeln, der entfernt wird. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{22}$  und siedet im Bereich von etwa 230 °C bis 400 °C.]
- EL: ακαθαρτα πετρέλαια (πετρελαίου), υδρογονοαποθειωμένα· Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από πρώτη ύλη πετρελαίου με καταργασία με υδρογόνο για τη μετατροπή οργανικού θείου σε υδρόθειο, το οποίο απομακρύνεται. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{22}$ , και δράζε: στην περιοχή από 230 °C έως 400 °C περίπου.]
- EN: Gas oils (petroleum), hydrodesulfurized; Gasoil — unspecified  
[A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{22}$  and boiling in the range of approximately 230 °C to 400 °C (446 °F to 752 °F).]
- FR: gazoles (pétrole), hydrodésulfurés; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement à l'hydrogène d'une charge pétrolière afin de convertir le soufre organique en hydrogène sulfuré qui est ensuite éliminé. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_{11}$ - $C_{22}$ , et dont le point d'ébullition est compris approximativement entre 230 °C et 400 °C.]
- IT: gasoli (petrolio), idrodesolforati; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta da uno stock di petrolio trattandolo con idrogeno per trasformare lo zolfo organico in idrogeno solforato, che viene poi eliminato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{22}$  e punto di ebollizione nell'intervallo 230 °C - 400 °C ca.]
- NL: gasolien (aardolie), met waterstof ontzwaveld; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit een aardoliegrondstof door behandeling met waterstof om organische zwavel om te zetten in waterstofsulfide dat wordt verwijderd. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{22}$ , met een kooktraject van ongeveer 230 °C tot 400 °C.]
- PT: gasoleos (petróleo), hidrogenodessulfurizados; Gasoleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio para converter enxofre orgânico em sulfureto de hidrogénio que é removido. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{22}$ , e destila no intervalo de aproximadamente 230 °C a 400 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification Classification (classificazione Indeling, Classificação*

Carc Cat 2, R 45

*Fisquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenzen Konzentrationsgrenzuerte Όρια συγκέντρωσης, Concentration limits, Limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentraçao*


Cas No 64742-80-9

EEC No 265-183-3

No 649-223-00-0

NOTA H


NOTA N

- ES destilados (petróleo), fracción intermedia hidrodesulfurada ; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida de una reserva de petróleo por tratamiento con hidrogeno para transformar el azufre organico en sulfuro de hidrógeno, que se separa. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{21}$ , y con un intervalo de ebullición aproximado de 205 °C a 400 °C]
- DA destillater (råolie), hydroafsvoviede middeeltunge , Uspecificeret gasolie  
[En sammensat blanding af carbonhydnder opnået fra en rå råolie ved behandling med hydrogen for at omdanne organisk svovl til hydrogensulfid, der fjernes. Den består af carbonhydnder, overvejende  $C_{11}$  til og med  $C_{21}$ , med kogesinterval omtrent fra 205 °C til 400 °C]
- DE Destillate (Erdöl), hydrodesulfurierte mittlere , Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen erhalten aus einem Erdölgrundstoff durch Behandeln mit Wasserstoff, um organischen Schwefel in Schwefelwasserstoff zu verwandeln, der entfernt wird. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{21}$  und siedet im Bereich von etwa 205 °C bis 400 °C.]
- EL αποσταγμα (πετρέλαιο), μεσαία υδρογονοαποθειωμένα. Πετρέλαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται από πρώτη ύλη πετρελαίου με κατεργασία με υδρογόνο για τη μετατροπή του οργανικού θείου σε υδρόθειο, το οποίο απομακρύνεται. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως  $C_{21}$  και βράζει στην περιοχή από 205 °C έως 400 °C περίπου]
- EN Distillates (petroleum), hydrodesulfurized middle , Gasöl — unspecified  
[A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{21}$  and boiling in the range of approximately 205 °C to 400 °C (401 °F to 752 °F)]
- FR distillats moyens (pétrole), hydrodesulfures , Gazole — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par traitement à l'hydrogène d'une charge pétrolière afin de convertir le soufre organique en hydrogène sulfure qui est ensuite éliminé. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{21}$ , et dont le point d'ébullition est compris approximativement entre 205 °C et 400 °C]
- IT distillati (petrolio), intermedi idrodesolforati . Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta da uno stock di petrolio trattandolo con idrogeno per trasformare lo zolfo organico in idrogeno solforato, che viene poi eliminato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{21}$  e punto di ebollizione nell'intervallo 205 °C-400 °C ca.]
- NL destillaten (aardolie), met waterstof ontzwavelde middenfractie , Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit een aardoliegrondstof door behandeling met waterstof om organische zwavel om te zetten in waterstofsulfide dat wordt verwijderd. Bestaat uit koolwaterstoffen, overwegende  $C_{11}$  tot en met  $C_{21}$ , met een kooktraject van ongeveer 205 °C tot 400 °C]
- PT destilados (petróleo), médios hidrogenodessulfurizados. Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogenio para converter o enxofre organico em sulfureto de hidrogenico que e removido. E constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{21}$  e desliza no intervalo de aproximadamente 205 °C a 400 °C]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68334-30-5

EEC No 269-822-7

No 649-224-00-6

## NOTA N

- ES combustibles, para motor diesel, Gasoleo, sin especificar  
[Combinación compleja de hidrocarburos producida por la destilación del petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{20}$  y con un intervalo de ebullición aproximado de 163 °C a 357 °C]
- DA brændstoffer, diesel-, Uspecificeret gasolie  
[En sammensat blanding af carbonhydrier fremstillet ved destillationen af råolie. Den består af carbonhydrier, overvejende  $C_4$  til og med  $C_{20}$ , med koginterval omtrent fra 163 °C til 357 °C]
- DE Brennstoffe, Diesel-, Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{20}$  und siedet im Bereich von etwa 163 °C bis 357 °C]
- EL καυσίμα ντίζελ. Πετρέλαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται με την απόσταξη αργού πετρελαιο. Συνιστάται από υδρογονανθράκες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{20}$  και βράζει στην περιοχή από 163 °C έως 357 °C περίπου]
- EN Fuels, diesel, Gasoil — unspecified  
[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{20}$  and boiling in the range of approximately 163 °C to 357 °C (325 °F to 675 °F)]
- FR combustibles, diesels, Gazole — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$  -  $C_{20}$  et dont le point d'ébullition est compris approximativement entre 163 °C et 357 °C]
- IT combustibili, diesel, Gasolio — non specificato  
[Combinazione complessa di idrocarburi prodotta per distillazione di petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{20}$  e punto di ebollizione nell'intervallo 163 °C - 357 °C ca.]
- NL brandstoffen, diesel- Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{20}$ , met een kooktraject van ongeveer 163 °C tot 357 °C]
- PT gasoleos, fuel, Gasoleo — não especificado  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de petróleo bruto. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{20}$  e destila no intervalo de aproximadamente 163 °C a 357 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 3 ; R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	<p>R : 40</p> <p>S : [2]-36/37</p>

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68476-30-2

EEC No 270-671-4

No 649-225-00-1

NOTA H

- ES petróleo combustible, número 2, Gasóleo, sin especificar  
[Aceite destilado con una viscosidad mínima de 32,6 SUS a 37,7 °C y una máxima de 37,9 SUS a 37,7 °C]
- DA brændselolie, nr 2, Uspecificeret gasolie  
[En destillatolie med en minimumviskositet på 2 cSt ved 37,7 °C til et maximum på 37 cSt ved 37,7 °C]
- DE Fuel oil, Nr 2, Gasol — nicht spezifiziert  
[Destillatöl mit einer Viskosität von mindestens 32,6 SUS bei 37,7 °C und maximal 37,9 SUS bei 37,7 °C]
- EL καυσίμο ελαίου, Νο 2 Πετρέλαιο μη προδιαγεγραμμένο  
[Απόσταγμα ελαίου με ιξώδες από 32,6 SUS σε 37,7 °C ελάχιστο έως 37,9 SUS σε 37,7 °C μέγιστο]
- EN Fuel oil, No 2, Gasoil — unspecified  
[A distillate oil having a minimum viscosity of 32,6 SUS at 37,7 °C (100 °F) to a maximum of 37,9 SUS at 37,7 °C (100 °F)]
- FR fuel-oil, n° 2, Gazole — non spécifié  
[Distillat huileux dont la viscosité est comprise entre 32,6 SUS et 37,9 SUS à 37,7 °C]
- IT olio combustibile, n. 2 Gasolio — non specificato  
[Olio distillato avente viscosità da un minimo di 32,6 SUS a 37,7 °C a un massimo di 37,9 SUS a 37,7 °C]
- NL stookolie, nr 2, Gasolie — niet gespecificeerd  
[Een gedestilleerde olie met een minimale viscositeit van 32,6 SUS bij 37,7 °C tot een maximale viscositeit van 37,9 SUS bij 37,7 °C]
- PT fuel-oil, nº 2, Gasóleo não especificado  
[Um óleo destilado com uma viscosidade a 37,7 °C compreendida entre um mínimo de 32,6 SUS e um máximo de 37,9 SUS]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc Cat 3, R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 40 S : [2]-36/37

*Limites de concentration, Konzentrationgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68476-31-3

EPC No 270-673-5

No 649-226-00-7

NOTA H

- ES petróleo combustible, número 4, Gasoleo, sin especificar  
[Aceite destilado con una viscosidad mínima de 45 SUS a 37,7 °C y una máxima de 125 SUS a 37,7 °C]
- DA brændselolie, nr 4, Uspecificeret gasolie  
[En destillatolie med en minimumsviskositet på 58 cSt ved 37,7 °C til et maximum på 264 cSt ved 37,7 °C]
- DE Fuel oil, Nr 4, Gasol — nicht spezifiziert  
[Destillatöl mit einer Viskosität von mindestens 45 SUS bei 37,7 °C und maximal 125 SUS bei 37,7 °C]
- EL καυσίμο ελαιο Νο 4 Πετρέλαιο μη προδιαγεγραμμένο  
[Αποστάγμα ελαίου με ιξώδη, από 45 SUS σε 37,7 °C ελάχιστο έως 125 SUS σε 37,7 °C μέγιστο]
- EN Fuel oil, No 4, Gasoil — unspecified  
[A distillate oil having a minimum viscosity of 45 SUS at 37,7 °C (100 °F) to a maximum of 125 SUS at 37,7 °C (100 °F)]
- FR fuel-oil, n° 4, Gazole — non spécifique  
[Distillat huileux dont la viscosité est comprise entre 45 SUS et 125 SUS a 37,7 °C]
- IT olio combustibile, n 4, Gasolio — non specificato  
[Olio distillato avente viscosità da un minimo di 45 SUS a 37,7 °C a un massimo di 125 SUS a 37,7 °C]
- NL stookolie, nr 4, Gasolie — niet gespecificeerd  
[Een gedestilleerde olie met een minimale viscositeit van 45 SUS bij 37,7 °C tot een maximale viscositeit van 125 SUS bij 37,7 °C]
- PT Fuel-oil, nº 4, Gasoleo não especificado  
[Um óleo destilado com uma viscosidade a 37,7 °C compreendida entre um mínimo de 45 SUS e um máximo de 125 SUS]

Classification Klassificering Einstufung Ταξινόμηση Classification, Classification, Classificazione Indelning Classificação

Cat. Cat 3, R 40

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling, Étiquetage, Etichettatura Kenmerken Rotulagem

Xn	
	R 40
	S {2}36/37

Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Ορια συγκεντρώσεως Concentration limits  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 68476-34-6

EEC No 270-676-1

No 649-227-00-2

## NOTA H

- ES combustibles, motor diesel, numero 2, Gasoleo, sin especificar  
[Aceite destilado con una viscosidad minima de 32,6 SUS a 37,7 °C y una maxima de 40,1 SUS a 37,7 °C]
- DA brændstoffer, dielsel-, nr. 2 Uspecificeret gasolie  
[Destillatolien med en minimumsviskositet på 2 cSt ved 37,7 °C til et maximum på 4,3 cSt ved 37,7 °C]
- DE Fuels, diesel, Nr. 2, Gasöl — nicht spezifiziert  
[Destillatöl mit einer Viskosität von mindestens 32,6 SUS bei 37,7 °C und maximal 40,1 SUS bei 37,7 °C]
- EL καυσίμα, ντιζελ, Νο 2 Πετρέλαιο μη προδιαγεγραμμένο  
[Το αποστάγμα ελαίου με ιξώδες από 32,6 SUS σε 37,7 °C ελάχιστο έως 40,1 SUS σε 37,7 °C μέγιστο.]
- EN Fuels, diesel, No 2 Gasoil — unspecified  
[A distillate oil having a minimum viscosity of 32,6 SUS at 37,7 °C (100 °F)]
- FR combustibles pour moteur diesel n° 2, Gazole — non spécifié  
[Distillat huileux dont la viscosité est comprise entre 32,6 SUS et 40,1 SUS a 37,7 °C Couramment appele huile diesel ou gazole ]
- IT combustibili, diesel n 2 Gasolio — non specificato  
[olio combustibile distillato avente viscosità da un minimo di 32,6 SU a 37,7 °C a un massimo di 40,1 SUS a 37,7 °C]
- NL brandstoffen, diesel, nr 2 Gasolie — niet gespecificeerd  
[De gedestilleerde olie met een minimale viscositeit van 32,6 SUS bij 37,7 °C tot een maximale viscositeit van 40,1 SUS bij 37,7 °F]
- PT combustíveis, diesel, nº 2 Gasóleo — não especificado  
[O óleo destilado com uma viscosidade a 37,7 °C compreendida entre um mínimo de 32,6 SUS e um máximo de 40,1 SUS]

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc Cat. 3 ; R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 40
	S : {2} 36/37

Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 68477-29-2

FEC No 270-719-4

No 649-228 00-8

NOTA H

NOTA N

- ES destilados (petroleo), residuo del fraccionador del reformador catalitico, punto de ebullicion elevado Gasoleo, sin especificar  
[Combinacion compleja de hidrocarburos de la destilacion del residuo del fraccionador del reformador catalitico Con un intervalo de ebullicion aproximado de 343 °C a 399 °C]
- DA destillater (råolie), katalytisk reformer fraktioneringskolonnerest, højt kogende Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider fra destillationen af en rest fra en katalytisk reformer fraktioneringskolonne Den koger omtrent fra 343 °C til 399 °C]
- DE Destillate (Erdöl), katalytischer Reformier Fraktionator Rückstand, hochsiedend Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von katalytischem Reformier Fraktionator Rückstand Siedet im Bereich von etwa 343 °C bis 399 °C]
- EL αποσταγμάτα (πετρελαίου), υπολείμματα κλασμάτωσης, καταλυτικού αναμορφωτήρα, υψηλής μονάδας, θερμότητας δράσεως· Πετρέλαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων από την επεξεργασία υπολειμμάτων, μονάδας κλασμάτωσης, καταλυτικού αναμορφωτήρα Βράζει στην περιοχή από 343 °C έως 399 °C περίπου]
- EN Distillates (petroleum), catalytic reformer fractionator residue, high-boiling Gasol — unspecified  
[A complex combination of hydrocarbons from the distillation of catalytic reformer fractionator residue It boils in the range of approximately 343 °C to 399 °C (650 °F to 750 °F)]
- FR distillats a point d'ébullition eleve (petrole), residu de fractionnement du reformage catalytique Gazole — non specifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation du residu de la colonne de fractionnement du reformage catalytique Son point d'ébullition est compris approximativement entre 343 °C et 399 °C]
- IT distillati (petrolio), residuo della colonna di frazionamento di un impianto di reforming catalitico, altobollenti Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di un residuo della colonna di frazionamento di un impianto di reforming catalitico Bolle nell'intervallo 343 °C - 399 °C ca.]
- NL destillaten (aardolie), katalytische reformator-fractioneerderresidu, hoogkokend Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen verkregen uit de destillatie van katalytische reformator fractioneerderresidu Het heeft een kooktraject van ongeveer 343 °C tot 399 °C]
- PT destilados (petroleo), do residuo do fraccionador do reformer catalitico, com intervalo de destilação elevado Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos da destilação do residuo do fraccionador do reformer catalitico Destila no intervalo de aproximadamente 343 °C a 399 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-30-5

EEC No 270-721-5

No 649-229-00-3

NOTA H

NOTA N

- ES: destilados (petróleo), residuo del fraccionador del reformador catalítico, punto de ebullición intermedio; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos de la destilación del residuo del fraccionador del reformador catalítico. Con un intervalo de ebullición aproximado de 288 °C a 371 °C.]
- DA: destillater (råolie), katalytisk reformer fraktioneringskolonnerest, intermediært kogende; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider fra destillationen af en rest fra en katalytisk reformer fraktioneringskolonne. Den koger omrent fra 288 °C til 371 °C.]
- DE: Destillate (Erdöl), katalytischer Reformier Fraktionator Rückstand, intermediär siedend, Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von katalytischem Reformier Fraktionator Rückstand. Siedet im Bereich von etwa 288 °C bis 371 °C.]
- EL: αποσταγμάτα (πετρέλαιου), υπολείμματος μονάδας κλασμάτωσης καταλυτικού αναμορφωτήρα, ενδιάμεσης θερμοκρασίας βρασμού· Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη υπολείμματος μονάδας κλασμάτωσης καταλυτικού αναμορφωτήρα. Βράζει στην περιοχή από 288 °C έως 371 °C περίπου.]
- EN: Distillates (petroleum), catalytic reformer fractionator residue, intermediate-boiling; Gasoil — unspecified  
[A complex combination of hydrocarbons from the distillation of catalytic reformer fractionator residue. It boils in the range of approximately 288 °C to 371 °C (550 °F to 700 °F).]
- FR: distillats à point d'ébullition moyen (pétrole), résidu de fractionnement du reformage catalytique; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation du résidu de la colonne de fractionnement du reformage catalytique. Son point d'ébullition est compris approximativement entre 288 °C et 371 °C.]
- IT: distillati (petrolio), residuo della colonna di frazionamento di un impianto di reforming catalitico, a punto di ebollizione intermedio; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di un residuo della colonna di frazionamento di un impianto di reforming catalitico. Bolle nell'intervallo 288 °C - 371 °C ca.]
- NL: destillaten (aardolie), katalytische reformator-fractioneerderresidu, bij middentemperaturen kokend; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van reformator-fractioneerderresidu. Heeft een kooktraject van ongeveer 288 °C to 371 °C.]
- PT: destilados (petróleo), do residuo do fraccionador do reformer catalítico, com intervalo de destilação médio; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos da destilação do residuo do fraccionador do reformer catalítico. Destila no intervalo de aproximadamente 288 °C a 371 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68477-31-6

EEC No 270-722-0

No 649-230-00-9

NOTA H

NOTA N

- ES destilados (petróleo), residuo del fraccionador del reformador catalítico, punto de ebullición bajo Gasoleo, sin especificar  
[Combinación compleja de hidrocarburos de la destilación del residuo del fraccionador del reformador catalítico Con un punto de ebullición aproximado por debajo de 288 °C]
- DA destillater (råolie), katalytisk reformer fraktioneringskolonnerest, lavtkogende, Uspecificeret gasolie  
[En sammensat blanding af carbonhydrier fra destillationen af en rest fra en katalytisk reformer fraktioneringskolonne Den koger omkring under 288 °C]
- DE Destillate (Erdöl), katalytischer Reformier Fraktionator Rückstand, niedrigsiedend, Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von katalytischem Reformier Fraktionator Rückstand Siedet etwa unter 288 °C]
- EL αποσταγμάτα (πετρελαίου), υπολειμματος κλασμάτωσης καταλυτικού αναμορφωτήρα, χαμηλών θερμοκρασιών βρασμού Πετρέλαιο μη προδιαγεγραμμένο  
[Ο πολυπλοκός συνδυασμός υδρογονανθράκων από την απόσταξη υπολειμματος μονάδας κλασμάτωσης καταλυτικού αναμορφωτήρα Βράζει κάτω από 288 °C περίπου]
- EN Distillates (petroleum), catalytic reformer fractionator residue, low-boiling Gasoil — unspecified  
[The complex combination of hydrocarbons from the distillation of catalytic reformer fractionator residue It boils approximately below 288 °C (550 °F)]
- FR distillats à bas point d'ébullition (pétrole), résidu de fractionnement du reformage catalytique Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation du résidu de la colonne de fractionnement du reformage catalytique Son point d'ébullition est approximativement inférieur à 288 °C]
- IT distillati (petrolio), residuo della colonna di frazionamento di un impianto di reforming catalitico, bassobollenti Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di un residuo della colonna di frazionamento di un impianto di reforming catalitico Bolle a temperatura inferiore a 288 °C ca]
- NL destillaten (aardolie), katalytische reformator-fractioneerderresidu, laagkokend Gasolie — niet gespecificeerd  
[De complexe verzameling koolwaterstoffen verkregen uit de destillatie van katalytische reformator fractioneerderresidu Kookt beneden ongeveer 288 °C]
- PT destilados (petróleo), do residuo do fraccionador do reformer catalítico, com intervalo de destilação baixo Gasóleo — não especificado  
[A combinação complexa de hidrocarbonetos da destilação do residuo do fraccionador do reformer catalítico Tem um ponto final de destilação de cerca de 288 °C]

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classifica, ao*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 90640-93-0

EEC No 292-6155

No 649-231 00-4

NOTA H

NOTA N


- ES destilados (petroleo), fraccion intermedia altamente refinada Gasoleo, sin especificar  
[Combinacion compleja de hidrocarburos obtenida sometiendo una fraccion de petroleo a varios de los siguientes pasos: filtracion, centrifugacion, desulacion atmosferica, destilacion a vacio, acidificacion, neutralizacion y tratamiento con arcilla. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{20}$ ]
- DA destillater (råolie), højt raffinerede middeltunge Uspecificeret gasolie  
[En sammensat blanding af carbonhydinder opnaet ved at underkaste en raoliefraktion flere af følgende trin: Filtrering, centrifugering, atmosfærisk destillation, vakuumdestillation, syrebehandling, neutralisation og lerbehandling. Den består overvejende af carbonhydinder, overvejende  $C_{10}$  til og med  $C_{20}$ ]
- DE Destillate (Erdöl), stark raffinierte mittlere Gasol — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus einer Erdöl-Fraktion erhält, indem man sie mehreren der folgenden Schritte aussetzt: Filtern, Zentrifugieren, offene Destillation, Vakuumdestillation, Ansäuern, Neutralisieren und Tonbehandlung. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{20}$ ]
- EL αποσταγμα (πετρελαίου), εντόνως διυλισμένα μεσαία Πετρέλαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με την υποβολή κλάσματος πετρελαίου σε πολλά από τα παρακάτω στάδια κατεργασίας: διήθηση, φυγοκεντρική, ατμοσφαιρική απόσταξη, απύκνωση σε κενό, οξείνιση, εξουδετέρωση και κατεργασία με πηλό. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{20}$ ]
- EN Distillates (petroleum), highly refined middle Gasoil — unspecified  
[A complex combination of hydrocarbons obtained by the subjection of a petroleum fraction to several of the following steps: filtration, centrifugation, atmospheric distillation, vacuum distillation, acidification, neutralization and clay treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{20}$ ]
- FR distillats moyens (petrole), hautement raffines, Gazole — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue en soumettant une fraction petroliere a plusieurs des traitements suivants: filtration, centrifugation, distillation atmospherique, distillation sous vide, acidification, neutralisation et traitement a la terre. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{10}$  -  $C_{20}$ ]
- IT distillati (petrolio), intermedi altamente raffinati, Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta sottoponendo una frazione di petrolio a parecchi dei passi seguenti: filtrazione, centrifugazione, distillazione atmosferica, distillazione sotto vuoto, acidificazione, neutralizzazione e trattamento con argilla. Costituita prevalentemente da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_{10}$  -  $C_{20}$ ]
- NL destillaten (aardolie), hooggezuiverde midden-, Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het onderwerpen van een aardoliefractie aan verscheidene van de volgende stappen: filtratie, centrifugatie, atmosferische destillatie, vacuumdestillatie, verzuring, neutralisatie en behandeling met klei. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{20}$ ]
- PT destilados (petróleo), medios altamente refinados, Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida submetendo uma fracção petrolífera a várias das seguintes etapas: filtração, centrifugação, destilação atmosférica, destilação de vácuo, acidificação, neutralização, e tratamento com argila. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{10}$  ate  $C_{20}$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91945 34 5

EEC No 29 24 2

N 649 232 00 X

NOTA H


NOTA N

- ES destilados (petroleo), reformador catalitico, concentrado aromatico pesado Gasoleo, sin especificar  
[Combinacion compleja de hidrocarburos obtenida de la destilacion de una fraccion de petroleo reformada cataliticamente Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{16}$  y con un intervalo de ebullicion aproximado de 200 °C a 300 °C]
- DA destillater (raolie) katalytisk reformer, tungt aromatisk koncentrat Uspecificeret gasolie  
[En sammensat blanding af carbonhydrier opnaet fra destillation af en katalytisk reformeret raoliefraktion Den består overvejende af aromatiske carbonhydrier, overvejende  $C_{10}$  til og med  $C_{16}$ , med koginterval omtrent fra 200 °C til 300 °C]
- DE Destillate (Erdöl), katalytische Reformier schwer aromatisch Konzentrat Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus der Destillation eines katalytisch reformierten Erdölschnittes erhält Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{16}$ , und siedet im Bereich von etwa 200 °C bis 300 °C]
- EL κλάσματα (πετρελαίου), καταλυτικού αναμορφωτήρα, συμπυκνώμα βαρέων αρωματικών Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από την απόσταξη κλάσματος πετρελαίου καταλυτικά αναμορφωμένου Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{16}$  και βράζει στην περιοχή από 200 °C έως 300 °C περίπου]
- EN Distillates (petroleum) catalytic reformer heavy arom conc Gasoil — unspecified  
[A complex combination of hydrocarbons obtained from the distillation of a catalytically reformed petroleum cut It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{16}$  and boiling in the range of approximately 200 °C to 300 °C (392 °F to 572 °F)]
- FR distillats (petrole) reformage catalytique, concentré aromatique lourd Gazole — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par distillation d'une coupe pétrolière de reformage catalytique Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$  -  $C_{16}$  et dont le point d'ébullition est compris approximativement entre 200 °C et 300 °C]
- IT distillati (petrolio), da reforming catalitico, concentrato di aromatici pesanti Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di un taglio di petrolio riformato cataliticamente Costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$  -  $C_{16}$  e con punto di ebollizione nell'intervallo 200 °C-300 °C ca.]
- NL destillaten (aardolie), katalytische reformator, concentraat van zware aromaten Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de destillatie van een katalytisch gereformeerde aardoliefractie Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 200 °C tot 300 °C]
- PT destilados (petroleo), do reformer catalitico, concentrado aromatico pesado Gasoleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida da destilação dos produtos do reforming catalítico de uma fracção petrolífera É constituída predominantemente por hidrocarbonetos aromaticos com numeros de atomos de carbono predominantemente na gama de  $C_{10}$  ate  $C_{16}$  e destila no intervalo de aproximadamente 200 °C a 300 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 93924-33-5

EEC No 300-227-8

No 649-233-00-5

NOTA H

NOTA N

- ES gasoleos, parafínicos Gasoleo, sin especificar  
[Destilado obtenido de la redestilación de una combinación compleja de hidrocarburos obtenida por la destilación de los efluentes de un riguroso tratamiento catalítico con hidrógeno de parafinas. Tiene un intervalo de ebullición aproximado de 190 °C a 330 °C.]
- DA gasolier, paraffin- Uspecificeret gasolie  
[Et destillat opnaet ved redestillationen af en sammensat blanding af carbonhydrider, opnaet ved destillationen af spildevandet fra kraftig katalytisk hydrogenbehandling af paraffiner. Det har koginterval omtrent fra 190 °C til 330 °C.]
- DE Gasole, paraffinhaltig Gasol — nicht spezifiziert  
[Destillat aus der Redestillation einer komplexen Kombination von Kohlenwasserstoffen, die man durch Destillation oder Ausflüssen aus einer scharfen katalytischen Behandlung von Paraffinen mit Wasserstoff enthält. Siedet im Bereich von etwa 190 °C bis 330 °C.]
- EL ακαθάρτα πετρελαιο, παραφινικά Πετρέλαιο μη προδιαγεγραμμένο  
[Αποστάγμα που λαμβάνεται από την επαναπόσταξη πολύπλοκου συνδυασμού υδρογονάνθρακων οι οποίοι λαμβάνονται με την αποστάξη των εκκρίσιμων εστιών κατά τη διάρκεια επεξεργασίας παραφινών με υδρογόνο. Βράζει στην περιοχή από 190 °C έως 330 °C περίπου.]
- EN Gas oils, paraffinic Gasoil — unspecified  
[A distillate obtained from the redistillation of a complex combination of hydrocarbons obtained by the distillation of the effluents from a severe catalytic hydrotreatment of paraffins. It boils in the range of approximately 190 °C to 330 °C (374 °F to 624 °F).]
- FR gazoles paraffiniques Gazole — non spécifique  
[Distillat obtenu par redistillation d'une combinaison complexe d'hydrocarbures produite par distillation des effluents issus d'un hydrotraitement catalytique poussé des paraffines. Son point d'ébullition est approximativement compris entre 190 °C et 330 °C.]
- IT gasolio, paraffinico Gasolio — non specificato  
[Distillato ottenuto dalla ridistillazione di una combinazione complessa di idrocarburi ottenuta dalla distillazione degli efluenti in idrotrattamento catalitico severo di paraffine. Bolle nell'intervallo 190 °C-330 °C ca.]
- NL gasolien, paraffinenoudend Gasolie — niet gespecificeerd  
[Een destillaat verkregen uit de herdestillatie van een complexe verzameling koolwaterstoffen, verkregen door destillatie van afvalstoffen verkregen na een grondige katalytische waterstofbehandeling van paraffinen. Het heeft een kooktraject van ongeveer 190 °C tot 330 °C.]
- PT gasoleos, parafínicos Gasoleo — não especificado  
[Destilado obtido da redistilação de uma combinação complexa de hidrocarbonetos obtida pela destilação dos efluentes de um tratamento drástico de parafinas com hidrogénio na presença de um catalisador. Destila no intervalo de aproximadamente 190 °C a 330 °C.]

*Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Roetulagem*

T	
	R : 45
	S : 53-45

*Λίmites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97488-96-5

EEC No 307-035-3

No 649-234-00-0

NOTA H  
NOTA N

- ES nafta (petróleo), fracción pesada hidrodesulfurada refinada con disolvente Gasoleo, sin especificar
- DA naphtha (råolie), solvent-raffineret hydroafsvovlet tung , Uspecificeret gasolie
- DE Naphtha (Erdöl), durch Lösungsmittel gereinigt hydrodesulfuriert schwer Gasol — nicht spezifiziert
- EL ναφθα (πετρελαίου), διυλισμένη με διαλυτή υδρογονοαποθειωμένα βαριά Πετρέλαιο με προδιαγεγραμμένο
- EN Naphtha (petroleum), solvent-refined hydrodesulfurized heavy Gasoil — unspecified
- FR naphtha lourd (pétrole), raffinée au solvant, hydrodésulfurée Gazole — non spécifié
- IT nafta (petrolio), raffinata con solvente idrodesolforata pesante Gasolio — non specificato
- NL nafta (aardolie), solvent-geraffineerd met waterstof ontzwaveld zwaar , Gasolie — niet gespecificeerd
- PT nafta (petróleo) pesada hidrogenodessulfurizada refinada com solvente Gasoleo — não especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc Cat 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem



Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits,  
Limites de concentration, Limiti di concentrazione, Konzentrationsegrenzen, Limites de concentraçao


Cas No 97675-85-9

EEC No 307-659-6

No 649-235-00-6

NOTA H


NOTA N

- ES n drocarburos, destilado de la fraccion intermedia tratada con hidrógeno  $C_{16-20}$ , fracciones ligeras de destilación Gasoleo, sin especificar  
[Combinacion compleja de hidrocarburos obtenida como primeros productos de la destilacion a vacio de efluentes del tratamiento de un destilado de la fraccion intermedia con hidrogeno. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{16}$  a  $C_{20}$  y con un intervalo de ebullicion aproximado de 290 °C a 350 °C Produce un aceite final con una viscosidad de 2cSt a 100 °C]
- DA carbonhydrider, C16-20-hydrogenbehandlet middeltungt destillat, lette destillater Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnaet som forløb fra vakuumdestillationen af udløb fra behandlingen af et middeltungt destillat med hydrogen. Den består overvejende af carbonhydrider  $C_{16}$  til og med  $C_{20}$ , med kogesinterval omtrent fra 290 °C til 350 °C. Den danner en færdig olie med en viskositet på 2 cSt ved 100 °C]
- DE Kohlenwasserstoffe  $C_{16-20}$  mit Wasserstoff behandeltes Mitteldestillat, leichte Destillate Gasol — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man als erste Laute aus der Vakuumdestillation von Ausflüssen aus der Behandlung eines Mitteldestillates mit Wasserstoff erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{16}$  bis  $C_{20}$  und siedet im Bereich von etwa 290 °C bis 350 °C. Ergibt ein Fertigöl mit einer Viskosität von 2cSt bei 100 °C]
- EL υδρογονάνθρακες,  $C_{16-20}$ , κατεργασμένου με υδρογόνο μεσαίου αποσταγματος, ελαφρά κλάσματα απόσταξης Πετρέλαιο μη προδιατεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται σαν τα πρώτα αποσταγματα από την απόσταξη σε κενό, των τ-οροσίων από την κατεργασία με υδρογόνο μεσαίου αποσταγματος. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{16}$  έως και  $C_{20}$  και με περιοχή βρασμού από 290 °C έως 350 °C περίπου. Το έτοιμο έλαιο έχει ιώδες 2cSt στους 100 °C]
- EN Hydrocarbons,  $C_{16-20}$ , hydrotreated middle distillate, distn lights, Gasoil — unspecified  
[A complex combination of hydrocarbons obtained as first runnings from the vacuum distillation of effluents from the treatment of a middle distillate with hydrogen. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{16}$  through  $C_{20}$  and boiling in the range of approximately 290 °C to 350 °C (554 °F to 662 °F). It produces a finished oil having a viscosity of 2cSt at 100 °C (212 °F)]
- FR hydrocarbures en  $C_{16-20}$ , distillat moyen hydrotraite, fraction légère de distillation Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue comme premier écoulement lors de la distillation sous vide des effluents de traitement d'un distillat moyen. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{16}$  à  $C_{20}$  et dont le point d'ébullition est compris approximativement entre 290 °C et 350 °C. donne une huile produite finie de viscosité égale à 2cSt à 100 °C]
- IT idrocarburi,  $C_{16-20}$  idrotrattati distillato intermedio, frazioni leggere della distillazione, Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta come prime frazioni della distillazione sotto vuoto di effluenti dal trattamento con idrogeno di un distillato intermedio. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{16}$  a  $C_{20}$  e punto di ebollizione nell'intervallo 290 °C - 350 °C ca. Produce un olio finito avente viscosità di 2cSt a 100 °C]
- NL koolwaterstoffen,  $C_{16-20}$ -waterstofbehandeld middendestillaat, lichte destillatiefractionen Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als de eerste fracties uit de vacuumdestillatie van de vloeistof die wordt verkregen door de behandeling van een middendestillaat met waterstof. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{16}$  tot en met  $C_{20}$ , met een kooktraject van ongeveer 290 °C tot 350 °C. Het vormt een voltooide olie met een viscositeit van 2cSt bij 100 °C]
- PT hidrocarbonetos, destilado medio  $C_{16-20}$  tratado com hidrogenio, fracções leves da destilação Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como fracção inicial da destilação de vacuo de efluentes do tratamento com hidrogenio de um destilado medio. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{16}$  ate  $C_{20}$  e destila no intervalo de aproximadamente 290 °C a 350 °C. Produz um óleo acabado com uma viscosidade de 2cSt a 100 °C]

*Classification, Klassificering, Einordnung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Limites de concentration, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 97675-86-0

EEC No 307-660-1

No 649-236-00-1

NOTA H

NOTA N

- ES : hidrocarburos,  $C_{12-20}$ , parafínicos tratados con hidrógeno, fracciones ligeras de destilación ; Gasóleo, sin especificar [Combinación compleja de hidrocarburos obtenida como primeros productos de la destilación a vacío de efluentes del tratamiento de parafinas pesadas con hidrógeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{12}$  a  $C_{20}$  y con un intervalo de ebullición aproximado de 230 °C a 350 °C. Produce un aceite final con una viscosidad de 2cSt a 100 °C.]
- DA : carbonhydrider,  $C_{12-20}$ , hydrogenbehandlet paraffin, lette destillater ; Uspecificeret gasolie [En sammensat blanding af carbonhydrider opnået som forløb fra vakuumdestillationen af udløb fra behandlingen af tunge paraffiner med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af carbonhydrider, overvejende fra  $C_{12}$  til og med  $C_{20}$ , med kogesinterval omtrent fra 230 °C til 350 °C. Den danner en færdig olie med en viskositet på 2 cSt ved 100 °C.]
- DE : Kohlenwasserstoffe,  $C_{12-20}$ , mit Wasserstoff behandelte paraffinhaltige, leichte Destillate ; Gasöl — nicht spezifiziert [Komplexe Kombination von Kohlenwasserstoffen, die man als erste Läufe aus der Vakuumdestillation von Ausflüssen aus der Behandlung von schweren Paraffinen mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{12}$  bis  $C_{20}$  und siedet im Bereich von etwa 230 °C bis 350 °C. Ergibt ein Fertigöl mit einer Viskosität von 2cSt bei 100 °C.]
- EL : υδρογονάνθρακες,  $C_{12-20}$ , παραφινικών κατεργασμένων με υδρογόνο, ελαφρά προϊόντα απόσταξης. Πετρέλαιο μη προδιαγεγραμμένο [Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν τα πρώτα αποστάγματα, απόσταξης στο κενό, απορροών από την κατεργασία βαριών παραφινών με υδρογόνο, παρουσία καταλύτη. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{12}$  έως και  $C_{20}$  και με περιοχή θρασμού από 230 °C περίπου. Το έτοιμο έλαιο έχει ιξώδες 2cSt στους 100 °C.]
- EN : Hydrocarbons,  $C_{12-20}$ , hydrotreated paraffinic, distn. lights ; Gasoil — unspecified [A complex combination of hydrocarbons obtained as first runnings from the vacuum distillation of effluents from the treatment of heavy paraffins with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{12}$  through  $C_{20}$  and boiling in the range of approximately 230 °C to 350 °C (446 °F to 662 °F). It produces a finished oil having a viscosity of 2cSt at 100 °C (212 °F).]
- FR : hydrocarbures en  $C_{12-20}$ , paraffiniques hydrotraités, fraction légère de distillation ; Gazole — non spécifié [Combinaison complexe d'hydrocarbures obtenue comme premier écoulement lors de la distillation sous vide des effluents de traitement de paraffines lourdes à l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{12-20}$  et dont le point d'ébullition est compris approximativement entre 230 °C et 350 °C, donne une huile-produit fini de viscosité égale à 2 cSt à 100 °C.]
- IT : idrocarburi,  $C_{12-20}$ , paraffinici idrotrattati, frazioni leggere della distillazione ; Gasolio — non specificato [Combinazione complessa di idrocarburi ottenuta come prime frazioni della distillazione sotto vuoto di efluenti dal trattamento di paraffine pesanti con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{12} - C_{20}$  e punto di ebollizione nell'intervallo 230 °C-350 °C ca. Produce un olio finito avente viscosità di 2cSt a 100 °C.]
- NL : koolwaterstoffen,  $C_{12-20}$ , waterstofbehandelde paraffinische, lichte destillatiefractionen ; Gasolie — niet gespecificeerd [Een complexe verzameling koolwaterstoffen die wordt verkregen als de eerste fracties uit de vacuumdestillatie van de vloeistoffen die worden verkregen bij de behandeling van zware paraffine met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{12}$  tot en met  $C_{20}$ , met een kooktraject van ongeveer 230 °C tot 350 °C. Het vormt een voltooide olie met een viscositeit van 2cSt bij 100 °C.]
- PT : hidrocarbonetos  $C_{12-20}$ , parafínicos tratados com hidrogénio, fracções leves da destilação ; Gasóleo — não especificado [Uma combinação complexa de hidrocarbonetos obtida como fracção inicial da destilação de vácuo de efluentes do tratamento de parafinas pesadas com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{12}$  até  $C_{20}$  e destila no intervalo de aproximadamente 230 °C a 350 °C. Produz um óleo acabado com uma viscosidade de 2cSt a 100 °C.]

*Classification* Κλasiφικering, Eισαγωγή, Τ. εισαγωγή, Classification, Classification, Classificazione, Inuclering, Classificação

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración* Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 97722-08-2

EEC No 307-757-9

No 649-237-00-7

NOTA H


NOTA N

- ES : hidrocarburos,  $C_{11-17}$ , fracción nafténica ligera extraída con disolvente ; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida por extracción de los aromáticos de un destilado nafténico ligero con una viscosidad de 2,2 cSt a 40 °C. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{17}$  y con un intervalo de ebullición aproximado de 200 °C a 300 °C.]
- DA : carbonhydrider,  $C_{11-17}$ -solvent-ekstraherede lette naphthenske ; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnået ved ekstraktion af aromaterne fra et let naphthen destillat med en viskositet på 2,2 cSt ved 40 °C. Den består overvejende af carbonhydrider, overvejende fra  $C_{11}$  til og med  $C_{17}$ , med kogesinterval omtrent fra 200 °C til 300 °C.]
- DE : Kohlenwasserstoffe,  $C_{11-17}$ -durch Lösungsmittel extrahierte leichte naphthenhaltige ; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Extraktion der Aromaten aus einem leichten naphthenhaltigen Destillat mit einer Viskosität von 2,2 cSt bei 40 °C erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{17}$  und siedet im Bereich von etwa 200 °C bis 300 °C.]
- EL : υδρογονάνθρακες  $C_{11-17}$ , εκχυλισμένοι με διαλύτη ελαφροί ναφθενικοί ; Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απομάκρυνση των αρωματικών από ελαφρό ναφθενικό αποσταγμα με ιξώδες 2,2 cSt σε 40 °C. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{17}$  και με περιοχή βρασμού από 200 °C έως 300 °C περίπου.]
- EN : Hydrocarbons,  $C_{11-17}$ , solvent-extd. light naphthenic ; Gasoil — unspecified  
[A complex combination of hydrocarbons obtained by extraction of the aromatics from a light naphthenic distillate having a viscosity of 2.2 cSt at 40 °C (104 °F). It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{17}$  and boiling in the range of approximately 200 °C to 300 °C (392 °F to 572 °F).]
- FR : hydrocarbures en  $C_{11-17}$  naphthéniques légers, extraction au solvant ; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par extraction des aromatiques dans un distillat naphthénique léger de viscosité égale à 2,2 cSt à 40 °C. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{17}$ , et dont le point d'ébullition est compris approximativement entre 200 °C et 300 °C.]
- IT : idrocarburi,  $C_{11-17}$ , naftenici leggeri estratti con solvente ; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta per estrazione degli aromatici da un distillato nafténico leggero avente viscosità di 2,2 cSt a 40 °C. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{17}$ , e punto di ebollizione nell'intervallo 200 °C-300 °C ca.]
- NL : koolwaterstoffen,  $C_{11-17}$ , solvent-geëxtraheerde lichte naftenische ; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door extractie van de aromaten uit een licht naftenisch destillaat met een viscositeit van 2,2 cSt bij 40 °C. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{17}$ , met een kooktraject van ongeveer 200 °C tot 300 °C.]
- PT : hidrocarbonetos,  $C_{11-17}$ , nafténicos leves extraídos com solvente ; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por extração dos aromáticos de um destilado nafténico leve com uma viscosidade de 2,2 cSt a 40 °C. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{17}$ , e destila no intervalo da aproximadamente 200 °C a 300 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="363 463 379 486" style="text-align: center;">T</div> <div data-bbox="331 510 419 607" style="text-align: center;">  </div>	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97862-78-7

EEC No 308-128-1

No 649-238-00-2

NOTA H

NOTA N

- ES gasoleos, tratados con hidrógeno Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida por la redestilación de los efluentes del tratamiento de parafinas con hidrógeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{22}$ , y con un intervalo de ebullición aproximado de 330 °C a 340 °C]
- DA gasolier, hydrogenbehandlede Uspecificeret gasolie  
[En sammensat blanding af carbonhydrier opnået ved redestillationen af udløbene fra behandlingen af paraffiner med hydrogen, i tilstedeværelse af en katalysator Den består overvejende af carbonhydrier, overvejende fra  $C_{11}$  til og med  $C_{22}$ , med kogesinterval omtrent fra 330 °C til 340 °C]
- DE Gasöl, mit Wasserstoff behandelt Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus der Redestillation der Ausflüsse aus der Behandlung von Paraffinen mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{22}$ , und siedet im Bereich von etwa 330 °C bis 340 °C]
- EL ακαθάρτα πετρελαιο, υδρογονοκατεργασμένα Πετρελαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από την εναπόσταξη των εκροών από την κατεργασία παραφινών με υδρογόνο παρουσία καταλύτη. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{22}$ , και με περιοχή θρασμού από 330 °C έως 340 °C περίπου]
- EN Gas oils, hydrotreated Gasoil — unspecified  
[A complex combination of hydrocarbons obtained from the redistillation of the effluents from the treatment of paraffins with hydrogen in the presence of a catalyst It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{22}$ , and boiling in the range of approximately 330 °C to 340 °C (626 °F to 644 °F)]
- FR gazoles hydrotraités Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par redistillation des effluents de traitement de paraffines à l'hydrogène en présence d'un catalyseur Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$  -  $C_{22}$ , et dont le point d'ébullition est compris approximativement entre 330 °C et 340 °C.]
- IT gasoli, idrotrattati Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dalla ridistillazione degli effluenti dal trattamento di paraffine con idrogeno in presenza di un catalizzatore È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  -  $C_{22}$ , e punto di ebollizione nell'intervallo 330 °C - 340 °C ca.]
- NL gasolien, waterstofbehandeld Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door herdestillatie van de vloeistoffen die worden verkregen bij de behandeling van paraffinen met waterstof in aanwezigheid van een katalysator Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{22}$ , met een kooktraject van ongeveer 330 °C tot 340 °C]
- PT gasoleos, tratados com hidrogenio Gasoleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida da redestilação de efluentes do tratamento de parafinas com hidrogénio na presença de um catalisador É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{22}$ , e destila no intervalo de aproximadamente 330 °C a 340 °C.]

*Clasificación, Klasificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="371 465 392 490" data-label="Text">T</div> <div data-bbox="336 515 429 607" data-label="Image"> </div> <div data-bbox="941 515 1023 544" data-label="Text">R : 45</div> <div data-bbox="941 566 1053 595" data-label="Text">S : 53-45</div>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 100683-97-4

EEC No 309-667-5

No 649-239-00-8

NOTA H

NOTA N

- ES destilados (petroleo), fracción parafínica ligera tratada con carbon. Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de una fracción de aceite de petroleo con carbón vegetal activado para separar constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{14}$ ]
- DA destillater (råolie), carbonbehandlet lette paraffin. Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnået ved behandling af en råoliefraktion med aktivt kul, til fjernelse af spor af polære bestanddele og urenheder. Den består overvejende af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{14}$ ]
- DE Destillate (Erdöl), mit Kohlenstoff behandelte leichte paraffinhaltige. Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung einer Erdöl-Fraktion mit Aktivkohle erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{14}$ ]
- EL αποσταγμάτα (πετρελαιο), ελαφρά παραφινικά κατεργασμένα με άνθρακα. Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία κλάστατος πετρελαιο με ενεργό ξυλάνθρακα για την απομάκρυνση ίχνων πολικών συστατικών και προσμίξεων. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{14}$ ]
- EN Distillates (petroleum), carbon-treated light paraffinic. Gasoil — unspecified  
[A complex combination of hydrocarbons obtained by the treatment of a petroleum oil fraction with activated charcoal for the removal of traces of polar constituents and impurities. It consists predominantly of hydrocarbons having carbon numbers predominant in the range of  $C_{11}$  through  $C_{14}$ ]
- FR distillats paraffiniques légers (petrole), traites au charbon. Gazole — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction d'huile petroliere avec du charbon actif afin d'éliminer les traces de constituants polaires et les impuretes. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{11}$  -  $C_{14}$ ]
- IT distillati (petrolio), paraffinici leggeri trattati con carbone. Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di una frazione di olio di petrolio con carbone attivo per eliminare costituenti polari in tracce ed impurezze. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{14}$ ]
- NL destillaten (aardolie), met koolstof behandelde lichte paraffine-houdende, Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die is verkregen door de behandeling van een aardoliefractie met geactiveerde houtskool voor de verwijdering van sporen polaire bestanddelen en onzuiverheden. Bevat voornamelijk koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{14}$ ]
- PT destilados (petroleo), parafínicos leves tratados com carvão activado. Gasoleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de uma fracção petrolífera com carvão activado para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{14}$ ]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Limites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*




Cas No 100683-98-5

EEC No 309-668-0

No 649-240-00-3

NOTA H

NOTA N

- ES: destilados (petróleo), fracción parafínica intermedia, tratada con carbón; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de petróleo con carbón vegetal activado para separar constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{16}$  a  $C_{36}$ .]
- DA: destillater (råolie), intermediære paraffin-, carbonbehandlede; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnået ved behandlingen af råolie med aktivt kul, til fjernelse af spor af polære bestanddele og urenheder. Den består overvejende af carbonhydrider, overvejende  $C_{16}$  til og med  $C_{36}$ .]
- DE: Destillate (Erdöl), intermediäre paraffinhaltige, mit Kohlenstoff behandelt; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Erdöl mit Aktivkohle erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{16}$  bis  $C_{36}$ .]
- EL: αποσταγματα (πετρελαίου), ενδιάμεσα παραφινικά, κατεργασμένα με άνθρακα. Πετρέλαιο μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κατεργασία πετρελαίου με ενεργό ξυλάνθρακα για την απομακρυνση ιχνών πολικών συστατικών και προσμίξεων. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό άνθρακα κυρίως στην περιοχή από  $C_{16}$  έως και  $C_{36}$ .]
- EN: Distillates (petroleum), intermediate paraffinic, carbon-treated, Gasoil — unspecified  
[A complex combination of hydrocarbons obtained by the treatment of petroleum with activated charcoal for the removal of trace polar constituents and impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{16}$  through  $C_{36}$ .]
- FR: distillats paraffiniques intermédiaires (pétrole), traités au charbon; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement du pétrole avec du charbon actif afin d'éliminer les traces de constituants polaires et les impuretés. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_{16}$ - $C_{36}$ .]
- IT: distillati (petrolio), parafinici intermedi, trattati con carbone; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di petrolio con carbone attivo per eliminare costituenti polari in tracce ed impurezze. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{16}$ - $C_{36}$ .]
- NL: destillaten (aardolie), middelste paraffine-houdende, behandeld met koolstof; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die is verkregen door de behandeling van aardolie met geactiveerde houtskool voor de verwijdering van sporen polaire bestanddelen en onzuiverheden. Bevat voornamelijk koolwaterstoffen, overwegend  $C_{16}$  tot en met  $C_{36}$ .]
- PT: destilados (petróleo), parafinicos médios, tratados com carvão activado; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de petróleo com carvão activado para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{16}$  até  $C_{36}$ .]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 100683-99-6

EEC No 309-669-6

No 649-241-00-9

NOTA H

NOTA N

- ES : destilados (petróleo), fracción parafínica intermedia, tratada con arcilla ; Gasóleo, sin especificar  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de petróleo con tierra para blanquear para separar constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{16}$ .]
- DA : destillater (råolie), intermediære paraffin-, lerbehandlede ; Uspecificeret gasolie  
[En sammensat blanding af carbonhydrider opnået ved behandlingen af råolie med blegejord, til fjernelse af spor polære bestanddele og urenheder. Den består overvejende af carbonhydrider, overvejende  $C_{14}$  til og med  $C_{16}$ .]
- DE : Destillate (Erdöl), intermediäre paraffinhaltige, mit Ton behandelt ; Gasöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Erdöl mit Bleicherde erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{16}$ .]
- EL : αποσταγμάτα (πετρέλαιου), παραφινικά ενδιάμεσα, κατεργασμένα με άργιλλο· Πετρέλαιο μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με την κατεργασία πετρελαίου με λευκαντική γή για να απομακρυνθούν ίχνη πολικών συστατικών και προσμίξεις. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  έως και  $C_{16}$ .]
- EN : Distillates (petroleum), intermediate paraffinic, clay-treated ; Gasoil — unspecified  
[A complex combination of hydrocarbons obtained by the treatment of petroleum with bleaching earth for the removal of trace polar constituents and impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{16}$ .]
- FR : distillats paraffiniques intermédiaires (pétrole), traités à la terre ; Gazole — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement du pétrole avec de la terre décolorante afin d'éliminer les traces de constituants polaires et les impuretés. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{14}$ - $C_{16}$ .]
- IT : distillati (petrolio), paraffinici intermedi, trattati con argilla ; Gasolio — non specificato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di petrolio con terra sbiancante per eliminare costituenti polari in tracce ed impurezza. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ - $C_{16}$ .]
- NL : destillaten (aardolie), middelste paraffine-houdende, behandeld met klei ; Gasolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die is verkregen door de behandeling van aardolie met bleekarde voor de verwijdering van sporen polaire bestanddelen en onzuiverheden. Bevat voornamelijk koolwaterstoffen, overwegend  $C_{14}$  tot en met  $C_{16}$ .]
- PT : destilados (petróleo), parafínicos, médios, tratados com argila ; Gasóleo — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de petróleo com argila para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{14}$  até  $C_{16}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração.*


Cas No 90622-53-0

FEC No 292 454-3

No 649-242-00-4


NOTA H  
NOTA N

ES alcanos,  $C_{12-26}$ -ramificados y lineales ,  
 DA alkaner,  $C_{12-26}$ -forgrenede og lige-kædede  
 DE Alkane,  $C_{12-26}$ -verzweigt und linear ,  
 EL αλκάνια,  $C_{12-26}$ -διακλαδισμένα και γραμμικά  
 EN Alkanes,  $C_{12-26}$ -branched and linear ,  
 FR alcanes en  $C_{12-26}$ , ramifiés et droits ,  
 IT alcani,  $C_{12-26}$ -ramificati e lineari ,  
 NL alkanen,  $C_{12-26}$ -vertakte en niet-vertakte  
 PT alcanos,  $C_{12-26}$ -lineares e ramificados

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 74869-21-9

EEC No 278-011-7

No 649-243-00-X

NOTA H

NOTA N

- ES: grasas lubricantes; Grasa  
[Combinación compleja de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{12}$  a  $C_{30}$ . Puede contener sales orgánicas de metales alcalinos, metales alcalino-terreos y/o compuestos de aluminio.]
- DA: smørefedstoffer; Fedt  
[En sammensat blanding af carbonhydnder, overvejende  $C_{12}$  til og med  $C_{30}$ , som kan indeholde organiske salte af alkalimetaller, jordalkalimetaller, og/eller aluminiumforbindelser.]
- DE: Schmierfette; Schmierfett  
[Komplexe Kombination von Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{12}$  bis  $C_{30}$ . Kann organische Salze von Alkalimetallen, Erdalkalimetallen und/oder Aluminiumverbindungen enthalten.]
- EL: λιπαντικά γρασσα· Γράσσο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{12}$  ως και  $C_{30}$  και που μπορεί να περιέχει οργανικά άλατα μετάλλων αλκαλίων, μετάλλων αλκαλικών γαιών, ή και ενώσεις αργιλίου.]
- EN: Lubricating greases; Grease  
[A complex combination of hydrocarbons having carbon numbers predominantly in the range of  $C_{12}$  through  $C_{30}$ . May contain organic salts of alkali metals, alkaline earth metals, and/or aluminium compounds.]
- FR: graisses lubrifiantes; Graisse  
[Combinaison complexe d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{12}$ - $C_{30}$ , et qui peut contenir des sels organiques de métaux alcalins, des métaux alcalino-terreux et/ou des composés de l'aluminium.]
- IT: grassi lubrificanti; Grasso lubrificante  
[Combinazione complessa di idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{12}$ - $C_{30}$ . Può contenere sali organici di metalli alcalini o alcalino-terrosi, e/o composti di alluminio.]
- NL: smeervetten; Mineraal vet  
[Een complexe verzameling koolwaterstoffen, overwegend  $C_{12}$  tot en met  $C_{30}$ . Kan organische zouten van alkali- en aardalkalimetalen en/of aluminiumverbindingen bevatten.]
- PT: massa lubrificantes; Massa lubrificante  
[Uma combinação complexa de hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{12}$  até  $C_{30}$  e que pode conter sais orgânicos de metais alcalinos e alcalino-terrosos, e/ou compostos de alumínio.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 64742-61-6

EEC No 265-165-5

No 649-244-00-5

NOTA H  
NOTA N

- ES cera de parafina y petroleo (petróleo), Gachas de parafina  
[Combinación compleja de hidrocarburos obtenida de una fracción de petróleo por cristalización en disolvente (desparafinado con disolvente) o como una fracción de destilación de un petróleo muy ceroso. Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada y lineal con un número de carbonos en su mayor parte superior a  $C_{20}$ ]
- DA slack wax (råolie), Råparaffin  
[En sammensat blanding af carbonhydrier opnaet fra en raoliefraktion ved solventkrystallisation (solventafvoksning), eller som en destillationsfraktion fra en meget voksagtig olie. Den består overvejende af mættede, ligekædede og forgrenede carbonhydrier, overvejende større end  $C_{20}$ ]
- DE Weichwachs (Erdöl) Paraffingatsch  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einer Erdölfraktion durch Lösungsmittelkristallisation (Lösungsmittelentwachsen) oder als Destillationsfraktion aus sehr wachsener Basis. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette und mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$ ]
- EL ελαιώδης κηρος (πετρελαίου): Ψευδοκηρος  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από κλάσμα πετρελαίου με κρυστάλλωση από διαλυτή (αποκηρωση με διαλυτή) ή σαν κλάσμα αποσταξης από πολύ κηρώδες αργό. Συνίσταται κυρίως από κορεσμένους υδρογονανθρακες ευθείας και διακλαδισμένης αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο κυρίως από  $C_{20}$ ]
- EN Slack wax (petroleum) Slack wax  
[A complex combination of hydrocarbons obtained from a petroleum fraction by solvent crystallization (solvent dewaxing) or as a distillation fraction from a very waxy crude. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than  $C_{20}$ ]
- FR gatsch (pétrole) Gatsch  
[Combinaison complexe d'hydrocarbures obtenue à partir d'une fraction pétrolière par cristallisation au solvant (deparaffinage au solvant) ou comme fraction de distillation d'un brut très paraffineux. Se compose principalement d'hydrocarbures saturés à chaîne droite ou ramifiée et dont le nombre de carbones est en majorité supérieur à  $C_{20}$ ]
- IT paraffina molle (petrolio) Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta da una frazione di petrolio per cristallizzazione con solvente (deparaffinazione con solvente), oppure come frazione di distillazione derivante da un grezzo ad alto tenore in paraffine. È costituita in prevalenza da idrocarburi saturi a catena lineare o ramificata, con numero di atomi di carbonio prevalentemente maggiore di  $C_{20}$ ]
- NL olierijke paraffinewas (aardolie) Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen, verkregen uit een aardoliefractie door solventkristallisatie (met solvent van was ontdoen) of als een destillatiefractie uit een zeer wasachtige ruwe olie. Bestaat voornamelijk uit verzadigde vertakte en niet-vertakte koolwaterstoffen, overwegend groter dan  $C_{20}$ ]
- PT parafinas brutas (petróleo); Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida de uma fracção petrolífera por cristalização com solvente (desparafinação com solvente) ou como uma fracção da destilação de um petróleo bruto parafínico. É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com números de átomos de carbono predominantemente superiores a  $C_{20}$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90669-77-5

EEC No 292-659 8

No 649-245 00-0

NOTA H

NOTA N

- ES cera de parafina y petroleo (petroleo), tratada con acido Gachas de parafina  
[Combinacion compleja de hidrocarburos obtenida como un refinado por tratamiento de una fraccion de cera de parafina y petroleo en un proceso de tratamiento con acido sulfurico Compuesta fundamentalmente de hidrocarburos saturados de cadena lineal y ramificada con un numero de carbonos en su mayor parte superior a  $C_{20}$ ]
- DA slack wax (råolie), syrebehandlet, Råparaffin  
[En sammensat blanding ekstraktcarbonhydnder opnaet som et raffinat ved behandling af en råolie slack wax i en svovlsyrebehandlingsproces Den består overvejende af mættede, ligeledes og forgrenede carbonhydnder, overvejende større end  $C_{20}$ ]
- DE Paraffinkuchen (Erdöl), Säure-behandelt, Paraffingatsch  
[Komplexe Kombination von Kohlenwasserstoffen erhalten als Raffinat durch Behandeln einer Erdöl-Paraffinkuchen-Fraktion in einem Schwefelsäureverfahren Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$ ]
- EL ελαιούχος κηρός (πετρελαίου), κατεργασμένος με οξύ· Ψευδοκηρός  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν εκχυλισμένο προϊόν με κατεργασία κλασματικού ελαιούχου κηρου πετρελαίου με θειικό οξύ. Συνίσταται κυρίως από κορεσμένους υδρογονανθρακες γραμμικής και διακλαδισμένης αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{20}$ ]
- EN Slack wax (petroleum), acid-treated, Slack wax  
[A complex combination of hydrocarbons obtained as a raffinate by treatment of a petroleum slack wax fraction with sulfuric acid treating process. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than  $C_{20}$ ]
- FR gatsch (pétrole), traite à l'acide Gatsch  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat par traitement à l'acide sulfurique d'une fraction de gatsch pétrolier Se compose principalement d'hydrocarbures saturés à chaîne droite ou ramifiée dont le nombre de carbones est en majorité supérieur à  $C_{20}$ ]
- IT paraffina molle (petrolio), trattata con acido Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta come raffinato per trattamento di una frazione di paraffina molle di petrolio con un processo di trattamento con acido solfonico Costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con un numero di atomi di carbonio prevalentemente maggiore di  $C_{20}$ ]
- NL olierijke paraffinewas (aardolie), zuur-behandeld Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een raffinaat door de behandeling van een olierijke paraffinewas-fractie uit aardolie in een zwavelzuurbehandelingsproces Bestaat voornamelijk uit verzadigde vertakte en niet-vertakte koolwaterstoffen, overwegend groter dan  $C_{20}$ ]
- PT parafinas brutas (petróleo), tratadas com acido Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado por tratamento pelo processo do acido sulfurico de uma fracção de parafinas brutas. É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com numeros de atomos de carbono predominantemente superiores a  $C_{20}$ ]

*Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2: R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*


Cas No 90669-78-6

EEC No 292-660-3

No 649-246-00 6

NOTA H

NOTA N

- ES cera de parafina y petroleo (petróleo), tratada con arcilla Gachas de parafina  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de cera de parafina y petroleo con arcilla natural o modificada en un proceso por contacto o por percolación. Compuesta fundamentalmente de hidrocarburos saturados lineales y ramificados con un número de carbonos en su mayor parte superior a  $C_{10}$ ]
- DA slack wax (råolie), lerbehandlet, Råparaffin  
[En sammensat blanding af carbonhydrier opnaet ved behandling af en råolie-slack wax-fraktion med neutral eller modificeret ler i enten en kontakt- eller en perkoleringsproces. Den består overvejende af mættede, ligekædede og forgrenede carbonhydrier, overvejende større end  $C_{10}$ ]
- DE Paraffinkuchen (Erdöl), Ton-behandelt Paraffingatsch  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln einer Erdöl-Paraffinkuchen-Fraktion mit natürlichem oder modifiziertem Ton entweder in einem Kontakt- oder Perkulationsverfahren erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{10}$ ]
- FI ελαιουχος κηρος (πετρελαιου), κατεργασμενος με αργιλλο Ψευδοκηρος  
[Πολυπλοκος συνδυασμός υδρογονανθράκων που λαμβανεται με κατεργασία κλάσματος ελαιουχου κηρου πετρελαιου με φυσικη η τροποποιημενη αργιλλο είτε με τη μεθοδο της επαφης είτε με τη μεθοδο της διήθησης. Συνισταται κυρίως από κορεσμενους και διακλαδισμενους υδρογονανθρακες με αριθμό ατόμων ανθρακα κυρίως μεγαλύτερο από  $C_{10}$ ]
- EN Slack wax (petroleum), clay-treated Slack wax  
[A complex combination of hydrocarbons obtained by treatment of a petroleum slack wax fraction with natural or modified clay in either contacting or percolation process. It consists predominantly of saturated straight and branched hydrocarbons having carbon numbers predominantly greater than  $C_{10}$ ]
- FR gatsch (pétrole), traite à la terre Gatsch  
[Combinaison complexe d'hydrocarbures resultant du traitement d'une fraction de gatsch petrolier avec de l'argile naturelle ou modifiée, par contact ou par percolation. Se compose principalement d'hydrocarbures saturés à chaîne droite ou ramifiée dont le nombre de carbonnes est en majorité supérieur à  $C_{10}$ ]
- IT paraffina molle (petrolio), trattata con argilla Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta come raffinato trattando una frazione di paraffina molle di petrolio con argilla naturale o modificata con un processo a contatto o a percolazione. È costituita prevalentemente da idrocarburi saturi lineari e ramificati con un numero di atomi di carbonio prevalentemente maggiore di  $C_{10}$ ]
- NL olierijke paraffinewas (aardolie), met klei behandeld Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een olierijke paraffinewas-fractie uit aardolie met natuurlijke of gemodificeerde klei in een contact- of een filtratieproces. Bestaat voornamelijk uit verzadigde vertakte en niet-vertakte koolwaterstoffen, overwegend groter dan  $C_{10}$ ]
- PT parafinas brutas (petróleo), tratadas com argila Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção de parafinas brutas com argila natural ou modificada quer por mistura quer por um processo de percolação. É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com numeros de atomos de carbono predominantemente superiores a  $C_{10}$ ]

*Classification Klassifizierung Lev'utung Ταξινόηση Clasificación Clasificación Classificazione Indeling Classificação*

Carc. Cat. 2, R. 45

*Etiquetado Etikettering Kennzeichnung Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione Concentratiegrenzen, Limites de concentração*


Cas No 92062-09-4

EEC No 295-523-6

No 649-247-00-1

NOTA H

NOTA N

- ES: cera de parafina y petroleo (petroleo), tratada con hidrógeno; Gachas de parafina  
[Combinación compleja de hidrocarburos obtenida por tratamiento con hidrógeno de cera de parafina y petroleo y en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos saturados de cadena lineal y ramificada con un número de carbonos en su mayor parte superior a  $C_{20}$ .]
- DA: slack wax (råolie), hydrogenbehandlet; Råparaffin  
[En sammensat blanding af carbonhydrier opnået ved at behandle slack wax med hydrogen i tilstedeværelse af en katalysator. Den består af mættede, ligezædede og forgrenede carbonhydrider, overvejende større end  $C_{20}$ .]
- DE: Paraffinkuchen (Erdöl), mit Wasserstoff behandelt; Paraffingatsch  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln von Paraffinkuchen mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$ .]
- EL: ελαιούχος κηρός (πετρέλαιο), υδρογονοκατεργασμένος· Ψευδοκηρός  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία ελαιούχου κηρού με υδρογόνο παρουσία καταλύτη. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες απευθείας και διακλαδισμένης αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{20}$ .]
- EN: Slack wax (petroleum), hydrotreated; Slack wax  
A complex combination of hydrocarbons obtained by treating slack wax with hydrogen in the presence of a catalyst. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than  $C_{20}$ .]
- FR: gatsch (pétrole), hydrotraite; Gatsch  
[Combinaison complexe d'hydrocarbures obtenue par traitement de gatsch à l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures saturés à chaîne droite ou ramifiée dont le nombre de carbones est en majorité supérieur à  $C_{20}$ .]
- IT: cera molle (petrolio), idrotrattata; Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di cera molle con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente maggiore di  $C_{20}$ .]
- NL: olierijke paraffine (aardolie), met waterstof behandeld; Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het behandelen van olierijke paraffine met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit verzadigde vertakte en niet-vertakte koolwaterstoffen, overwegend groter dan  $C_{20}$ .]
- PT: parafinas brutas (petróleo), tratadas com hidrogénio; Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de parafinas brutas com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com números de átomos de carbono predominantemente superiores a  $C_{20}$ .]

*Clasificación Klassificering Linstufung, Ταξινόμηση, Classification Classificazione Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45, S : 53-45

*Limites de concentracion Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 92062-10-7

EFC No 225-524-1

No 649 715 00 7

NOTA H

NOTA N


- ES cera de parafina y petroleo (petroleo), temperatura de fusión baja. Ceras de parafina  
[Combinación compleja de hidrocarburos obtenida de una fracción de petróleo por desparafinación con disolvente. Compuesta fundamentalmente de hidrocarburos saturados de cadena lineal y ramificada con un número de carbonos en su mayor parte superior a  $C_{12}$ ]
- DA slack wax (råolie), lavsmeltende Råparaffin  
[En sammensat blanding af carbonhydrier opnaet fra en råoliefraktion ved solventparaffinering. Den består overvejende af mættede, ligkædede og forgrenede carbonhydrier, overvejende større end  $C_{12}$ ]
- DE Paraffinkuchen (Erdöl) niedrig schmelzend Paraffingatsch  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus einer Erdöl-Fraktion durch Lösungsmittelparaffinierung erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorwiegend größer als  $C_{12}$ ]
- EL ελαίουχος κηρος (πετρέλαιου), χαμηλής θερμοκρασίας τήξεως Ψευδοκηρος  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από κλάσμα πετρελαίου με υποτρεφίνωση με οξυαιθίνη ή υδρογόνο, κυρίως από κορεσμένους υδρογονανθράκες ευθείας και διακλαδισμένης αλυσίδας με αριθμό ατόμων άνθρακα περισσότερο από  $C_{12}$ ]
- EN Slack wax (petroleum), low-melting Slack wax  
[A complex combination of hydrocarbons obtained from a petroleum fraction by solvent deparaffination. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ ]
- FR gatsch a bas point de fusion (petrole) Gatsch  
[Combinaison complexe d'hydrocarbures obtenue a partir d'une fraction petroliere par deparaffinage au solvant. Elle est composee principalement d'hydrocarbures satures a chaine droite ou ramifiee dont le nombre de carbonnes est en majorite superieur a  $C_{12}$ ]
- IT cera molle (petrolio), basso punto di fusione Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta da una frazione di petrolio per deparaffinazione con solvente. È costituita prevalentemente da idrocarburi saturati a catena lineare e ramificata con numero di atomi di carbonio prevalentemente maggiore di  $C_{12}$ ]
- NL vlierijke paraffine (aardolie), smeltend bij lage temperaturen Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een aardoliefractie door solventeparaffinering. De fractie bestaat voornamelijk uit verzadigde vertakte en niet vertakte koolwaterstoffen, overwegend groter dan  $C_{12}$ ]
- PT parafinas brutas (petroleo), de ponto de fusão baixo Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida de uma fracção petrolífera por desparafinação com solvente. É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com número de átomos de carbono predominantemente superiores a  $C_{12}$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


C 15 190 92062-11 X

EEC No 295/257

No 649 249 00 2

NOTES

NOTES

- ES cera de parafina y petroleo (petroleo), temperatura de fusión baja, tratada con hidrogeno. Gatsch de parafina  
Combinación compleja de hidrocarburos obtenida por tratamiento con hidrogeno de cera de parafina y petroleo de temperatura de fusión baja en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos saturados de cadena lineal y ramificada con un número de carbonos en su mayor parte superior a C<sub>12</sub>].
- DA slack wax (råolie), lavtsmeltende, hydrogenbehandlet. Paraffin  
En sammensat blanding af carbonhydrier oprettet ved behandling af lavtsmeltende råolie slack wax med hydrogen i tilstedeværelse af katalysator. Den består overvejende af mættede ligeledes og forgrenede carbonhydrider med stigende størrelse end C<sub>12</sub>].
- DE Paraffinkuchen (Erdöl), niedrig schmelzend, mit wasserstoff behandelt. Paraffingatsch  
Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln von niedrig schmelzendem Paraffinkuchen mit wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader, verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als C<sub>12</sub>].
- EL ελαίουχος κηρος (πετρελαιο), χαμηλής θερμοκρασίας τήξεως, υδροκατεργασμένος. Ψευδοκηρος  
Πολυπλοκός συνδυασμός υδρογονανθράκων που αποβάλλεται με την κατεργασία ελαίουχου κηρος με υδρογόνο χαμηλής θερμοκρασίας με υδρογόνο παρουσία καταλύτη. Σε σύσταση κυρίως από κορεσμένους ευθείας και διακλασμένους αλυσίδες υδρογονανθράκες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από C<sub>12</sub>].
- EN Slack wax (petroleum), low-melting, hydrotreated. Slack wax  
A complex combination of hydrocarbons obtained by treatment of low-melting petroleum slack wax with hydrogen in the presence of a catalyst. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon number predominantly greater than C<sub>12</sub>].
- FR gatsch a bas point de fusion (petrole), hydrotraite. Gatsch  
(Combinaison complexe d'hydrocarbures obtenue par traitement a l'hydrogene en presence d'un catalyseur d'un gatsch petrole a bas point de fusion. Se compose principalement d'hydrocarbures satures a chaine droite ou ramifiee dont le nombre de carbones est en majorite superieur a C<sub>12</sub>].
- IT cera molle (petrolio), basso punto di fusione, idrotrattata. Paraffina molle  
(Combinazione complessa di idrocarburi per trattamento di cera molle di petrolio a basso punto di fusione con idrogeno in presenza di un catalizzatore. E costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente maggiore di C<sub>12</sub>].
- NL olierijke paraffine (aardolie), smeltend bij lage temperatuur, met waterstof behandeld. Ruwe paraffinewas  
(Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van bij lage temperatuur smeltende olierijke paraffine uit aardolie met waterstof en de aanwezigheid van een katalysator. Bestaat voornamelijk uit verzadigde vertakte en niet-vertakte koolwaterstoffen overwegend groter dan C<sub>12</sub>].
- PT parafinas brutas (petróleo), de ponto de fusão baixo, tratadas com hidrogénio. Cera bruta  
(Uma combinação complexa de hidrocarbonetos obtida por tratamento de parafinas brutas de ponto de fusão baixo com hidrogeno na presença de uma catalisator. É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com numeros de atomos de carbono predominantemente superiores a C<sub>12</sub>].

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97863-04 2

FEC No 308 155 9

No 649 250 00 8

NOTA H

NOTA N

- ES cera de parafina y petroleo (petroleo), temperatura de fusion baja, tratada con carbono Gachas de parafina  
[Combinacion compleja de hidrocarburos obtenida por el tratamiento de cera de parafina y petroleo de bajo punto de fusion con carbon activado para la separacion de constituyentes polares en trazas e impurezas Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada y lineal con un numero de carbonos en su mayor parte superior a C<sub>12</sub>]
- DA slack wax (råolie), lavsmeltende, carbonbehandlet Råparaffin  
[En sammensat blanding af carbonhydrider opnaet ved behandlingen af lavsmeltende slack wax med aktivt kul for at fjerne polære sporbestanddele og urenheder Den består overvejende af mættede ligekædede og forgrenede carbonhydrider, overvejende større end C<sub>12</sub>]
- DE Paraffinkuchen (Erdöl), niedrig schmelzend, mit Kohlenstoff behandelt Paraffingatsch  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von niedrig schmelzendem Paraffinkuchen mit Aktivkohle erhält um Spuren polarer Bestandteile und Verunreinigungen zu entfernen Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als C<sub>12</sub>]
- EL ελαιούχος κηρός (πετρέλαιου), χαμηλής θερμοκρασίας τήξης, κατεργασμένος με άνθρακα Ψευδοκηρός  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με την κατεργασία πετρελαιοκίτου ελαιούχου κηρού χαμηλής θερμοκρασίας τήξης με άνθρακα για να απομακρυνθούν πολλά ιχνοσυστατικά και προσμίξεις Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες, εθίνες και οπικλιδισμένης αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από C<sub>12</sub>]
- EN Slack wax (petroleum), low-melting, carbon treated Slack wax  
[A complex combination of hydrocarbons obtained by the treatment of low melting slack wax with activated carbon for the removal of trace polar constituents and impurities It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C<sub>12</sub>]
- FR gatsch (petrole), a bas point de fusion, traite au charbon Gatsch  
[Combinaison complexe d'hydrocarbures obtenue par traitement de gatsch a bas point de fusion avec du charbon actif afin d'éliminer les constituants polaires en traces et les impuretés Se compose principalement d'hydrocarbures saturés a chaîne droite ou ramifiée dont le nombre de carbones est en majorité supérieur a C<sub>12</sub>]
- IT cera molle (petrolio) a basso punto di fusione trattata con carbone Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di cera molle con carbone attivo per eliminare costituenti polari in tracce ed impurezze È costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente superiore a C<sub>12</sub>]
- NL olierijke paraffinewas (råolie), laagsmeltend, behandeld met kool Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van laag smeltende olierijke paraffinewas met geactiveerde kool om sporen polaire bestanddelen en onzuiverheden te verwijderen Bestaat voornamelijk uit verzadigde vertakte en niet vertakte koolwaterstoffen overwegend groter dan C<sub>12</sub>]
- PT parafinas brutas (petroleo), de ponto de fusão baixo, tratadas com carvão ativado Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de parafinas brutas de ponto de fusão baixo com carvão ativado para remoção de vestígios de constituintes polares e impurezas É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com numeros de atomos de carbono predominantemente superiores a C<sub>12</sub>]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97863-05-3

FFC No 308-156-3

No 649-251-00-3

NOTA H

NOTA N

- ES cera de parafina y petrolen (petróleo), temperatura de fusion baja, tratada con arcilla Gachas de parafina  
[Combinación compleja de hidrocarburos obtenidos por el tratamiento de cera de parafina y petróleo de bajo punto de fusion con bentonita para la separacion de constituyentes polares en trazas e impurezas Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada y lineal con un numero de carbonos en su mayor parte superior a  $C_{12}$ ]
- DA slack wax (råolie), lavtismeltende, lerbebehandlet Råparaffin  
[En sammensat blanding af carbonhydrier opnaet ved behandlingen af lavtismeltende raolie-slack wax med bentonit for at fjerne polære sporbestanddele og urenheder Den består overvejende af mættede ligekædede og forgrenede carbonhydrier, overvejende større end  $C_{12}$ ]
- DE Paraffinkuchen (Erdöl), niedrig schmelzend, mit Ton behandelt Paraffingatsch  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von niedrig schmelzendem Paraffinkuchen mit Bentonit erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ ]
- EL ελαιούχος κηρος (πετρελαιο), χαμηλής θερμοκρασίας τήξης, κατεργασμένος με άργιλλο Ψευδοκηρος  
[Πολυπλέκτος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κατεργασία πετρελαικού ελαιούχου κηρου χαμηλής θερμοκρασίας τήξης με μπεντονίτη για να απομακρυνθούν πολικά ιχνοσυστατικά και προσμίξεις Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες ευθείας και διακλαδισμένης αλυσού με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{12}$ ]
- EN Slack wax (petroleum), low-melting, clay-treated Slack wax  
[A complex combination of hydrocarbons obtained by the treatment of low-melting petroleum slack wax with bentonite for removal of trace polar constituents and impurities It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ ]
- FR gatsch (petrole), a bas point de fusion, traite a la terre Gatsch  
[Combinaison complexe d'hydrocarbures obtenue par traitement de gatsch petrolier a bas point de fusion avec de la bentonite afin d'éliminer les constituants polaires en traces et les impuretes Se compose principalement d'hydrocarbures saturés a chaîne droite ou ramifiée dont le nombre de carbones est en majorite supérieur a  $C_{12}$ ]
- IT cera molle (petrolio), a basso punto di fusione, trattata con argilla Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di cera molle di petrolio con bentonite per eliminare costituenti polari in tracce ed impurezze È costituita prevalentemente da idrocarburi saturi a catena lineare e ramificata con numero di atomi di carbonio prevalentemente superiore a  $C_{12}$ ]
- NL olierijke paraffinewas (aardolie), laagsmeltend, behandeld met klei Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van laag smeltende olierijke paraffinewas uit aardolie met bentoniet om sporen polaire bestanddelen en onzuiverheden te verwijderen Bestaat voornamelijk uit verzadigde vertakte en niet vertakte koolwaterstoffen, overwegend groter dan  $C_{12}$ ]
- PT parafinas brutas (petroleo), de ponto de fusão baixo, tratadas com argila Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de parafinas brutas de ponto de fusão baixo com bentonite para remoção de vestígios de constituintes polares e impurezas É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com numeros de atomos de carbono predominantemente superiores a  $C_{12}$ ]

*Classificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="368 465 389 488" data-label="Text">T</div> <div data-bbox="330 512 426 604" data-label="Image"> </div> <div data-bbox="943 515 1023 542" data-label="Text">R : 45</div> <div data-bbox="943 566 1054 593" data-label="Text">S : 53-45</div>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97863-06-4

EEC No 308 158-5

No 649-252 00-9

NOTA H

NOTA N

- ES cera de parafina y petroleo (petroleo) bajo punto de fusion, tratada con acido silicico Gachas de parafina  
[Combinacion compleja de hidrocarburos obtenida por el tratamiento de ceras de parafina y petroleo a bajo punto de fusion con acido silicico para la separacion de constituyentes polares en trazas e impurezas Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada y lineal con un numero de carbonos en su mayor parte superior a C<sub>12</sub>]
- DA slack wax (råolie), lavtsmeltende, kiselsyrebehandlet Råparaffin  
[En sammensat blanding af carbonhydnder opnået ved behandlingen af lavtsmeltende raolie-slack wax med kiselsyre for at fjerne polære sporbestanddele og urenheder Den består overvejende af mættede ligekædede og forgrenede carbonhydnder, overvejende større end C<sub>12</sub>]
- DE Paraffinkuchen (Erdöl), niedrig schmelzend, mit Kieselsäure behandelt Paraffingatsch  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von niedrig schmelzendem Paraffinkuchen mit Kieselsäure erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader und verzweigter Kette mit Kohlenstoffzahlen vorherrschend größer als C<sub>12</sub>]
- EL ελαιούχος κηρός (πετρέλαιου), χαμηλής θερμοκρασίας τήξης, κατεργασμένος με πυριτικό οξύ Ψευδοκηρός  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με την κατεργασία ελαιούχου κηρού πετρελαιο χαμηλής θερμοκρασίας τήξης με πυριτικό οξύ για την απομάκρυνση ιχνών πολικών συστατικών και προσμίξεων Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με ευθεία και διακλαδισμένη αλυσίδα, οι οποίοι έχουν αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από C<sub>12</sub>]
- EN Slack wax (petroleum), low-melting, silicic acid-treated Slack wax  
[A complex combination of hydrocarbons obtained by the treatment of low-melting petroleum slack wax with silicic acid for the removal of trace polar constituents and impurities It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C<sub>12</sub>]
- FR gatsch (pétrole), a bas point de fusion, traité a l'acide silicique Gatsch  
[Combinaison complexe d'hydrocarbures obtenue par traitement de gatsch pétrolier a bas point de fusion avec de l'acide silicique afin d'éliminer les constituants polaires en traces et les impuretés Se compose principalement d'hydrocarbures saturés a chaîne droite ou ramifiée dont le nombre de carbones est en majorité supérieur a C<sub>12</sub>]
- IT cer molle (petrolio), a basso punto di fusione, trattata con acido silicico Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di cera molle di petrolio con acido silicico per eliminare costituenti polari in tracce ed impurezze È costituita prevalentemente da idrocarburi saturi a catena lineare e ramificati con numero di atomi di carbonio prevalentemente superiore a C<sub>12</sub>]
- NL olienijke paraffinewas (aardolie), laag-smeltend, behandeld met kiezelzuur Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van laag-smeltende olienijke paraffinewas uit aardolie met kiezelzuur om sporen polaire bestanddelen en onzuiverheden te verwijderen Bestaat voornamelijk uit verzadigde vertakte en niet vertakte koolwaterstoffen, overwegend groter dan C<sub>12</sub>]
- PT parafinas brutas (petróleo), de ponto de fusão baixo, tratadas com acido silicico, Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de parafinas brutas de ponto de fusão baixo com acido silicico para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos saturados de cadeia linear e ramificada com numero de atomos de carbono predominantemente superiores a C<sub>12</sub>]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat: 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


is No 10053499

EC No 309 123

No 649 253 00 4

NOTA II

NOTA N

- ES cera de parafina y petróleo (petróleo) tratada con carbon. Cera de parafina  
[Combinación compleja de hidrocarburos obtenida por tratamiento de cera de parafina y petróleo con carbon vegetal activado para separar constituyentes polares en trazas e impurezas]
- DA slack wax (råolie) carbonbehandlet. Råparaffin  
[En sammensat blanding af carbonhydroer, præsenteret i behandling af råolie slack wax med aktivt kul, for at fjerne spor af polære bestanddele og urenheder]
- DE Paraffinkuchen (Erdöl), mit Kohlenstoff behandelt. Paraffingarsen  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Paraffinkuchen mit Aktivkohle erhält um Spuren polarer Bestandteile und Verunreinigungen zu entfernen]
- EL ελαίουχο, κηρός (πετρελαίου) κατεργασμένο με άνθρακα. Ψευδοκηρός  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία ελαίουχο, κηρού πετρελαίου με ενεργό άνθρακα για να απομακρυνθούν ίχνη πολικών συστατικών και προσμίξεων]
- EN Slack wax (petroleum), carbon-treated. Slack wax  
[A complex combination of hydrocarbons obtained by treatment of petroleum slack wax with activated charcoal for the removal of trace polar constituents and impurities]
- FR gatsch (pétrole), traité au charbon. Gatsch  
[Combinaison complexe d'hydrocarbures obtenue par traitement de gatsch de pétrole avec du charbon actif afin d'éliminer les traces de constituants polaires et les impuretés]
- IT cera molle (petrolio), trattata con carbone. Paraffina molle  
[Combinazione complessa di idrocarburi ottenuta per trattamento di cera molle di petrolio con carbone attivo per eliminare costituenti polari in trace ed impurezze]
- NL olierijke paraffinewas (aardolie), behandeld met koolstof. Ruwe paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van olierijke paraffinewas uit aardolie met geactiveerde kool teneinde sporen van polaire bestanddelen en onzuiverheden te verwijderen]
- PT parafinas brutas (petróleo), tratadas com carvão activado. Cera bruta  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de parafinas brutas com carvão activado para remoção de vestígios de constituintes polares e impurezas]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificaçào*

Carc. C : 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


CIS No 8005 00 5

EEC No 252 373 2

No 649 254 00 X

NOTA H

NOTA N

- ES** vaselina / Vaseline  
[Combinación compleja de hidrocarburos obtenidos como un semisólido de la desparafinación del aceite residual parafínico. Compuesta fundamentalmente de hidrocarburos saturados líquidos y cristalinos con un número de carbonos en su mayor parte superior a  $C_{12}$ .]
- DA** vaselin / Vaseline  
[En sammensat blanding af carbonhydrater udvundet som et halvfast stof fra afvoksning af paraffinrestolie. Den består overvejende af mættede krystallinske og flydende carbonhydrater overvejende større end  $C_{12}$ .]
- DE** Petrolatum / Petrolatum  
[Komplexe Kombination von Kohlenwasserstoffen, die als Semiteststoff beim Entwachsen von paraffinhaltigem Rückstandsol erhalten wird. Besteht vorherrschend aus gesättigten kristallinen und flüssigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ .]
- EL** βαζελίνη / Βαζελίνη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σε ημιστερεά μορφή από την αποκρήωση παραφινικού υπολείμματος. Συνίσταται κυρίως από κορεσμένους κρυσταλλικούς και υγρούς υδρογονανθράκες με αριθμό ατόμων ανθράκα σημαντικά μεγαλύτερο από  $C_{12}$ .]
- EN** Petrolatum / Petrolatum  
[A complex combination of hydrocarbons obtained as a semi-solid from dewaxing paraffinic residual oil. It consists predominantly of saturated crystalline and liquid hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ .]
- FR** petrolatum / Petrolatum  
[Combinaison complexe d'hydrocarbures obtenue sous forme semi-solide lors du déparaffinage d'huile résiduelle paraffinique. Se compose principalement d'hydrocarbures saturés cristallins et liquides dont le nombre de carbones est en majorité supérieur à  $C_{12}$ .]
- IT** petrolato / Petrolato  
[Combinazione complessa di idrocarburi ottenuta in forma semisolida dalla deparaffinazione di olio residuo paraffinico. È costituita in prevalenza da idrocarburi liquidi e cristallini saturati con numero di atomi di carbonio prevalentemente superiore a  $C_{12}$ .]
- NL** petrolatum / Petrolatum  
[Een complexe verzameling van koolwaterstoffen, verkregen als een halfvaste stof bij het van was ontdoen van paraffinische residuolie. Het bestaat voornamelijk uit verzadigde kristalline en vloeibare koolwaterstoffen, overwegend groter dan  $C_{12}$ .]
- PT** petrolato / Petrolatos  
[Uma combinação complexa de hidrocarbonos obtida como um semi-sólido na desparafinação de óleo residual parafínico. É constituída predominantemente por hidrocarbonetos saturados cristalinos e líquidos com números de átomos de carbono predominantemente superiores a  $C_{12}$ .]

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Inzertung, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 64743-01-7

EEC No 265-206-7

No 649 255 00 5

NOTA H

NOTA N

- ES vaselina (petroleo), oxidada Vaselina  
[Combinación compleja de compuestos orgánicos, fundamentalmente ácidos carboxílicos de elevado peso molecular obtenida por la oxidación al aire de vaselina]
- DA vaselin (råolie), oxideret, Vaseline  
[En sammensat blanding af organiske forbindelser overvejende højmolekylære carboxylsyrer, opnået ved luftoxidation af vaselin]
- DE Petrolatum (Erdöl), oxidiertes, Petrolatum  
[Komplexe Kombination organischer Verbindungen vorwiegend Carbonsäuren mit hohem Molekulargewicht erhalten durch Luftoxidation von Petrolatum]
- EL βαζελίνη (πετρελαιο), οξειδωμένη Βαζελίνη  
[Πολύπλοκος συνδυασμός οργανικών ενώσεων κυρίως καρβοξυλικών οξέων μεγάλου μοριακού βάρους, που λαμβάνεται με την οξείδωση βαζελίνης με αέρα.]
- EN Petrolatum (petroleum), oxidized Petrolatum  
[A complex combination of organic compounds, predominantly high molecular weight carboxylic acids, obtained by the air oxidation of petrolatum]
- FR petrolatum oxyde (petrole) Pétrolatum  
[Combinaison complexe de composés organiques principalement des acides carboxyliques de poids moléculaire élevé obtenue par oxydation à l'air du petrolatum]
- IT petrolato (petrolio), ossidato, Petrolato  
[Combinazione complessa di composti organici prevalentemente acidi carbossilici ad alto peso molecolare ottenuta per ossidazione con aria del petrolato]
- NL petrolatum (aardolie), geoxideerd Petrolatum  
[Een complexe verzameling organische verbindingen voornamelijk carbonzuren met hoog molecuulgewicht verkregen door de oxidatie aan lucht van petrolatum]
- PT petrolato (petroleo), oxidado Petrolatos  
[Uma combinação complexa de compostos orgânicos predominantemente ácidos carboxílicos de peso molecular elevado obtida pela oxidação de petrolato pelo ar]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione Indeling, Classificação*

Carc Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cis No 85029 74 4

EFC No 285 098 5

No 649 256 06 0

NOTA H

NOTA N

- ES **vaselina (petroleo) tratada con alumina** Vaselina  
[Combinación compleja de hidrocarburos obtenida cuando se trata la vaselina con  $Al_2O_3$  para separar componentes polares e impurezas. Compuesta en su mayor parte de hidrocarburos saturados líquidos y cristalinos con un número de carbonos en su mayor parte superior a  $C_{15}$ .]
- DA **vaselin (råolie), aluminiumoxidbehandlet** Vaseline  
[En sammensat blanding af carbonhydrier opnået nar vaselin er behandlet med  $Al_2O_3$  for at fjerne polære komponenter og urenheder. Den består overvejende af mættede, krystallinske og flydende carbonhydrier, overvejende større end  $C_{15}$ .]
- DE **Petrolatum (Erdöl), Aluminiumoxid-behandelt** Petrolatum  
[Komplexe Kombination von Kohlenwasserstoffen erhalten durch Behandeln von Petrolatum mit  $Al_2O_3$ , um polare Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus gesättigten, kristallinen und flüssigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{15}$ .]
- EL **βαζελίνη (πετρελαίου), κατεργασμένη με αλουμίνα** Βαζελίνη  
[Πόλυπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται όταν βαζελίνη υφίσταται κατεργασία με  $Al_2O_3$  για την αφαίρεση κρίσιμης ποσότητας στατικών και ζωνών τρεσμιζών. Συσταται κατά κύριο λόγο από κορεσμένους κρυσταλλικούς και υγρούς υδρογονανθράκες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{15}$ .]
- EN **Petrolatum (petroleum), alumina-treated** Petrolatum  
[A complex combination of hydrocarbons obtained when petrolatum is treated with  $Al_2O_3$  to remove polar components and impurities. It consists predominantly of saturated, crystalline and liquid hydrocarbons having carbon numbers predominantly greater than  $C_{15}$ .]
- FR **petrolatum (pétrole), traité à l'alumine** Petrolatum  
[Combinaison complexe d'hydrocarbures obtenue par traitement du petrolatum avec de l' $Al_2O_3$  afin d'éliminer les composés polaires et les impuretés. Se compose principalement d'hydrocarbures saturés, cristallins et liquides dont le nombre de carbones est en majorité supérieur à  $C_{15}$ .]
- IT **petrolato (petrolio), trattato con allumina** Petrolato  
[Una combinazione complessa di idrocarburi ottenuti quando il petrolato viene trattato con  $Al_2O_3$  per rimuovere i componenti polari e le impurezze. È costituita prevalentemente da idrocarburi saturati, cristallini e liquidi con numero di atomi di carbonio prevalentemente superiore a  $C_{15}$ .]
- NL **petrolatum (aardolie), met alumina behandeld** Petrolatum  
[Een complexe verzameling koolwaterstoffen verkregen wanneer petrolatum wordt behandeld met  $Al_2O_3$  om polaire componenten en onzuiverheden te verwijderen. Het bestaat voornamelijk uit verzadigde, kristallijne en vloeibare koolwaterstoffen, overwegend groter dan  $C_{15}$ .]
- PT **petrolato (petróleo), tratado com alumina** Petrolatos  
[Uma combinação complexa de hidrocarbonetos obtida quando petrolato é tratado com  $Al_2O_3$  para remover componentes polares e impurezas. É constituída predominantemente por hidrocarbonetos saturados, cristalinos, e hidrocarbonetos líquidos com números de átomos de carbono predominantemente superiores a  $C_{15}$ .]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92045 77 7

I.F.C. No 295 459 9

No 649-257 00 6

NOTA H

NOTA N

- ES vaselina (petroleo), tratada con hidrogeno Vaselina  
[Combinacion compleja de hidrocarburos obtenida como un semisolido de aceite residual parafinico desparafinado tratado con hidrogeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos saturados microcristalinos y liquidos con un numero de carbonos en su mayor parte superior a  $C_{20}$ ]
- DA vasilin (råolie), hydrogenbehandlet Vasilin  
[En sammensat blanding af carbonhydinder opnaet som et halvfast stof fra afvokset paraffinrestolie behandlet med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af mættede mikrokrySTALLINSKE og flydende carbonhydinder, overvejende større end  $C_{20}$ ]
- DE Petrolatum (Erdöl), mit Wasserstoff behandelt Petrolatum  
[Komplexe Kombination von Kohlenwasserstoffen die man als Semifeststoff aus entwachstem paraffinhaltigem Rückstandsol, behandelt mit Wasserstoff in Gegenwart eines Katalysators, erhält. Besteht vorherrschend aus gesättigten mikrokristallinen und flüssigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$ ]
- EL θαζελίνη (πετρελαίου), κατεργασμένη με υδρογόνο Βαζελίνη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σε ημιρευστή μορφή, από αποκηρωμένο παραφινικό υπολειμματικό έλαιο το οποίο έχει υποστεί κατεργασία με υδρογόνο παρουσία καταλύτη. Συνίσταται κυρίως από  $C_{20}$ ]
- EN Petrolatum (petroleum), hydrotreated Petrolatum  
[A complex combination of hydrocarbons obtained as a semi solid from dewaxed paraffinic residual oil treated with hydrogen in the presence of a catalyst. It consists predominantly of saturated microcrystalline and liquid hydrocarbons having carbon numbers predominantly greater than  $C_{20}$ ]
- FR petrolatum (pétrole), hydrotraité Pétrolatum  
[Combinaison complexe d'hydrocarbures obtenue sous forme d'un corps semi-solide a partir d'huile résiduelle paraffinique traitée a l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures saturés microcristallins et liquides dont le nombre de carbones est en moyenne supérieur a  $C_{20}$ ]
- IT petrolato (petrolio), idrotrattato Petrolato  
[Combinazione complessa di idrocarburi ottenuta sotto forma di semisolido da olio residuo paraffinico deparaffinato e trattato con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi saturi microcristallini e liquidi con numero di atomi di carbonio prevalentemente maggiore di  $C_{20}$ ]
- NL petrolatum (aardolie), met waterstof behandeld Petrolatum  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een halfvaste stof uit van was ontdane paraffinische residu-olie, die in aanwezigheid van een katalysator met waterstof behandeld is. Bestaat voornamelijk uit verzadigde microkristallijne en vloeibare koolwaterstoffen, overwegend groter dan  $C_{20}$ ]
- PT petrolato (petróleo), tratado com hidrogenio Petrolatos  
[Uma combinação complexa de hidrocarbonetos obtida como um semi sólido de um óleo residual parafínico desparafinado tratado com hidrogenio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos saturados microcristalinos e líquidos com numeros de átomos de carbono predominantemente superiores a  $C_{20}$ ]

*Classificação, Klasifizierung, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97862-97-0

EEC No 308-149-6

No 649 258-00 1

NOTA H

NOTA N

- ES vaselina (petróleo), tratada con carbono Vaselina  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de vaselina de petróleo con carbono activo para la separación de constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte superior a  $C_{20}$ ]
- DA vaselín (råolie) carbonbehandlet, Vaseline  
[En sammensat blanding af carbonhydinder opnaet ved behandlingen af råolievaselin med aktivt kul for at fjerne polære sporbe- standdele og urenheder. Den består overvejende af mættede carbonhydinder, overvejende større end  $C_{20}$ ]
- DE Petrolatum (Erdöl), mit Kohlenstoff behandelt Petrolatum  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Erdöl-Petrolatum mit Aktivkohle erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$ ]
- EL βαζελίνη (πετρέλαιου), κατεργασμένη με άνθρακα Βαζελίνη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κατεργασία βαζελίνης πετρελαίου με ενεργό άνθρακα, για να απομακρυνθούν πολικά ιχνοσυστατικά και προσμίξεις. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{20}$ ]
- EN Petrolatum (petroleum), carbon-treated Petrolatum  
[A complex combination of hydrocarbons obtained by the treatment of petroleum petrolatum with activated carbon for the removal of trace polar constituents and impurities. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly greater than  $C_{20}$ ]
- FR petrolatum (pétrole), traité au charbon Pétrolatum  
[Combinaison complexe d'hydrocarbures obtenue par traitement de petrolatum de pétrole avec du charbon actif afin d'éliminer les constituants polaires en traces et les impuretés. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones est en majorité supérieur à  $C_{20}$ ]
- IT petrolo (petrolio), trattato con carbone Petrolo  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di petrolo di petrolio con carbone attivo per eliminare costi- tuenti polari in tracce ed impurezze. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio preva- lentemente superiore a  $C_{20}$ ]
- NL petrolatum (aardolie), behandeld met kool Petroleum  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van aardolie petrolatum met geactiveerde kool om sporen polaire bestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit verzadigde koolwaterstoffen, over- wegend groter dan  $C_{20}$ ]
- PT petrolo (petróleo) tratado com carvão activado Petrolatos  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de petrolo com carvão activado para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente superiores a  $C_{20}$ ]

Classification Key: Indicating Limitations, Τεκτονιστική Classification Classification, Classificazione, Indicating Classification

Carc. Cat. 2, R 45

Etiquetage: Indicating Kennzeichnung, Ετικεταρισμός Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

	<p>R : 45</p> <p>S : 53-45</p>
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Limits of concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 97862-98-1

EEC No 308-150-1

No 649-259-00-7

NOTA H


NOTA N

- FS *vaselina (petróleo), tratada con ácido silícico*, Vaselina  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de vaselina de petróleo con ácido silícico para la separación de constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte superior a  $C_{20}$ .]
- DA *vaselin (råolie), kiselsyrebehandlede* Vaseline  
[En sammensat blanding af carbonhydnder opnaet ved behandlingen af råolievaselin med kiselsyre for at fjerne polære sporbestanddele og urenheder. Den består overvejende af mættede carbonhydnder, overvejende større end  $C_{20}$ .]
- DE *Petrolatum (Erdöl), mit Kieselsäure behandelt* Petrolatum  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Erdöl-Petrolatum mit Kieselsäure erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{20}$ .]
- EL *βαζελίνη (πετρελαίου), κατεργασμένη με πυριτικό οξύ* Βαζελίνη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κατεργασία βαζελίνης πετρελαίου με πυριτικό οξύ για να απομακρυνθούν πολικά ιχνοσυστατικά και προσμίξεις. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με αριθμό ατόμων ανθράκα σημαντικά μεγαλύτερο από  $C_{20}$ .]
- EN *Petrolatum (petroleum), silicic acid-treated*, Petrolatum  
[A complex combination of hydrocarbons obtained by the treatment of petroleum petrolatum with silicic acid for the removal of trace polar constituents and impurities. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly greater than  $C_{20}$ .]
- FR *petrolatum (pétrole), traité à l'acide silicique* Pétrrolatum  
[Combinaison complexe d'hydrocarbures obtenue par traitement de petrolatum de pétrole avec de l'acide silicique afin d'éliminer les consutnants polaires en traces et les impuretés. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones est en majorité supérieur à  $C_{20}$ .]
- IT *petrolato (petrolio), trattato con ácido silícico*, Petrolato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di petrolato di petrolio con carbone attivo per eliminare costituenti polari in tracce ed impurezze. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente superiore a  $C_{20}$ .]
- NL *petrolatum (aardolie), behandeld met kiezelzuur* Petrolatum  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van aardolie-petrolatum met geactiveerde kool om sporen polaire bestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend groter dan  $C_{20}$ .]
- PT *petrolato (petróleo), tratado com ácido silícico* Petrolatos  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de petrolato com ácido silícico para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente superiores a  $C_{20}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cus No 100684-33-1

EEC No 309-706-6

No 649-260-00-2

NOTA H

NOTA N

- ES vaselina (petróleo), tratada con arcilla, Vaselina  
[Combinación compleja de hidrocarburos obtenida por tratamiento de vaselina con tierra para blanquear para separar constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo superior a  $C_{15}$ ]
- DA vaselin (råolie), lerbehandlet; Vaselin  
[En sammensat blanding af carbonhydinder opnået ved behandling af vaselin med blegejord, for at fjerne spor af polære bestanddele og urenheder. Den består overvejende af carbonhydinder, overvejende større end  $C_{15}$ ]
- DE Petrolatum (Erdöl), mit Ton behandelt; Petrolatum  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Petrolatum mit Bleicherde erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich größer als  $C_{15}$ ]
- EL βαζελίνη (πετρελαίου), κατεργασμένη με άργιλλο· Βαζελίνη  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με την κατεργασία βαζελίνης με λευκαντική γή για να απομακρυνθούν ίχνη πολικών συστατικών και προσμίξεων. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή μεγαλύτερη από  $C_{15}$ ]
- EN Petrolatum (petroleum), clay-treated; Petrolatum  
[A complex combination of hydrocarbons obtained by treatment of petrolatum with bleaching earth for the removal of traces of polar constituents and impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of greater than  $C_{15}$ ]
- FR petrolatum (pétrole), traité à la terre; Pétrolatum  
[Combinaison complexe d'hydrocarbures obtenue par traitement du pétrolatum avec de la terre décolorante afin d'éliminer les traces de constituants polaires et les impuretés. Se compose principalement d'hydrocarbures en majorité supérieurs à  $C_{15}$ ]
- IT petrolo (petrolio), trattato con argilla, Petrolo  
[Combinazione complessa di idrocarburi ottenuta per trattamento di petrolo con terra sbiancante per eliminare costituenti polari in tracce ed impurezze. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo superiore a  $C_{15}$ ]
- NL petrolatum (aardolie), behandeld met klei; Petrolatum  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van petrolatum met bleekarde teneinde sporen van polaire bestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit koolwaterstoffen, overwegend groter dan  $C_{15}$ ]
- PT petrolo (petróleo), tratado com argila; Petrolatos  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de petrolo com argila descorante para remoção de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{15}$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 8006-61-9

EEC No 232-349-I

No 649-261-00-8

NOTA H

NOTA P

- ES gasolina, natural ; Nafta de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos separada a partir de gas natural por procesos como refrigeración o absorción. Compuesta principalmente de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{12}$  y con un intervalo de ebullición aproximado de menos 20 °C a 120 °C.]
- DA : kondensat, naturgas- ; Lavtkogende nafta  
[En sammensat blanding af carbonhydrier adskilt fra naturgas ved processer, såsom nedkøling eller absorption. Den består overvejende af mættede aliphatiske carbonhydrider, overvejende  $C_4$  til og med  $C_{12}$ , med koginterval omtrent fra minus 20 °C til 120 °C.]
- DE : Benzin, natürliches ; Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, von Naturgas durch Kühl- oder Absorptionsverfahren getrennt. Besteht vorherrschend aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{12}$  und siedet im Bereich von etwa minus 20 °C bis 120 °C.]
- EL δενζίνη, φυσική· Ελαφρά νάφθα  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που διαχωρίζεται από φυσικό αέριο με διεργασίες όπως ψύξη ή απορρόφηση. Συνίσταται κυρίως από κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{12}$  και με περιόχη βρασμού από μείον 20 °C έως και 120 °C περίπου.]
- EN Gasoline, natural ; Low boiling point naphtha  
[A complex combination of hydrocarbons separated from natural gas by processes such as refrigeration or absorption. It consists predominantly of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{12}$  and boiling in the range of approximately minus 20 °C to 120 °C (−4 °F to 248 °F).]
- FR essence naturelle ; Naphta à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures séparée du gaz naturel par des procédés tels que la réfrigération ou l'absorption. Se compose principalement d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 20 °C et 120 °C.]
- IT benzina naturale ; Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi separata dal gas naturale mediante processi quali la refrigerazione o l'assorbimento. È costituita prevalentemente da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{12}$  e con punto di ebollizione nell'intervallo da −20 °C a 120 °C ca.]
- NL benzine, gas- ; Nafta met laag kookpunt  
[Een complexe verzameling van koolwaterstoffen, afgescheiden van aardgas met processen als afkoeling en absorptie. Het bestaat voornamelijk uit verzadigde alifatische koolwaterstoffen, overwegend in de reeks van  $C_4$  tot en met  $C_{12}$ , met een kooktraject van ongeveer −20 °C tot 120 °C.]
- PT gasolina, natural ; Nafta de baixo ponto de ebulição  
[Uma combinação de hidrocarbonetos separada do gás natural por processos como a refrigeração ou a absorção. É constituída predominantemente por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{12}$  e destila no intervalo de aproximadamente menos 20 °C a 120 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 8030-30-6

EEC No 232-443-2

No 649-262-00-3

NOTA H

NOTA P

- ES : nafta ; Nafta de baja temperatura de inflamación  
[Productos del petróleo refinados, parcialmente refinados o sin refinar producidos por destilación del gas natural. Compuestos por hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$  y con un intervalo de ebullición aproximado de 100 °C a 200 °C.]
- DA : naphtha ; Lavkogende nafta  
[Raffinerede, delvist raffinerede, eller uraffinerede råolieprodukter fremstillet ved destillation af naturgas. De består af carbonhydrider overvejende  $C_1$  til og med  $C_6$ , med koginterval omrent fra 100 °C til 200 °C.]
- DE : Naphtha , Naphtha, niedrig siedend  
[Aufbereitete, teilweise aufbereitete oder nicht aufbereitete Erdölprodukte hergestellt durch Destillation von Naturgas. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$  und siedet im Bereich von etwa 100 °C bis 200 °C.]
- EL : ναφθα· Ελαφρά νάφθα  
[διυλισμένα, μερικώς διυλισμένα, ή μη διυλισμένα προϊόντα πετρελαίου, που παράγονται με απόσταξη φυσικού αερίου. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως  $C_1$  και  $C_6$  και βράζει στην περιοχή από 100 °C έως 200 °C περίπου.]
- EN : Naphtha ; Low boiling point naphtha  
[Refined, partly refined, or unrefined petroleum products by the distillation of natural gas. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$  and boiling in the range of approximately 100 °C to 200 °C (212 °F to 392 °F).]
- FR : naphta . Naphta à point d'ébullition bas  
[Produits pétroliers raffinés, partiellement raffinés ou non raffinés obtenus par distillation du gaz naturel. Se composent principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$  et dont le point d'ébullition est compris approximativement entre 100 °C et 200 °C.]
- IT : nafta , Nafta con basso punto di ebollizione  
[Prodotti del petrolio, parzialmente raffinati o non raffinati, ottenuti della distillazione del gas naturale. Sono costituiti da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$  e punto di ebollizione nell'intervallo 100 °C - 200 °C ca.]
- NL : nafta ; Nafta met laag kookpunt  
[Geraffineerde, deels geraffineerde of ongeraffineerde aardolieprodukten, geproduceerd door destillatie van aardgas. Het bestaat uit koolwaterstoffen, overwegend in de reeks van  $C_1$  tot en met  $C_6$ , met een kooktraject van ongeveer 100 °C tot 200 °C.]
- PT : nafta , Nafta de baixo ponto de ebulição  
[Produtos petrolíferos refinados, parcialmente refinados ou não refinados produzidos pela destilação de gás natural. São constituído por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$  e desulam no intervalo de aproximadamente 100 °C a 200 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classificacão, Classification, Classificazione, Indeling, Classificaçào*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45- 65 S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

$C \geq 10\%$	T ; R 45- 65
$0,1\% \leq C < 10\%$	T ; R 45

NOTA 4

Cas No 8032-32-4

EEC No 232-453-7

No 649-263-00-9

NOTA H

NOTA P

- ES : ligroína ; Nafta de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por la destilación fraccionada del petróleo. Esta fracción tiene un intervalo de ebullición aproximado de 20 °C a 135 °C.]
- DA : ligroin ; Lavtkogende nafta  
[En sammensat blanding af carbonhydrider opnået ved fraktioneret destillation af råolie. Denne fraktion har kogesinterval omtrent fra 20 °C til 135 °C.]
- DE : Ligroin ; Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen aus der fraktionierten Destillation von Erdöl. Diese Fraktion siedet im Bereich von etwa 20 °C bis 135 °C.]
- EL : λιγροίνη ; Ελαφρά νάφθα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κλασματική απόσταξη πετρελαίου. Το κλάσμα αυτό βράζει στην περιοχή από 20° C έως 135° C περίπου.]
- EN : Ligroine ; Low boiling point naphtha  
[A complex combination of hydrocarbons obtained by the fractional distillation of petroleum. This fraction boils in a range of approximately 20 °C to 135 °C (58 °F to 275 °F).]
- FR : ligroïne ; Naphta à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation fractionnée du pétrole et dont le point d'ébullition se situe approximativement entre 20 °C et 135 °C.]
- IT : ligroína ; Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi, ottenuta per distillazione frazionata del petrolio. Questa frazione bolle nell'intervallo 20 °C - 135 °C ca.]
- NL : ligroïen ; Nafta met laag kookpunt  
[Een complexe verzameling van koolwaterstoffen, verkregen door de gefractioneerde destillatie van aardolie. Deze fractie heeft een kooktraject van ongeveer 20 °C tot 135 °C.]
- PT : ligroína ; Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação fraccionada do petróleo. Esta fracção destila no intervalo de aproximadamente 20 °C a 135 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn , R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T , R 45

NOTA 4

Cas No 64741-41-9

EEC No 265-041-0

No 649-264-00-4

NOTA H

NOTA P


- ES nafta (petróleo), fracción pesada de primera destilación Nafta de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la destilación de petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 65 °C a 230 °C]
- DA Naphtha (råolie), tung straight-run , Lavtkogende nafta  
[En sammensat blanding af carbonhydrier fremstillet ved destillation af råolie Den består af carbonhydrier, overvejende  $C_6$  til og med  $C_{12}$ , med kogesinterval omkring fra 65 °C til 230 °C]
- DE Naphtha (Erdöl), schwere Straight-run- , Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Rohöldestillation Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 65 °C bis 230 °C]
- EL ναφθα (πετρελαίου), βαριά απευθείας αποσταγμα· Ελαφρά ναφθα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη αργού πετρελαίου Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{12}$  και με περιοχή βρασμού από 65° C έως 230° C περίπου]
- EN Naphtha (petroleum), heavy straight-run , Low boiling point naphtha  
[A complex combination of hydrocarbons produced by distillation of crude oil It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$  and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F)]
- FR naphtha lourde (pétrole), distillation directe , Naphta a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_6$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 65 °C et 230 °C]
- IT nafta (petrolio), frazioni pesanti di distillazione primaria , Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta per distillazione del petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$  e con punto di ebollizione nell'intervallo 65 °C-230 °C ca]
- NL nafta (aardolie), zwaar direct uit fractionering verkregen , Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegende  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 65 °C tot 230 °C.]
- PT nafta (petróleo), pesada de destilação directa , Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida por destilação de petróleo bruto. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{12}$  e destila no intervalo de aproximadamente 65 °C a 230 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45- 65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	T ; R 45- 65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 64741-42-0

EEC No 265-042-6

No 649 265 00-X

NOTA H

NOTA P


- ES nafta (petroleo), serie completa de primera destilacion Nafta de baja temperatura de inflamacion  
[Combinacion compleja de hidrocarburos producida por la destilacion de petroleo crudo Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$  y con un intervalo de ebullicion aproximado de menos 20 °C a 220 °C]
- DA naphtha (råolie), full-range straight-run Lavtkogende nafta  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af råolie Den består af carbonhydrider, overvejende  $C$  til og med  $C_{11}$ , med kogesinterval omfrent fra minus 20 °C til 220 °C]
- DE Naphtha (Erdöl), gesamte Straight-run- Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Rohöldestillation Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa minus 20 °C bis 220 °C]
- EL ναφθα (πετρελαιο), πλήρους συστάσης απευθείας αποσταγμα· Ελαφρά ναφθα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παραγεται με απόσταξη αργού πετρελαιοιου Συνιστάται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{11}$  και με περιοχή θραίσμου από μείον 20° C έως 220° C περίπου]
- EN Naphtha (petroleum), full-range straight-run Low boiling point naphtha  
[A complex combination of hydrocarbons produced by distillation of crude oil It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$  and boiling in the range of approximately minus 20 °C to 220 °C (-4 °F to 428 °F)]
- FR naphtha a large intervalle d'ébullition (pétrole), distillation directe Naphtha a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation du petrole brut Se compose d'hydrocarbures dont le nombre de carbonos se situe principalement dans la gamme  $C_4$ - $C_{11}$  et dont le point d'ébullition est compris approximativement entre -20 °C et 220 °C]
- IT nafta (petrolio), distillazione primaria dell'intera gamma Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta per distillazione del petrolio grezzo È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$  e punto di ebollizione nell'intervallo -20 °C-220 °C ca]
- NL nafta (aardolie), totale fractie direct uit fractionering verkregen , Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van ruwe olie Bestaat uit koolwaterstoffen overwegend  $C$  tot en met  $C_{11}$ , met een kooktraject van ongeveer -20 °C tot 220 °C]
- PT nafta (petróleo), carga de destilação directa Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de petróleo bruto É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_4$  ate  $C_{11}$ , e destila no intervalo de aproximadamente menos 20 °C a 220 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

Xn ; R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65 S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 64741-46-4

EEC No 265-046-8

No 649-266-00 5

NOTA H

NOTA P

- ES nafta (petróleo), fracción ligera de primera destilación Nafta de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por destilación de petróleo crudo. Compuesta principalmente de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{10}$  y con un intervalo de ebullición aproximado de menos 20 °C a 180 °C]
- DA naphtha (råolie), let straight-run Lavtkogende nafta  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af råolie. Den består overvejende af aliphatiske carbonhydrider, overvejende  $C_4$  til og med  $C_{10}$ , med koginterval omtrent fra minus 20 °C til 180 °C]
- DE Naphtha (Erdöl), leichte Straight-run- Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Roholdestillation. Besteht vorherrschend aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{10}$  und siedet im Bereich von etwa minus 20 °C bis 180 °C.]
- EL ναφθα (πετρελαιο), ελαφρά απευθείας απόσταγμα· Ελαφρά ναφθα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται με απόσταξη αργού πετρελαίου. Συνιστάται κυρίως από αλειφατικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{10}$  και με περιοχή βρασμού από μείον 20 °C έως και 180 °C περίπου]
- EN Naphtha (petroleum), light straight-run Low boiling point naphtha  
[A complex combination of hydrocarbons produced by distillation of crude oil. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{10}$  and boiling in the range of approximately minus 20 °C to 180 °C (- 4 °F to 356 °F)]
- FR naphtha léger (pétrole), distillation directe, Naphtha a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole brut. Se compose principalement d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majeure dans la gamme  $C_4$ - $C_{10}$  et dont le point d'ébullition est compris approximativement entre - 20 °C et 180 °C]
- IT nafta (petrolio), frazioni leggere, distillazione primaria, Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta per distillazione del petrolio grezzo. È costituita prevalentemente da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{10}$  e punto di ebollizione nell'intervallo da - 20 °C a 180 °C ca.]
- NL nafta (aardolie), lichte fractie direct uit fractionering verkregen, Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van ruwe olie. Bestaat voornamelijk uit alifatische koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{10}$ , met een kooktraject van ongeveer - 20 °C tot 180 °C]
- PT nafta (petróleo), leve de destilação directa Nafta de baixo ponto de ebulição  
[Uma combinação de hidrocarbonetos produzida pela destilação de petróleo bruto. É constituída predominantemente por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{10}$ , e destila no intervalo de aproximadamente menos 20 °C a 180 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T; R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

Cas No 64742-89-8

EEC No 265-192-2

No 649-267-00-0

NOTA H


NOTA P

- ES : nafta disolvente (petróleo), fracción alifática ligera ; Nafta de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida de la destilación de petróleo crudo o de gasolina natural. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{10}$  y con un intervalo de ebullición aproximado de 35 °C a 160 °C.]
- DA : solventnaphtha (råolie), let aliphatisk ; Lavtkogende nafta  
[En sammensat blanding af carbonhydrider opnået ved destillation af råolie eller naturgaskondensat. Den består overvejende af mættede carbonhydrider, overvejende  $C_1$  til og med  $C_{10}$ , med kogesinterval omtrent fra 35 °C til 160 °C.]
- DE : Lösungsmittelnaphtha (Erdöl), leichte aliphatische ; Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus der Destillation von Rohöl oder natürlichem Benzin. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{10}$  und siedet im Bereich von etwa 35 °C bis 160 °C.]
- EL : διαλύτης νάφθα (πετρελαίου), ελαφρά αλειφατική· Ελαφρά νάφθα  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από την απόσταξη αργού πετρελαίου ή φυσικής βενζίνης. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  έως και  $C_{10}$  και δράζει στην περιοχή από 35 °C έως και 160 °C περίπου.]
- EN : Solvent naphtha (petroleum), light aliph. ; Low boiling point naphtha  
[A complex combination of hydrocarbons obtained from the distillation of crude oil or natural gasoline. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_{10}$  and boiling in the range of approximately 35 °C to 160 °C (95 °F to 320 °F).]
- FR : solvant naphtha aliphatique léger (pétrole) ; Naphta à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation de pétrole brut ou d'essence naturelle. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_{10}$  et dont le point d'ébullition est compris approximativement entre 35 °C et 160 °C.]
- IT : nafta solvente (petrolio), alifatica leggera ; Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione del petrolio grezzo o della benzina naturale. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{10}$  e punto di ebollizione nell'intervallo 35 °C - 160 °C ca.]
- NL : solvent-nafta (aardolie), lichte fractie alifatisch ; Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van ruwe olie of gasbenzine. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 35 °C tot 160 °C.]
- PT : nafta de petróleo (petróleo), alifática leve ; Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de petróleo bruto ou de gasolina natural. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_{10}$  e destila no intervalo de aproximadamente 35 °C a 160 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Eticbettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0.1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68410-05-9

EEC No 270 077 5

No 649 268 00 6

NOTA H

NOTA P


- ES destilados (petróleo), fracción ligera de primera destilación. Nafta de baja temperatura de inflamación.  
[Combinación compleja de hidrocarburos producida por la destilación del petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_2$  a  $C_6$ , y con un intervalo de ebullición aproximado de  $-88^\circ\text{C}$  a  $99^\circ\text{C}$ ]
- DA destillater (råolie), straight-run lette. Lavkogende nafta.  
[En sammensat blanding af carbonhydrier fremstillet ved destillationen af råolie. Den består af carbonhydrier overvejende  $C_2$  til og med  $C_6$ , med kogesinterval omfrent fra  $-88^\circ\text{C}$  til  $99^\circ\text{C}$ ]
- DE Destillate (Erdöl), straight-run leichte. Naphtha, niedrig siedend.  
[Komplexe Kombination von Kohlenwasserstoffen erhalten durch Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_2$  bis  $C_6$  und siedet im Bereich von etwa  $-88^\circ\text{C}$  bis  $99^\circ\text{C}$ ]
- EL αποσταγμάτα (πετρέλαιου), ελαφρά απευθείας αποσταξης. Ελαφρά ναφθα.  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται με αποσταξη αργού πετρελαιο. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_2$  έως και  $C_6$ , και βράζει στην περιοχή από  $-88^\circ\text{C}$  έως  $99^\circ\text{C}$  περίπου]
- EN Distillates (petroleum), straight-run light, Low boiling point naphtha.  
[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_2$  through  $C_6$  and boiling in the range of approximately  $-88^\circ\text{C}$  to  $99^\circ\text{C}$  ( $-127^\circ\text{F}$  to  $210^\circ\text{F}$ )]
- FR distillats légers de distillation directe (pétrole). Naphta a point d'ébullition bas.  
[Combinaison complexe d'hydrocarbures produite par distillation de pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_2$ - $C_6$ , et dont le point d'ébullition est approximativement compris entre  $-88^\circ\text{C}$  et  $99^\circ\text{C}$ ]
- IT distillati (petrolio), leggeri di prima distillazione, Nafta con basso punto di ebollizione.  
[Combinazione complessa di idrocarburi ottenuta per distillazione di petrolio grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente da  $C_2$ - $C_6$ , e punto di ebollizione nell'intervallo  $-88^\circ\text{C}$  -  $99^\circ\text{C}$  ca.]
- NL destillaten (aardolie), direct uit fractionering verkregen lichte fractie, Nafta met laag kookpunt.  
[Een complexe verzameling koolwaterstoffen verkregen uit de destillatie van ruwe olie. Bestaat uit koolwaterstoffen, overwegend  $C_2$  tot en met  $C_6$ , met een kooktraject van ongeveer  $-88^\circ\text{C}$  tot  $99^\circ\text{C}$ ]
- PT destilados (petróleo), leves de destilação directa. Nafta de baixo ponto de ebulição.  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de petróleo bruto. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_2$  até  $C_6$ , e destila no intervalo de aproximadamente  $-88^\circ\text{C}$  a  $99^\circ\text{C}$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45	Xn : R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45- 65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45- 65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68514-15-8

EEC No 271-025-4

No 649-269-00-1

NOTA H

NOTA P

- ES gasolina, recuperacion a vapor Nafta de baja temperatura de inflamacion  
[Combinacion compleja de hidrocarburos separados de los gases por sistemas de recuperacion a vapor por enfriamiento. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullicion aproximado de  $-20^{\circ}\text{C}$  a  $196^{\circ}\text{C}$ ]
- DA benzin, damp-genudvindings- Lavtkogende nafta  
[En sammensat blanding af carbonhydnder separeret fra gasserne fra damp genudvindingsystemet ved afkøling. Den består af carbonhydnder, overvejende  $C_4$  til og med  $C_{11}$  med kogesinterval omtrent fra  $-20^{\circ}\text{C}$  til  $196^{\circ}\text{C}$ ]
- DE Benzin, Dampf-Wiedergewinnung Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, durch Kühlen von den Gasen aus den Dampf-Wiedergewinnungssystemen abgetrennt. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa  $-20^{\circ}\text{C}$  bis  $196^{\circ}\text{C}$ ]
- FL βενζίνα, ανακτησης ατμών Ελαφρά ναφθα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που διαχωρίζεται με ψύξη από τα αέρια του συστήματος ανακτησης ατμών. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{11}$  και με περιοχή θραύσεως από  $-20^{\circ}\text{C}$  έως  $196^{\circ}\text{C}$  περίπου]
- EN Gasoline, vapor-recovery, Low boiling point naphtha  
[A complex combination of hydrocarbons separated from the gases from vapor recovery systems by cooling. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$  and boiling in the range of approximately  $-20^{\circ}\text{C}$  to  $196^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $384^{\circ}\text{F}$ )]
- FR essence, recuperation de vapeur Naphta a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures separée par refroidissement des gaz issus des systemes de recuperation de vapeur. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ ,  $C_{11}$  et dont le point d'ébullition est compris approximativement entre  $-20^{\circ}\text{C}$  et  $196^{\circ}\text{C}$ ]
- IT benzina, recupero vapon Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi separata dai gas del sistema di recupero dei vapori per raffreddamento. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$  -  $C_{11}$ , e punto di ebollizione nell'intervallo da  $-20^{\circ}\text{C}$  a  $196^{\circ}\text{C}$  ca.]
- NL gasoline, dampsterugwinning Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, afgescheiden van de gassen die worden verkregen uit dampsterwinningsystemen door afkøling. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer  $-20^{\circ}\text{C}$  tot  $196^{\circ}\text{C}$ ]
- PT gasolina, da recuperação de vapor Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos separada dos gases de sistemas de recuperação de vapor por arrefecimento. É constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_4$  ate  $C_{11}$ , e destila no intervalo de aproximadamente  $-20^{\circ}\text{C}$  a  $196^{\circ}\text{C}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65 S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 68606-11-1

EEC No 271-727-0

No 649-270-00-7

NOTA H

NOTA P

- ES gasolina, traccion de primera destilacion, planta de destilacion primaria Nafta de baja temperatura de inflamacion  
[Combinacion compleja de hidrocarburos producidos en la planta de destilacion primaria por la desulacion de petroleo crudo Con un intervalo de ebullicion aproximado de 36,1 °C a 193,3 °C]
- DA benzin, straight-run, topanlæg, Lavtkogende nafta  
[En sammensat blanding af carbonhydrier fremstillet fra topanlægget ved destillationen af raolie Den koger i intervallet omtrent fra 36,1 °C til 193,3 °C]
- DE Benzin, straight-run, Topanlage, Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt aus der Topanlage durch Destillation von Rohöl Siedet im Bereich von etwa 36,1 °C bis 193,3 °C]
- EL βενζίνη απευθείας απόσταγμα, μονάδας ατμοσφαιρικής απόσταξης Ελαφρά ναφθα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται από τη μονάδα ατμοσφαιρικής απόσταξης αργού πετρελαιο. Βράζει στην περιοχή από 36,1 °C έως 193,3 °C περίπου.]
- EN Gasoline, straight-run, topping-plant Low boiling point naphtha  
[A complex combination of hydrocarbons produced from the topping plant by the distillation of crude oil It boils in the range of approximately 36,1 °C to 193,3 °C (97 °F to 380 °F)]
- FR essence de distillation directe, unite de fractionnement Naphta a point d'ebullition bas  
[Combinaison complexe d'hydrocarbures produite par l'unité de fractionnement lors de la distillation du petrole brut Son point d'ebullition est compris approximativement entre 36,1 °C et 193,3 °C]
- IT benzina, prima distillazione, impianto di topping Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta dall'impianto di topping per distillazione del grezzo Ha intervallo di ebollizione 36,1 °C - 193,3 °C ca.]
- NL gasoline, direct door fractionering verkregen, attopinrichting, Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, gevormd door de attopinrichting bij de destillatie van ruwe olie Heeft een kooktraject van ongeveer 36,1 °C tot 193,3 °C.]
- PT gasolina, de destilação directa, da unidade de topping, Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida a partir da unidade de topping por destilação de petróleo bruto Destila no intervalo de aproximadamente 36,1 °C a 193,3 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn , R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T ; R 45-65
$0,1 \leq C < 10 \%$	T ; R 45

NOTA 4

Cas No 68783-12-0

EEC No 272-186-3

No 649-271-00-2

NOTA H


NOTA P

- ES : nafta (petroleo), sin desazufrar ; Nafta de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida de la destilación de corrientes de nafta de diversos procesos de refinería. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 0 °C a 230 °C.]
- DA : naphtha (råolie), ikke-sweetenet ; Løvtkogende nafta  
[En sammensat blanding af carbonhydrider fremskullet ved destillationen af naphthastømme fra forskellige raffinadenprocesser. Den består af carbonhydrider, overvejende fra  $C_4$  til og med  $C_{12}$ , med kogesinterval omtrent fra 0 °C til 230 °C.]
- DE : Naphtha (Erdöl), ungesüßt ; Naphtha niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen hergestellt durch Destillation von Naphthaläufen aus verschiedenen Raffinene-verfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{12}$  und siedet im Bereich von etwa 0 °C bis 230 °C.]
- EL : ναφθα (πετρελαίου), μη γλυκασμένη· Ελαφρά νάφθα  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται από την απόσταξη ρευμάτων νάφθας από διάφορες παραγωγικές διαδικασίες διύλισης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{12}$  και με περιοχή βρασμού από 0 °C έως 230 °C περίπου.]
- EN : Naphtha (petroleum), unsweetened ; Low boiling point naphtha  
[A complex combination of hydrocarbons produced from the distillation of naphtha streams from various refinery processes. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{12}$  and boiling in the range of approximately 0 °C to 230 °C (25 °F to 446 °F).]
- FR : naphtha non adouci (pétrole) ; Naphtha à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures produite par distillation de fractions de naphtha résultant de divers procédés de raffinerie. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 0 °C et 230 °C.]
- IT : nafta (petrolio), non addolcita ; Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di correnti di nafta provenienti da vari processi di raffinazione. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{12}$  e punto di ebollizione nell'intervallo 0 °C - 230 °C ca.]
- NL : natta (aardolie), niet stankvrij gemaakt ; Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van naftastromen uit verscheidene raffinageprocessen. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 0 °C tot 230 °C.]
- PT : natta (petroleo), não tratada (unsweetened) ; Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida da destilação de fracções de nafta de diversos processos de uma refina-ria. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  ate  $C_{12}$  e destila no intervalo de aproximadamente 0 °C a 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rutulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T ; R 45-65
$0,1 \% \leq C < 10 \%$	T ; R 45

NOTA 4

Cas No 68921 08-4

EEC No 272 931 2

No 619 272-00-8

NOTA H

NOTA P

- ES destilados (petróleo), fracciones de cabeza del estabilizador para el fraccionamiento de gasolina ligera de primera de primera destilación, Nafta de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por el fraccionamiento de gasolina ligera de primera destilación. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_3$  a  $C_6$ ]
- DA destillater (råolie), fraktionering af let straight-run benzin stabilizertopfraktioner Lavtkogende nafta  
[En sammensat blanding af carbonhydrier opnaet ved fraktioneringen af let straight-run benzin. Den består af næstede aliphatiske carbonhydrier, overvejende fra  $C_3$  til og med  $C_6$ ]
- DE Gase (Erdöl), leichte straight-run Benzin Fraktionierung Stabilisator Kopfbestandteile Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung von leichtem straight-run Benzin. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_3$  bis  $C_6$ ]
- EL αποσταγμάτα (πετρελαίου), προϊόντα κορυφής κλασμάτωσης σταθεροποιητή ελαφράς απευθείας δενζίνης. Ελαφρά ναφθα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την κλασμάτωση ελαφράς απευθείας δενζίνης. Συνίσταται κυρίως από κορεσμένους αλειφατικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_3$  έως και  $C_6$ ]
- EN Distillates (petroleum), light straight run gasoline fractionation stabilizer overheads Low boiling point naphtha  
[A complex combination of hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_6$ ]
- FR distillats (pétrole), produits de tête du stabilisateur, fractionnement d'essence légère de distillation directe Naphtha à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement d'essence légère de distillation directe. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe principalement dans la gamme  $C_3$  -  $C_6$ ]
- IT distillati (petrolio), frazioni di testa dallo stabilizzatore del frazionamento benzina leggera di prima distillazione Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta con il frazionamento di benzina leggera di prima distillazione. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_3$  -  $C_6$ ]
- NL destillaten (aardolie), lichte direct door fractionering verkregen gasoline fractioneringsstabilisatoropprodukten Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de fractionering van direct door fractionering verkregen lichte gasoline. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend  $C_3$  tot en met  $C_6$ ]
- PT destilados (petróleo), de cabeça do estabilizador do fraccionamento de gasolina leve de destilação directa Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida pelo fraccionamento de gasolina leve de destilação directa. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de  $C_3$  até  $C_6$ ]



Classification, Klassifizierung, Ενδιαγωγή, Classification, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2, R 45	Xn. R 65
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Etiquette, Etiketten, Kennzeichnung, Ενδιαγωγή, Labelling, Etikettag, Etichettatura, Kenmerken, Rotulagem



Ενδειξη συγκέντρωσης, Konzentration, Ενδειξη συγκέντρωσης, Ενδειξη συγκέντρωσης, concentration levels, Concentration levels, Concentration levels, Concentration levels, Concentration levels

$C \geq 10 \%$	T, R 45-65
$0.1 \% \leq C < 10 \%$	T, R 45

NOTA 4

Cas No 101631-20-3

EEC No 309-945-6

No 649-273-00-3

NOTA H

NOTA P

- ES : nafta (petróleo), fracción pesada de primera destilación, con aromáticos ; Nafta de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por un proceso de destilación de petróleo crudo. Compuesta en su mayor parte de hidrocarburos con un número de carbonos dentro del intervalo de  $C_8$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 130 °C a 210 °C.]
- DA : naphtha (råolie), tung straight-run, aromatholdig , Lavtkogende nafta  
[En sammensat blanding af carbonhydrider opnået ved en destillationsproces af råolie. Den består overvejende af carbonhydrider, overvejende  $C_8$  til og med  $C_{12}$ , med koginterval omtrent fra 130 °C til 210 °C]
- DE : Naphtha (Erdöl), schwere Straight-run, Aromaten-enthaltend ; Naphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus einem Destillationsverfahren von rohem Erdöl erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_8$  bis  $C_{12}$  und siedet im Bereich von etwa 130 °C bis 210 °C]
- EL : ναφθα (πετρελαίου), βαριά απευθείας απόσταγμα, που περιέχει αρωματικά· Ελαφρά νάφθα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από απόσταξη αργού πετρελαίου. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_8$  έως και  $C_{12}$  και με περιοχή βρασμού από 130° C έως 210° C περίπου.]
- EN : Naphtha (petroleum), heavy straight run, arom.-contg. ; Low boiling point naphtha  
[A complex combination of hydrocarbons obtained from a distillation process of crude petroleum. It consists predominantly of hydrocarbons having carbon numbers in the range of  $C_8$  through  $C_{12}$  and boiling in the range of approximately 130 °C to 210 °C (266 °F to 410 °F).]
- FR : naphta lourde de distillation directe (pétrole), contenant des aromatiques ; Naphta à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation de pétrole brut. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ - $C_{12}$ , et dont le point d'ébullition est compris approximativement entre 130 °C et 210 °C.]
- IT : nafta (petrolio), pesante di prima distillazione, contenente aromatici ; Nafta con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta da un processo di distillazione di petrolio grezzo. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{12}$  e punto di ebollizione nell'intervallo 130 °C-210 °C ca.]
- NL : nafta (aardolie), zware direct door destillatie verkregen, aromaathoudend ; Nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een destillatieproces van ruwe aardolie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 130 °C tot 210 °C.]
- PT : nafta (petróleo) pesada de destilação directa, contendo aromáticos ; Nafta de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de destilação de petróleo bruto. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono na gama de  $C_8$  até  $C_{12}$  e destila no intervalo de aproximadamente 130 °C a 210 °C.]

Classification Classificazione Klassifizierung Ταξινόμηση Classification Classificação Classificação Classificação

Carb. Cat. 2 R 45	Xn 2 65
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Frasetado Etikettering Kennzeichnung Exempelnamn Labelling Etiquetage Etichettatura Kenmerken Rotulagem

<p>I</p> 	<p>R 45-65 S 53-45</p>
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Limites de concentración Konzentrationsgrenzen, Konzentrationsgrenzuerte Ορια συγκεντρώσεως Concentration limits.  
Limite de concentration, Limiti di concentrazione Concentratiegrenzen Limites de concentração

C ≥ 10 %	T, R 45-65
0.1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 64741-64-6

EEC No 265-066-7

No 649-274-00-9

NOTA H

NOTA P

- ES nafta (petróleo), alquilato de la serie completa ; Nafta modificada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por destilación de los productos de reacción del isobutano con hidrocarburos monoolefinicos con un número de carbonos normalmente dentro del intervalo de  $C_3$  a  $C_7$ . Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada con un número de carbonos en su mayor parte dentro del intervalo de  $C_3$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 90 °C a 220 °C]
- DA naphtha (råolie), full-range alkylat ; Lavkogende modificeret nafta  
[En sammensat blanding af carbonhydrier fremstillet ved destillation af produkterne fra reaktionen mellem isobutan og monoolefiniske carbonhydrier, sædvanligvis  $C_3$  til og med  $C_7$ . Den består af overvejende forgrenede, mættede carbonhydrier, overvejende  $C_3$  til og med  $C_{12}$ , med koginterval omtrent fra 90°C til 220°C.]
- DE Naphtha (Erdöl), gesamte Alkylat- ; Naphtha, niedrig siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation der Reaktionsprodukte von Isobutan mit monoolefinischen Kohlenwasserstoffen mit Kohlenstoffzahlen gewöhnlich zwischen  $C_3$  bis  $C_7$ . Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit verzweigter Kette mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_3$  bis  $C_{12}$  und siedet im Bereich von etwa 90°C bis 220 °C.]
- EL νάφθα (πετρελαιο), προϊόν αλκυλίωσης πλήρους σύστασης· Ελαφρά επεξεργασμένη νάφθα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με απόσταξη των προϊόντων αντίδρασης ισοβουτανίου με μονοαλειφικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα που κυμαίνεται συνήθως από  $C_3$  έως  $C_7$ . Συνίσταται κυρίως από κορεσμένους διακλαδισμένους αλυσσους υδρογονανθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_3$  έως και  $C_{12}$  και με περιοχή βρασμού από 90° C έως 200° C περίπου.]
- EN Naphtha (petroleum), full-range alkylate ; Low boiling point modified naphtha  
[A complex combination of hydrocarbons produced by distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from  $C_3$  through  $C_7$ . It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_{12}$  and boiling in the range of approximately 90 °C to 220 °C (194 °F to 428 °F)]
- FR naphtha à large intervalle d'ébullition (pétrole), alkylation ; Naphta modifié à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures produite par distillation des produits de réaction de l'isobutane avec des hydrocarbures monooléfiniques généralement en  $C_3$  à  $C_7$ . Se compose d'hydrocarbures saturés, en majorité à chaîne ramifiée, dont le nombre de carbones se situe principalement dans la gamme  $C_3$ - $C_{12}$ , et dont le point d'ébullition est compris approximativement entre 90°C et 220°C.]
- IT nafta (petrolio), frazioni di alchilazione dell'intera gamma ; Nafta modificata con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione dei prodotti di reazione di isobutano con idrocarburi monoolefinici, a numero di atomi di carbonio normalmente nell'intervallo  $C_3$ - $C_7$ . È costituita prevalentemente da idrocarburi saturi a catena ramificata con numero di atomi di carbonio prevalentemente nell'intervallo  $C_3$ - $C_{12}$  e punto di ebollizione nell'intervallo 90°C - 220°C ca.]
- NL nafta (aardolie), totale fractie gealkyleerd ; Gemodificeerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de reactieproducten van isobutaan met mono-olefinische koolwaterstoffen, overwegend  $C_3$  tot en met  $C_7$ . Bestaat voornamelijk uit verzadigde koolwaterstoffen met vertakte ketens, overwegend  $C_3$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 90 °C tot 220 °C.]
- PT nafta (petróleo), de alquilação ; Nafta modificada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos da reacção de isobutano com hidrocarbonetos monoolefinicos com números de átomos de carbono geralmente na gama de  $C_3$  até  $C_7$ . É constituída predominantemente por hidrocarbonetos saturados de cadeia ramificada com números de átomos de carbono predominantemente na gama de  $C_3$  a  $C_{12}$ , e destila no intervalo de aproximadamente 90 °C a 220 °C.]

*Classification, Klassifizierung, Linstantzering, Ταξινόμηση, Classificatiem, Classificatiem, Classificaziom, Inbelling, Classificaziom*

Cat. Cat. 2: R 45 Xn: R 65

*Etiquetado, Etikettierung, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçom*

$C \geq 10 \%$	T; R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

Cas No 64741 65 7

EEC No 265-067-2

No 649 275-00-4

NOTA H

NOTA P

- ES nafta (petroleo), alquilato pesado Nafta modificada de baja temperatura de inflamacion  
[Combinacion compleja de hidrocarburos producida por destilacion de los productos de reaccion del isobutano con hidrocarburos monoolefinicos con un numero de carbonos normalmente dentro del intervalo de  $C_7$  a  $C_{12}$ . Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada con un numero de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{12}$  y con un intervalo de ebullicion aproximado de 150 °C a 220 °C]
- DA naphtha (råolie), tung alkylat Lavtkogende modificeret nafta  
[En sammensat blanding af carbonhydrier fremstillet ved destillation af produkterne fra reaktionen mellem isobutan og monoolefiniske carbonhydrier, sædvanligvis  $C_7$  til og med  $C_{12}$ . Den består af overvejende forgrenede mættede carbonhydrier, overvejende  $C_8$  til og med  $C_{12}$  med kogesinterval omtrent fra 150 °C til 220 °C]
- DE Naphtha (Erdöl), schwere Alkylat- Naphtha, niedrig siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation der Reaktionsprodukte von Isobutan mit monoolefinischen Kohlenwasserstoffen mit Kohlenstoffzahlen gewöhnlich zwischen  $C_7$  bis  $C_{12}$ . Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit verzweigter Kette mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{12}$  und siedet im Bereich von etwa 150 °C bis 220 °C]
- EL ναφθα (πετρελαίου), βαρύ προϊόν αλκυλιωτής Ελαφρά επεξεργασμένη ναφθα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται με αποστάξη των προϊόντων αντίδρασης ισοβουτανίου με μονοαλειφικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα που κυμαίνεται συνήθως από  $C_7$  έως  $C_{12}$ . Συνίσταται κυρίως από κορεσμένους διακλαδισμένους αλυσσών υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  έως και  $C_{12}$  και με περιοχή βρασμού από 150° C έως 220° C περίπου]
- EN Naphtha (petroleum), heavy alkylate Low boiling point modified naphtha  
[A complex combination of hydrocarbons produced by distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from  $C_7$  to  $C_{12}$ . It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{12}$  and boiling in the range of approximately 150 °C to 220 °C (302 °F to 428 °F)]
- FR naphtha lourde (pétrole), alkylation Naphtha modifiée à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures produite par distillation des produits de réaction de l'isobutane avec des hydrocarbures monooléfiniques généralement en  $C_7$  à  $C_{12}$ . Se compose d'hydrocarbures saturés, en majorité à chaîne ramifiée dont le nombre de carbones se situe principalement dans la gamme  $C_8$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 150 °C et 220 °C]
- IT nafta (petrolio), frazioni pesanti di alchilazione Nafta modificata con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione dei prodotti di reazione di isobutano con idrocarburi monoolefinici, a numero di atomi di carbonio normalmente nell'intervallo  $C_7$ ,  $C_{12}$ . E costituita prevalentemente da idrocarburi saturi a catena ramificata con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ ,  $C_{12}$  e punto di ebollizione nell'intervallo 150 °C-220 °C ca.]
- NL nafta (aardolie), zwaar gealkyleerd Gemodificeerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de reactieproducten van isobutaan met mono-olefinische koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{12}$ . Bestaat voornamelijk uit verzadigde vertakte koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 150 °C tot 220 °C]
- PT nafta (petróleo), pesada de alquilação Nafta modificada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos da reacção de isobutano com hidrocarbonetos monoolefinicos com numeros de atomos de carbono geralmente na gama de  $C_7$  ate  $C_{12}$ . E constituida predominantemente por hidrocarbonetos saturados de cadeia ramificada com numeros de atomos de carbono predominantemente na gama de  $C_8$  ate  $C_{12}$  e destila no intervalo de aproximadamente 150 °C a 220 °C]

Classification - Classificazione - Klassifizierung - Κατάταξη - Classification - Classificazione - Indeling - Classificacao

Carc. cat. 2 R 45	Xn R 65
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Etiquetado - Etikettering - Kennzeichnung - Επισήμανση - Labelling - Etiquetage - Etichettatura - Kennzeichen - Rotulagem

T	
	
	R : 45-65
	S : 53-45

Limits - Limitation - Konzentrationsgrenze - Konzentrationsgrenzwerte - Όρια συγκεντρώσεως - Concentration limits - limites de concentration - Limiti di concentrazione - Konzentrationsgrenzen - Limites de concentraçao

$C \geq 10\%$	T, R 45-65
$0,1\% \leq C < 10\%$	T, R 45

NOTA 4

Cas No 64741-66-8

EEC No 265 068-8

No 649 276-00 X

NOTA H

NOTA P


- FS** nafta (petroleo), alquilato ligero Nafta modificada de baja temperatura de inflamacion  
[Combinacion compleja de hidrocarburos producida por la destilacion de los productos de reaccion de isobutano con hidrocarburos monoolefinicos con un numero de carbonos normalmente dentro del intervalo de  $C_4$  a  $C_9$ . Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_9$ , y con un intervalo de ebullicion aproximado de 90 °C a 160 °C]
- DA** naphtha (råolie), let alkylat Lavtkogende modificeret nafta  
[En sammensat blanding af carbonhydrider fremskillet ved destillation af produkterne fra reaktionen mellem isobutan og monoolefinske carbonhydrider, sædvanligvis  $C_4$  til og med  $C_9$ . Den består af overvejende forgrenede, mættede carbonhydrider overvejende  $C_4$  til og med  $C_{10}$ , med kogesinterval omtrent fra 90 °C til 160 °C]
- DE** Naphtha (Erdöl), leichte Alkylat- Naphtha, niedrig siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation der Reaktionsprodukte von Isobutan mit monoolefinischen Kohlenwasserstoffen mit Kohlenstoffzahlen gewöhnlich zwischen  $C_4$  bis  $C_9$ . Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit erzweigter Kette mit Kohlenstoffzahlen vornehmlich im Bereich von  $C_4$  bis  $C_9$  und siedet im Bereich von etwa 90 °C bis 160 °C]
- EL** ναφθα (πετρελαίου), προϊόν ελαφράς αλκυλίωσης Ελαφρά επεξεργασμένη ναφθα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παράγεται με αποστάξη των προϊόντων αντίδρασης ισοβουτανίου με μονοολεφινικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα που κυμαίνεται από  $C_4$  έως και  $C_9$ . Συνίσταται κυρίως από κορεσμένους διακλαδισμένης αλυσσού υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_9$ , και με περιοχή βρασμού από 90° C έως 160° C περίπου]
- EN** Naphtha (petroleum), light alkylate Low boiling point modified naphtha  
[A complex combination of hydrocarbons produced by distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from  $C_4$  through  $C_9$ . It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_9$  and boiling in the range of approximately 90 °C to 160 °C (194 °F to 320 °F)]
- FR** naphta léger (pétrole), alkylation Naphta modifiée à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures produite par distillation des produits de réaction de l'isobutane avec des hydrocarbures monoolefiniques généralement en  $C_4$  à  $C_9$ . Se compose d'hydrocarbures saturés, en majeure partie à chaîne ramifiée dont le nombre de carbones se situe principalement dans la gamme  $C_4$ ,  $C_9$  et dont le point d'ébullition est compris approximativement entre 90 °C et 160 °C]
- IT** nafta (petrolio), frazioni leggere di alchilazione Nafta modificata con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione dei prodotti di reazione di isobutano con idrocarburi monoolefinici normalmente a numero di atomi di carbonio nell'intervallo  $C_4$ ,  $C_9$ . È costituita in prevalenza da idrocarburi saturi a catena ramificata con numero di atomi di carbonio nell'intervallo  $C_4$ ,  $C_{10}$  e punto di ebollizione nell'intervallo 90 °C 160 °C ca]
- NL** nafta (åardolie), licht gealkyleerd Gemodificeerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de reactieproducten van isobutaan met mono-olefinische koolwaterstoffen, overwegend  $C_4$  tot en met  $C_9$ . Bestaat voornamelijk uit verzadigde vertakte koolwaterstoffen overwegend  $C_4$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 90 °C tot 160 °C]
- PT** nafta (petróleo), leve de alquilação Nafta modificada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos da reacção de isobutano com hidrocarbonetos monoolefínicos com números de átomos de carbono geralmente na gama de  $C_4$  até  $C_9$ . É constituída predominantemente por hidrocarbonetos saturados de cadeia ramificada com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{10}$  e destila no intervalo de aproximadamente 90 °C a 160 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45	Xn : R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 64741 70-4

EEC No 265 073 5

No 649-277-00-5

NOTA H

NOTA P

- ES nafta (petroleo), isomerizaci3n Nafta modificada de baja temperatura de inflamaci3n  
[Combinaci3n compleja de hidrocarburos obtenida de la isomenzaci3n catalitica de hidrocarburos parafinicos de cadena lineal de C<sub>4</sub> a C<sub>6</sub>. Compuesta en su mayor parte de hidrocarburos saturados tales como isobutano, isopentano, 2,2 dimetilbutano, 2 metilpentano y 3-metilpentano.]
- DA naphtha (råolie), isomeriserings- Lavtkogende modificeret nafta  
[En sammensat blanding af carbonhydinder opnaet ved en katalytisk isomensening af ligestædede paraffincarbonhydridet, C<sub>4</sub> til og med C<sub>6</sub>. Den består overvejende af mættede carbonhydinder sasom isobutan, isopentan, 2,2 dimethylbutan, 2-methylpentan og 3-methylpentan.]
- DE Naphtha (Erdöl), Isomensations- Naphtha, niedrig siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der katalytischen Isomensierung von geradkettigen paraffinhaltigen C<sub>4</sub> bis C<sub>6</sub> Kohlenwasserstoffen. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen wie Isobutan, Isopentan, 2,2-Dimethylbutan, 2-Methylpentan und 3-Methylpentan.]
- EL ναφθα (πετρελαίου), ισομερισμού Ελαφρά επεξεργασμένη ναφθα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από καταλυτικό ισομερισμό ευθίας αλυσού παραφινικών υδρογονανθράκων από C<sub>4</sub> έως και C<sub>6</sub>. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες όπως ισοβουτάνιο, ισοπεντάνιο, 2,2 διμεθυλοβουτάνιο, 2-μεθυλοπεντάνιο και 3 μεθυλοπεντάνιο.]
- EN Naphtha (petroleum), isomerization Low boiling point modified naphtha  
[A complex combination of hydrocarbons obtained from catalytic isomerization of straight chain paraffinic C<sub>4</sub> through C<sub>6</sub> hydrocarbons. It consists predominantly of saturated hydrocarbons such as isobutane, isopentane, 2,2 dimethylbutane, 2-methylpentane and 3-methylpentane.]
- FR naphta (petrole), isomerisation Naphta modifiée a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par isomerisation catalytique d'hydrocarbures paraffiniques a chaîne droite en C<sub>4</sub> a C<sub>6</sub>. Se compose principalement d'hydrocarbures saturés tels que l'isobutane, l'isopentane, le dimethyl-2,2 butane, le methyl-2-pentane et le methyl-3-pentane.]
- IT nafta (petrolio), isomerizzazione Nafta modificata con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per isomenzazione catalitica di idrocarburi paraffinici da C<sub>4</sub> a C<sub>6</sub> a catena lineare. È costituita in prevalenza da idrocarburi saturi quali isobutano, isopentano, 2,2-dimetilbutano, 2 metilpentano e 3-metilpentano.]
- NL nafta (aardolie), isomensatie- Gemodificeerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen verkregen door de katalytische isomensatie van niet vertakte paraffinische C<sub>4</sub>- tot en met C<sub>6</sub> koolwaterstoffen. Bestaat voornamelijk uit verzadigde koolwaterstoffen als isobutaan, isopentaan, 2,2 dimethylbutaan, 2-methylpentaan en 3-methylpentaan.]
- PT nafta (petróleo), de isomerização Nafta modificada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por isomenzação catalitica de hidrocarbonetos parafinicos de cadeia linear em C<sub>4</sub> ate C<sub>6</sub>. É constituída predominantemente por hidrocarbonetos saturados tais como isobutano, isopentano, 2,2-dimetilbutano, 2 metilpentano, e 3-metilpentano.]

*Επισημάνσεις: Κερί σφραγισμένης εμπορεύματος (Classification des produits en fonction de leur destination)*

**Classement R 45-65**

*Ετικησία: Ετικητοποίηση, Kennzeichnung, Etichetaggio, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem*



*Λίμις de concentration, Konzentrationsgrenze, Konzentrationsgrenze, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentration*

$C \geq 10 \%$	Γ, R 45-65
$0.1 \% \leq C < 10 \%$	Γ, R 45

NOTA 1

Cas No 64741 84-0

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No 649 278-00 0

NOTA H

NOTA P

- ES nafta (petroleo), fraccion ligera refinada con disolvente. Nafta modificada de baja temperatura de inflamacion [Combinacion compleja de hidrocarburos obtenida como el refinado de un proceso de extraccion con disolvente. Compuesta fundamentalmente de hidrocarburos alifaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{10}$ , y con un intervalo de ebullición aproximado de 35 °C a 190 °C]
- DA naphtha (råolie), solventraffineret let. Lavtkogende modificeret nafta [En sammensat blanding af carbonhydrier opnaet som raffinatet fra en solventekstraktionsproces. Den består overvejende af aliphatiske carbonhydrier overvejende  $C_4$  til og med  $C_{10}$  med kogesinterval omtrent fra 35 °C til 190 °C]
- DE Naphtha (Erdöl), Lösungsmittel aufbereitete leichte Naphtha, niedrig siedend, modifiziert [Komplexe Kombination von Kohlenwasserstoffen erhalten als Raffinat aus einem Lösungsmittel-extraktionsverfahren. Besteht vorherrschend aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{10}$  und siedet im Bereich von etwa 35 °C bis 190 °C]
- EL ναφθα (πετρελαιο), ελαφρα εξευγενισμενη με διαλυτη. Ελαφρα επεξεργασμενη ναφθα [Πολυπλοκος συνδυασμος υδρογονων ιθακων που λαμβανεται παν το πριν των εκχυλιση, με διαλυτη. Συνισταται κυριως απο αλειφατικούς υδρογονανθρακες με αριθμο ατομων ανθρακα κυριως στην περιοχη απο  $C_4$  εως και  $C_{10}$  και με περιοχη βρασμου απο 35 °C εως 190 °C περιπου]
- EN Naphtha (petroleum), solvent-refined light. Low boiling point modified naphtha [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{10}$  and boiling in the range of approximately 35 °C to 190 °C (95 °F to 374 °F)]
- FR naphtha léger (petrole), raffiné au solvant. Naphta modifiée a point d'ébullition bas [Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'une extraction au solvant. Se compose principalement d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majeure partie dans la gamme  $C_4$  -  $C_{10}$  et dont le point d'ébullition est compris approximativement entre 35 °C et 190 °C]
- IT nafta (petrolio), frazione leggera raffinata con solventi. Nafta modificata con basso punto di ebollizione [Combinazione complessa di idrocarburi ottenuta come raffinato in raffinazione di un processo di estrazione con solvente. E' costituita prevalentemente da idrocarburi alifatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$  -  $C_{10}$ , e punto di ebollizione nell'intervallo 35 °C - 190 °C ca.]
- NL nafta (aardolie), solvent-geraffineerd licht. Gemodificeerde nafta met laag kookpunt [Een complexe verzameling koolwaterstoffen, verkregen als het raffinaat van een solvent-extractieproces. Bestaat voornamelijk uit alifatische koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{10}$  met een kooktraject van ongeveer 35 °C tot 190 °C]
- PT nafta (petroleo), leve refinada com solvente. Nafta modificada de baixo ponto de ebulição [Uma combinação complexa de hidrocarbonetos obtida como o refinado de um processo de extração com solvente. E' constituída predominantemente por hidrocarbonetos alifáticos com numeros de atomos de carbono predominantemente na gama de  $C_4$  ate  $C_{10}$  e destila no intervalo de aproximadamente 35 °C a 190 °C]

Classification Classification Classificação Classificação Classificação Classificação Classificação Classificação Classificação Classificação

Cat. Cat. 2 R 45 | Sn R 65

Etiquetado Etikettering Kennzeichnung Ετικετογράφηση Labelling/Étiquetage Etichettatura Kennzeichen, Rotulagem



Limite de concentração Konzentrationsgrenze Konzentrationsgrenze Όρια συγκεντρώσεως Concentration limits, Limites de concentration Limiti di concentrazione Concentrazionsprezen Limites de concentração

$C \geq 10\%$	I R 45-65
$0.1\% \leq C < 10\%$	F R 45

NOIA 4

Cas No 64741-92-0

EEC No 265-095-5

No 649-279-00-6

NOTA H

NOTA P

- ES nafta (petroleo), fracción pesada refinada con disolvente ; Nafta modificada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida como el refinado de un proceso de extracción con disolvente. Compuesta fundamentalmente de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>6</sub> a C<sub>12</sub>, y con un intervalo de ebullición aproximado de 90 °C a 230 °C]
- DA naphtha (råolie), solventraffineret tung ; Lavtkogende modificeret nafta  
[En sammensat blanding af carbonhydrier opnået som raffinatet fra en solventekstraktionsproces. Den består overvejende af aliphatiske carbonhydrier, overvejende C<sub>6</sub> til og med C<sub>12</sub>, med koginterval omtrent fra 90 °C til 230 °C.]
- DE Naphtha (Erdöl), Lösungsmittel-aufbereitete schwere ; Naphtha, niedrig siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Lösungsmittel-extraktionsverfahren. Besteht vorherrschend aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>6</sub> bis C<sub>12</sub> und siedet im Bereich von etwa 90 °C bis 230 °C.]
- EL ναφθα (πετρελαίου), βαριά, εξευγενισμένη με διαλύτη. Ελαφρά επεξεργασμένη νάφθα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν προϊόν εκχύλισης με διαλύτη. Συνίσταται κυρίως από αλειφατικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>6</sub> έως και C<sub>12</sub> και με περιοχή βρασμού από 90° C έως 230° C περίπου.]
- EN : Naphtha (petroleum), solvent-refined heavy ; Low boiling point modified naphtha  
A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>6</sub> through C<sub>12</sub> and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F).]
- FR naphtha lourde (pétrole), raffiné au solvant ; Naphta modifié à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'une extraction au solvant. Se compose principalement d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme C<sub>6</sub>-C<sub>12</sub>, et dont le point d'ébullition est compris approximativement entre 90 °C et 230 °C.]
- IT nafta (petrolio), frazione pesante raffinata con solvente ; Nafta modificata con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di estrazione con solvente. E costituita prevalentemente da idrocarburi alifatici con un numero di atomi di carbonio prevalentemente nell'intervallo C<sub>6</sub>-C<sub>12</sub> e punto di ebollizione nell'intervallo 90 °C - 230 °C ca.]
- NL nafta (petroleum), solvent-geraffineerd zwaar ; Gemodificeerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen als het raffinaat van een solvent-extractieproces. Bestaat voornamelijk uit alifatische koolwaterstoffen, overwegend C<sub>6</sub> tot en met C<sub>12</sub>, met een kooktraject van ongeveer 90 °C tot 230 °C.]
- PT nafta (petróleo), pesada refinada com solvente ; Nafta modificada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida como o refinado de um processo de extração com solvente. E constituída predominantemente por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de C<sub>6</sub> até C<sub>12</sub>, e destila no intervalo de aproximadamente 90 °C a 230 °C.]

La presente Circolare ha efficacia retroattiva dal 1° gennaio 1997. Con la presente Circolare si applica la Circolare Ministeriale del 1997.

La Circolare è pubblicata in data 19/8/1997.

65

La Circolare Ministeriale del 1997, pubblicata in data 19/8/1997, ha efficacia retroattiva dal 1° gennaio 1997.

	R. 45/65
	S. 45/65

La Circolare Ministeriale del 1997, pubblicata in data 19/8/1997, ha efficacia retroattiva dal 1° gennaio 1997.

C. 45/65	T. R. 45/65
C. 45/65	T. R. 45/65

TOTALE






*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

C 1. 15425 31

FIC 20 543

No 649 28.00.7

NO. 4 H

NOTA 2

- CS refinados (petroleo), reformador, unidad de separacion Lurgi. Nafta modificada de baja temperatura de inflamacion [Combinacion compleja de hidrocarburos obtenida como refinado de una unidad de separacion Lurgi. Compuesta fundamentalmente de hidrocarburos no aromaticos con algunas cantidades pequenas de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$ .]
- DA raffinater (raolie), reformer. Lurgi-enhedsseparator. Lavtkogende modifieret nafta [Den sammensatte blanding af carbonhydrider opnaet som et raffinat fra en Lurgi-separationsenhed. Den består overvejende af ikke aromatiske carbonhydrider med varierende små mængder aromatiske carbonhydrider, overvejende  $C_6$  til og med  $C_{12}$ .]
- DE Raffinate (Erdöl), Reformier. Lurgi-anlage separiert. Naphtha, niedrig siedend, modifiziert [Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einer Lurgitrennanlage. Besteht vorherrschend aus nichtaromatischen Kohlenwasserstoffen mit variierenden kleinen Mengen aromatischer Kohlenwasserstoffe mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$ .]
- EL ραφινατ (πετρελαιο), αναμορφωτήρα, διαχωρισμένα από μονάδα Lurgi. Ελαφρά επεξεργασμένη νάφθα [Ο πυκνωτικός, σε νάφθα, υδρογονάνθρακων που λαμβάνεται σαν εκχυλιστικό προϊόν από μονάδα διαχωρισμού Lurgi. Συνίσταται κυρίως από μη αρωματικούς υδρογονάνθρακες με οσφαιρές μικροποσοτήτες αρωματικών υδρογονανθράκων με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{12}$ .]
- EN Ratinates (petroleum), reformer. Lurgi unit-sepd. Low boiling point modified naphtha [The complex combination of hydrocarbons obtained as raffinate from a Lurgi separation unit. It consists predominantly of non-aromatic hydrocarbons with various small amounts of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$ .]
- FR raffinats de reformage (petrole), unite de separation Lurgi, Naphta moditie a point d'ébullition bas [Combinaison complexe d'hydrocarbures obtenue comme raffinat dans une unite de separation Lurgi. Se compose principalement d'hydrocarbures non aromatiques ainsi que de petites quantites d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorite dans la gamme  $C_6$  -  $C_{12}$ .]
- IT raffinati (petrolio), impianto di reforming, separazione in impianto Lurgi. Nafta modificata con basso punto di ebollizione [Combinazione complessa di idrocarburi ottenuta come raffinato da un impianto di separazione Lurgi. È costituita prevalentemente da idrocarburi non aromatici con varie piccole quantità di idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$  -  $C_{12}$ .]
- NL raffinaten (aardolie), reformer, met Lurgi-unit afgescheiden. Gemodificeerde nafta met laag kookpunt [De complexe verzameling koolwaterstoffen, verkregen als een raffinaat uit een Lurgi scheidingsunit. Bestaat voornamelijk uit niet aromatische koolwaterstoffen, met kleine hoeveelheden aan aromatische koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ .]
- PT refinados (petroleo), do reformer, da unidade de separação Lurgi. Nafta modificada de baixo ponto de ebulição [A combinação complexa de hidrocarbonetos obtida como um refinado de uma unidade de separação. É constituída predominantemente por hidrocarbonetos não aromaticos com pequenas variáveis de hidrocarbonetos aromaticos com numeros de atomos de carbonio predominantemente na gama de  $C_6$  ate  $C_{12}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

C 15

C 15 - 26

No 649-262 00-7

NOTA II


NOTA II

- ES nafta modificada de baja temperatura de inflamacion  
[Combinacion completa de hidrocarburos producida por la destilacion de los productos de reaccion del isobutano con hidrocarburos monoolefinicos normalmente con un numero de carbonos dentro del intervalo de C<sub>4</sub> a C<sub>12</sub>. Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada con un numero de carbonos en su mayor parte dentro del intervalo de C<sub>4</sub> a C<sub>12</sub>, con algunos butanos y con un intervalo de ebullicion aproximado de 35 °C a 200 °C.]
- DA naphtha (ræflet), full-range alkylat, butanholdig. Lavtkogende modificeret nafta  
[En sammensæt har der sigt at carbonno i de fleste forbindelser i de destillationer af produkterne fra reaktion mellem isobutan og monoolefiniske carbonhydroider sædvanligvis C<sub>4</sub> til og med C<sub>12</sub>. Den består af overvejende forgrenede, mættede carbonhydroider, overvejende C<sub>4</sub> til og med C<sub>12</sub> med nogle butaner, med kogeminterval omtrent fra 35 °C til 200 °C.]
- DE Naphta (Erdöl), gesamte Alkylat-Butan-enthaltend. Naphta, niedrig siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Reaktionsprodukten von Isobuten mit monoolefinischen Kohlenwasserstoffen, gewöhnlich mit Kohlenstoffzahlen im Bereich von C<sub>4</sub> bis C<sub>12</sub>. Besteht aus gesättigten Kohlenwasserstoffen mit vorherrschend verzweigter Kette und mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>4</sub> bis C<sub>12</sub> mit einigen Butanen. Das Siedebereich beträgt von etwa 35 °C bis 200 °C.]
- EL ναφθα (πετρελαιο), προϊόν αλκυλίωσης, πτηνούς σύστασης, που περιχει βουτάνιο. Ελαφρά επεξεργασμένη ναφθα  
[Πομπλητικός συνδυασμός υδρογονανθράκων που ταξινομείται με την αποστάση των προϊόντων αντιδράσης ισοβουτανίου με μονοολεφινικούς υδρογονανθράκες, συνήθως με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>4</sub> έως και C<sub>12</sub>. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με διακλαδισμένη αλυσίδα και με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>4</sub> έως και C<sub>12</sub>, μαζί με μικρά βουτάνια και βράζει στην περιοχή από 35 °C έως 200 °C περίπου.]
- EN Naphta (petroleum), full-range alkylate, butane-contg. Low boiling point modified naphta  
[A complex combination of hydrocarbons produced by the distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from C<sub>4</sub> through C<sub>12</sub>. It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of C<sub>4</sub> through C<sub>12</sub>, with some butanes and boiling in the range of approximately 35 °C to 200 °C (95 °F to 428 °F).]
- FR naphta d'alkylation a large intervalle d'ebullition (petrole) contenant du butane. Naphta modifie a point d'ebullition bas  
[Combinaison complexe d'hydrocarbures produite par la distillation des produits de reaction de l'isobutane avec des hydrocarbures mono-olefiniques dont le nombre de carbones varie generalement de C<sub>4</sub> a C<sub>12</sub>. Se compose d'hydrocarbures en majeure partie satures et ramifies dont le nombre de carbones se situe principalement dans la gamme C<sub>4</sub>-C<sub>12</sub>, avec quelques butanes, et dont le point d'ebullition est compris approximativement entre 35 °C et 200 °C.]
- IT nafta (petrolio) gamma completa frazioni di alchilato, contenente butano. Nafta modificata con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti di reazione di isobutano con idrocarburi monoolefinici C<sub>4</sub>-C<sub>12</sub>. E costituita prevalentemente da idrocarburi saturi ramificati con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>4</sub>-C<sub>12</sub>, con alcuni butani e con punto di ebollizione nell'intervallo 35 °C - 200 °C ca.]
- NL nafta (aardolie), totaal bereik van gealkyleerde butaan bevattend. Gemodificeerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, gevormd door de destillatie van de reactieproducten van isobutaan met mono-olefinische koolwaterstoffen, overwegend C<sub>4</sub> tot en met C<sub>12</sub>. Bestaat voornamelijk uit vertakte verzadigde koolwaterstoffen, overwegend C<sub>4</sub> tot en met C<sub>12</sub> met enige butanen en met een kooktraject van ongeveer 35 °C tot 200 °C.]
- PT nafta (petróleo), carga de alquilação, contendo butano. Nafta modificada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos da reacção de isobutano com hidrocarbonetos monoolefinicos normalmente com numeros de atomos de carbono na gama de C<sub>4</sub> ate C<sub>12</sub>. É constituída predominantemente por hidrocarbonetos saturados de cadeia ramificada com numeros de atomos de carbono predominantemente na gama de C<sub>4</sub> ate C<sub>12</sub>, com alguns butanos e destila no intervalo de aproximadamente 35 °C a 200 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

No 649-283-00.8

NOTA 2

- |    |  |  |
|----|--|--|
| 15 | destillado (petroleum) derivado del craqueo a vapor de nafta, fracción ligera tratada con hidrógeno refinada con disolvente. Nafta modificada de bajo temperatura de inflamación.<br>(A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process of hydrotreated light distillate from steam-cracked naphtha.)              |  |
| 16 | destillat (aardolie) afkomstig van het stoomkruken van nafta, solventgezuiverde waterstofbehandelde lichte<br>(Gemodificeerde nafta met laag kookpunt)<br>(A complex verzameling koolwaterstoffen die wordt verkregen als de raffinatens uit een solventextractieproces van waterstofbe- handeld licht destillaat afkomstig uit stoomgekraakte nafta.)             |  |
| 17 | destillat (petroleum) derivado de steam-cracking da nafta, levemente tratado com hidrogenio refinado com solvente. Nafta modificada com baixo ponto de ebulição.<br>(Combinação complexa de hidrocarbonetos obtida como os refinados de um processo de extração com solvente de destilado leve tratado com hidrogenio dos produtos do steam-cracking da nafta.)    |  |
| 18 | destillat (petroleum) derivati da cracking con vapore di nafta leggeri da idrotrattamento raffinati con solvente. Nafta modificata con basso punto di ebollizione.<br>(Combinazione complessa di idrocarburi ottenuti quali raffinati da un processo di estrazione con solvente di distillato leggero sottoposto a idrotrattamento di nafta crackizzata a vapore.) |  |
| 19 | destillat (petroleum) derivados de steam-cracking da nafta, leves tratados com hidrogenio refinados com solvente. Nafta modificada de baixo ponto de ebulição.<br>(Uma combinação complexa de hidrocarbonetos obtida como os refinados de um processo de extração com solvente de destilado leve tratado com hidrogenio dos produtos do steam-cracking da nafta.)  |  |

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

C. N. No. 2041-49-3

EEC. No. 295-430-0

No. 649-284-00-3

NOTA 1  
COLA 1

- ES** nafta (petroleo), alquilato-butano  $C_{12}$ , rico en isooctano. Nafta modificada de baja temperatura de inflamación. Combinación compleja de hidrocarburos obtenida por alquilación de butanos. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{12}$ , rico en isooctano, y cuyo intervalo de ebullición aproximado de 35 °C a 210 °C.
- DA** naphtha (råolie),  $C_{12}$  butanalkylat, isooctan-rig. Lavtkogende modificeret nafta. [En sammensat blanding af carbonhydrier opnået ved alkylering af butaner. Den består overvejende af carbonhydrier, overvejende  $C_8$  til og med  $C_{12}$ , rig på isooctan, med koginterval omtrent fra 35 °C til 210 °C.]
- DE** Naphtha (Erdöl),  $C_{12}$  Butanalkylat, Isooctan-reich. Naphtha, niedrig siedend, modifiziert. [Komplexe Kombination von Kohlenwasserstoffen, die man durch Alkylierung von Butanen erhält. Besteht vorwiegend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{12}$ , reich an Isooctan, und siedet im Bereich von etwa 35 °C bis 210 °C.]
- EL** νάφθα (επίγειο), αλκυλιωμένο βουτάνιο  $C_{12}$ , πλούσιο σε ισοοκτανό. Ελαφρύ πετρελαιοειδές. [Πρόκειται περί σύνθετης αλκυλιωμένης βουτανικής νάφθας, η οποία αποτελείται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  έως και  $C_{12}$ , πλούσια σε ισοοκτανό, και με σημείο βρασμού περίπου 35 °C έως 210 °C περίπου.]
- EN** Naphtha (petroleum),  $C_{12}$  butane-alkylate, isooctane-rich. Low boiling point modified naphtha. [A complex combination of hydrocarbons obtained by alkylation of butanes. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{12}$ , rich in isooctane, and boiling in the range of approximately 35 °C to 210 °C (95 °F to 410 °F).]
- FR** naphta (pétrole), alkylation en  $C_{12}$  de butane, riche en isooctane. Naphta modifiée à point d'ébullition bas. [Combinaison complexe d'hydrocarbures obtenue par alkylation de butanes. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure dans la gamme  $C_8$ - $C_{12}$ , riches en isooctane, et dont le point d'ébullition est compris approximativement entre 35 °C et 210 °C.]
- IT** nafta (petrolio),  $C_{12}$  butan-alkilato, ricca di isooctano. Nafta modificata con basso punto di ebollizione. [Combinazione complessa di idrocarburi ottenuta per alchilazione di butani. È costituita prevalentemente da idrocarburi con numeri di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{12}$ , ricca di isooctano, e con punto di ebollizione nell'intervallo 35 °C-210 °C ca.]
- NL** nafta (aardolie),  $C_{12}$ -butaanalkylaar, rijk aan isooctaan. Gemodificeerde nafta met laag kookpunt. [Een complexe verzameling koolwaterstoffen die wordt verkregen door alkylering van butanen. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{12}$ , rijk aan isooctaan, met een kooktraject van ongeveer 35 °C tot 210 °C.]
- PT** nafta (petróleo),  $C_{12}$  da alquilação de butanos, rica em isooctano. Nafta modificada de baixo ponto de ebulição. [Uma combinação complexa de hidrocarbonetos obtida por alquilação de butanos. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_8$  até  $C_{12}$ , rica em isooctano, e destila no intervalo de aproximadamente 35 °C a 210 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	R : 45-65
	S : 53-45

*Limites de concentraciön, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçõ*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cod. 204 35-1

EEC No 29 431-3

No. 649-285-00-9

NOTA 11

NOTA 12

- ES** hidrocarburos, destilados de nafta ligera tratada con hidrogeno refinado con disolvente. Nafta modificada de baja temperatura de inflamacion  
[Combinacion de hidrocarburos obtenida de la destilacion de nafta tratada con hidrogeno seguida por una extraccion con un intervalo de ebullicion aproximado de 94 °C a 99 °C]
- DA** carbonhydridet, hydrogenbehandlede lette naphthadestillater, solventraffinerede. Lavtkogende modificeret nafta  
[En sammensat blandning af carbonhydridet opnaet fra destillationen af hydrogenbehandlet naphtha, efterfulgt af en solventekstraktions- og destillationsproces. Den består overvejende af mættede carbonhydridet, med koginterval omtrent fra 94 °C til 99 °C]
- DE** Kohlenwasserstoffe, mit Wasserstoff behandelte leichte Naphthadestillate, durch Lösungsmittel aufbereitet  
Naphtha niedrige siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen die man aus der Destillation von mit Wasserstoff behandelter Naphtha gefolgt von einem Lösungsmittel-extraktions- und Destillationsverfahren erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen und siedet im Bereich von etwa 94 °C bis 99 °C]
- EL** υδρογονανθράκες, ελαφρά αποσταγμένα ναφθας κατεργασίας με υδρογόνο, εξευγενισμένα με διαλύτη. Ελαφρά επεξεργασμένη ναφθα  
[Συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη ναφθας κατεργασμένης με υδρογόνο και υφολογίζεται από εκχύλιση με διαλύτη και απόσταξη. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με περιοχή βρασμού από 94 °C έως 99 °C περίπου]
- EN** Hydrocarbons, hydrotreated light naphtha distillates, solvent-refined, Low boiling point modified naphtha  
[A combination of hydrocarbons obtained from the distillation of hydrotreated naphtha followed by a solvent extraction and distillation process. It consists predominantly of saturated hydrocarbons boiling in the range of approximately 94 °C to 99 °C (201 °F to 210 °F)]
- FR** hydrocarbures, distillats de naphta léger hydrotraité, raffinés au solvant, Naphta modifié à point d'ébullition bas  
[Combinaison d'hydrocarbures obtenue par distillation de naphta hydrotraité, puis extraction au solvant et distillation. Se compose principalement d'hydrocarbures saturés dont le point d'ébullition est compris approximativement entre 94 °C et 99 °C]
- IT** idrocarburi, distillati leggeri di nafta idrotrattati, raffinati con solvente. Nafta modificata con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuti della distillazione di nafta sottoposta ad hydrotreating seguita da un'estrazione con solvente ed un processo di distillazione. E' costituita prevalentemente da idrocarburi saturi con punto di ebollizione nell'intervallo 94 °C-99 °C, ca.]
- NL** koolwaterstoffen, waterstofbehandelde lichte naftadestillaten, solventgeraffineerd. Gemodificeerde nafta met laag kookpunt.  
[Een verzameling koolwaterstoffen die wordt verkregen uit de destillatie van waterstofbehandelde nafta gevolgd door een solventextractie en destillatieproces. Bestaat voornamelijk uit verzadigde koolwaterstoffen, met een kooktraject van ongeveer 94 °C tot 99 °C]
- PT** hidrocarbonetos, destilados de nafta leve tratada com hidrogenio, refinados com solvente. Nafta modificada de baixo ponto de ebulição  
[Uma combinação de hidrocarbonetos obtida da destilação de nafta tratada com hidrogenio seguida por um processo de extração com solvente e destilação. E' constituída predominantemente por hidrocarbonetos saturados que destilam no intervalo de aproximadamente 94 °C a 99 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

C. N. 92045-58-4

FEC No 295-440-5

C. N. 92045-00-4

NOTA H


NOTA I

- ES nafta (petróleo), isomerización, fracción de  $C_6$ . Nafta modificada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por destilación de una gasolina que ha sido isomerizada catalíticamente. Compuesta en su mayor parte de isómeros de hexano con un intervalo de ebullición aproximado de 60 °C a 66 °C]
- DA naphtha (raffiniet), isomerisation,  $C_6$ -fraktion. Lavtkogende modificeret nafta  
[En sammensætning af carbonhydrider opnået ved destillation af en benzol, der er blevet katalytisk isomeriseret. Den består overvejende af hexanisomerer med kogepunkt omtrent fra 60 °C til 66 °C]
- DE Naphtha (Erdöl), Isomerisierung,  $C_6$ -Fraktion. Naphtha, niedrig siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen die man durch Destillation eines katalytisch isomerisierten Benzins erhält. Besteht vorherrschend aus Hexanisomeren und siedet im Bereich von etwa 60 °C bis 66 °C]
- EL νάφθα (πετρέλαιο), ισομερισμοί, κλάσμα  $C_6$ . Ελαφρά επεξεργασμένη νάφθα  
[Ποικύλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με καταλυτική θενζίνης που έχει καταλυτικώς ισομερισθεί. Συνίσταται κυρίως από ισομερή εξάνιου με περιοχή θρασμού από 60 °C έως 66 °C περίπου]
- EN Naphtha (petroleum), isomerization,  $C_6$ -fraction. Low boiling point modified naphtha  
[A complex combination of hydrocarbons obtained by distillation of a gasoline which has been catalytically isomerized. It consists predominantly of hexane isomers boiling in the range of approximately 60 °C to 66 °C (140 °F to 151 °F)]
- FR naphtha (pétrole), isomérisation, fraction en  $C_6$ . Naphtha modifié a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation d'une essence ayant subi une isomérisation catalytique. Se compose principalement d'isomères d'hexane dont le point d'ébullition est compris approximativement entre 60 °C et 66 °C]
- IT nafta (petrolio), isomerizzazione, frazione  $C_6$ . Nafta modificata con basso punti di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di una benzina che è stata isomerizzata cataliticamente. È costituita prevalentemente da isomeri dell'esano con punto di ebollizione nell'intervallo 60 °C-66 °C ca.]
- NL nafta (aardolie), isomerisatie,  $C_6$ -fractie. Gemodificeerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van een gasoline die katalytisch geïsomeriseerd is. Bestaat voornamelijk uit hexaanisomeren met een kooktraject van ongeveer 60 °C tot 66 °C]
- PT nafta (petróleo), da isomerização, fracção em  $C_6$ . Nafta modificada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de uma gasolina que foi isomerizada cataliticamente. É constituída predominantemente por isómeros de hexano que destilam no intervalo de aproximadamente 60 °C a 66 °C]

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T; R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

C.A.S. No. 92045-64-7

I.F.U. No. 295-446-X

Inv. 649-287-00-X

NOTA II

NOTA I

- ES hidrocarburos,  $C_{12}$ , craqueo de nafta refinada con disolvente, Nafta modificada de baja temperatura de inflamación. [Combinación compleja de hidrocarburos obtenida por absorción de benceno de una fracción hidrocarbónica rica en benceno, catalíticamente hidrogenada catalíticamente que fue obtenida por la destilación de nafta craqueada y prehidrogenada. Compuesto que consiste principalmente de hidrocarburos parafínicos y nafténicos con un número de átomos de carbono en su mayoría comprendido entre 70 y 100.]

ΕΣ υδρογονάνθρακες,  $C_{12}$ , craqueo de nafta refinada con disolvente, Nafta modificada de baja temperatura de inflamación. [Combinación compleja de hidrocarburos obtenida por absorción de benceno de una fracción hidrocarbónica rica en benceno, catalíticamente hidrogenada catalíticamente que fue obtenida por la destilación de nafta craqueada y prehidrogenada. Compuesto que consiste principalmente de hidrocarburos parafínicos y nafténicos con un número de átomos de carbono en su mayoría comprendido entre 70 y 100.]

ES hidrocarburos,  $C_{12}$ , craqueo de nafta refinada con disolvente, Nafta modificada de baja temperatura de inflamación. [Combinación compleja de hidrocarburos obtenida por absorción de benceno de una fracción hidrocarbónica rica en benceno, catalíticamente hidrogenada catalíticamente que fue obtenida por la destilación de nafta craqueada y prehidrogenada. Compuesto que consiste principalmente de hidrocarburos parafínicos y nafténicos con un número de átomos de carbono en su mayoría comprendido entre 70 y 100.]

- EL υδρογονάνθρακες,  $C_{12}$ , craqueo de nafta refinada con disolvente, Nafta modificada de baja temperatura de inflamación. [Combinación compleja de hidrocarburos obtenida por absorción de benceno de una fracción hidrocarbónica rica en benceno, catalíticamente hidrogenada catalíticamente que fue obtenida por la destilación de nafta craqueada y prehidrogenada. Compuesto que consiste principalmente de hidrocarburos parafínicos y nafténicos con un número de átomos de carbono en su mayoría comprendido entre 70 y 100.]

- EN hydrocarbons,  $C_{12}$ , naphtha-cracking, solvent-refined, Low boiling point modified naphtha. [Complex combination of hydrocarbons obtained by the sorption of benzene from a catalytically fully hydrogenated benzene rich hydrocarbon cut that was distillatively obtained from prehydrogenated cracked naphtha. It consists predominantly of paraffinic and naphthenic hydrocarbons having carbon numbers predominantly in the range of , through 40 and boiling in the range of approximately 70 °C to 100 °C (155 °F to 212 °F).]

- FR hydrocarbures en  $C_{12}$ , craquage de naphta, raffinés au solvant, Naphta modifiée à point d'ébullition bas. [Combinaison complexe d'hydrocarbures obtenue par absorption du benzène dans une coupe d'hydrocarbures riche en benzène avant une hydrogénation catalytique complète. Cette coupe résultant de la distillation de naphta de craquage préalablement hydrogénée se compose principalement d'hydrocarbures paraffiniques et nafténiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{12}$  et dont le point d'ébullition est compris approximativement entre 70 °C et 100 °C.]

- FI hidrocarburi,  $C_{12}$ , cracking di nafta, raffinati con solvente, Nafta modificata con basso punto di ebollizione. [Combinazione complessa di idrocarburi ottenuta mediante assorbimento di benzene da un taglio idrocarbureo ricco di benzene completamente idrogenato cataliticamente che era stato ottenuto mediante distillazione da nafta crackizzata preidrogenata. È costituita prevalentemente da idrocarburi paraffinici e naftenici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{12}$  e con punto di ebollizione nell'intervallo 70 °C - 100 °C ca.]

- NL koolwaterstoffen,  $C_{12}$ , naftakraken, solventgeraffineerd; Gemodificeerde nafta met laag kookpunt. [Een complexe verzameling koolwaterstoffen die wordt verkregen door de sorptie van benzeen uit een katalytisch volledig gehydrogeneerde benzeenrijke koolwaterstoffractie die destillatief werd verkregen uit voorgehydrogeneerde gekraakte nafta. Bestaat voornamelijk uit paraffinische en naftenische koolwaterstoffen, overwegend  $C_{12}$  en  $C_{12}$ , met een kooktraject van ongeveer 70 °C tot 100 °C.]

- PT hidrocarbonetos,  $C_{12}$ , do cracking da nafta, refinados com solvente; Nafta modificada de baixo ponto de ebulição. [Uma combinação complexa de hidrocarbonetos obtida por absorção de benzeno de um corte de hidrocarbonetos rico em benzeno totalmente hidrogenado cataliticamente que foi obtido por destilação de nafta do cracking pre-hidrogenada. É constituída predominantemente por hidrocarbonetos parafínicos e nafténicos com números de átomos de carbono predominantemente na gama de  $C_{12}$  e com ponto de ebulição no intervalo de aproximadamente 70 °C a 100 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 101316-67-0

EEC No 309-871-4

No 549-288-00-5

NOTA H

NOTA P

- ES hidrocarburos, ricos en  $C_{10}$ , destilados de nafta ligera tratada con hidrógeno, refinados con disolvente. Nafta modificada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por destilación de nafta tratada con hidrógeno seguida por extracción con disolvente. Compuesta fundamentalmente de hidrocarburos saturados y con un intervalo de ebullición de 65 °C a 70 °C.]
- DA Carbonhydrider,  $C_{10}$ -rige, hydrogenbehandlede lette naphthadestillater, solvent-raffinerede, Lavtkogende modificeret nafta  
[En sammensat blanding af carbonhydrider opnået ved destillation af hydrogenbehandlet naphtha efterfulgt af solventekstraktion. Den består overvejende af mættede carbonhydrider, med koginterval omtrent fra 65 °C til 70 °C.]
- DE Kohlenwasserstoffe,  $C_{10}$ -reich, mit Wasserstoff behandelte leichte Naphthadestillate, durch Lösungsmittel aufbereitet. Nafta, niedrig siedend, modifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von mit Wasserstoff behandelter Naphtha mit nachfolgender Lösungsmittelextraktion erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen und sind im Bereich von etwa 65 °C bis 70 °C.]
- EL υδρογονάνθρακες, πλούσιοι σε  $C_{10}$ , κατεργασμένα με υδρογόνο ελαφρά αποσταγμένα νάφθα, εξευγενισμένα με διαλυτή. Ελαφρά επεξεργασμένη νάφθα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη κατεργασμένης με υδρογόνο νάφθας και στη συνέχεια από εκχύλιση με διαλυτή. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες και με περιοχή βρασμού από 65 °C έως 70 °C (ερίπου)]
- EN Hydrocarbons,  $C_{10}$ -rich, hydrotreated light naphtha distillates, solvent-refined, Low boiling point modified naphtha  
[A complex combination of hydrocarbons obtained by distillation of hydrotreated naphtha followed by solvent extraction. It consists predominantly of saturated hydrocarbons and boiling in the range of approximately 65 °C to 70 °C (149 °F to 158 °F)]
- FR hydrocarbures riches en  $C_{10}$ , distillats de naphtha léger hydrotraité, raffinés au solvant, Naphtha modifié à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation de naphtha hydrotraite puis au solvant. Se compose principalement d'hydrocarbures saturés dont le point d'ébullition est compris approximativement entre 65 °C et 70 °C.]
- IT idrocarburi, ricchi di  $C_{10}$ , distillati leggeri di nafta idrotrattati, raffinati con solvente, Nafta modificata con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di nafta idrotrattata seguita da estrazione con solvente. È costituita prevalentemente da idrocarburi saturi con punto di ebollizione nell'intervallo 65 °C-70 °C ca.]
- NL koolwaterstoffen, rijk aan  $C_{10}$ , met waterstof behandelde lichte naftadestillaten, solventgezuiverde, Gemodificeerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van met waterstof behandelde nafta gevolgd door solventextractie. Bestaat voornamelijk uit verzadigde koolwaterstoffen, met een kooktraject van ongeveer 65 °C tot 70 °C.]
- PT hidrocarbonetos, ricos em  $C_{10}$ , destilados da nafta leve tratada com hidrogénio, refinados com solvente, Nafta modificada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por destilação de nafta tratada com hidrogénio seguida por extração com solvente. É constituída predominantemente por hidrocarbonetos saturados e destila no intervalo de aproximadamente 65 °C a 70 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

Cas No 64741-54-4

EEC No 265-055-7

No 649-289-00-0

NOTA H

NOTA P

- ES nafta (petróleo), fracción pesada craqueada catalíticamente ; Nafta craqueada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por una destilación de productos de un proceso de craqueo catalítico. Compuesto de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 65 °C a 230 °C. Contiene una proporción relativamente grande de hidrocarburos insaturados.]
- DA naphtha (råolie), tung katalytisk krakket ; Lavtkogende katalytisk krakket nafta  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkter fra en katalytisk krakningsproces. Den består af carbonhydrider, overveiende  $C_6$  til og med  $C_{12}$ , med koginterval omtrent fra 65 °C til 230 °C. Den indeholder en forholdsvis stor del umættede carbonhydrider.]
- DE Naphtha (Erdöl), schwere katalytisch gekrackte ; Katkracknaphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Krackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 65 °C bis 230 °C. Enthält eine relativ große Menge ungesättigter Kohlenwasserstoffe.]
- EL ναφθα (πετρελαίου), βαριά, καταλυτικά πυρολυμένη. Ελαφρά νάφθα από καταλυτική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με απόσπαξη προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{12}$  και με περιοχή βρασμού από 65 °C έως 230 °C περίπου. Περιέχει σχετικά μεγάλη ανολογία ακόρεστων υδρογονανθράκων.]
- EN Naphtha (petroleum), heavy catalytic cracked ; Low boiling point cat-cracked naphtha  
[A complex combination of hydrocarbons produced by a distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$  and boiling in the range of approximately 65 °C to 230 °C (148 °F to 446 °F). It contains a relatively large proportion of unsaturated hydrocarbons.]
- FR naphta lourde (pétrole), craquage catalytique ; Naphta de craquage catalytique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_6$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 65 °C et 230 °C. Contient une proportion relativement importante d'hydrocarbures insaturés.]
- IT nafta (petrolio), frazioni pesanti di cracking catalitico ; Nafta di cracking catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$  e punto di ebollizione nell'intervallo 65 °C - 230 °C ca. Contiene una percentuale relativamente alta di idrocarburi insaturi.]
- NL nafta (aardolie), zwaar katalytisch gekraakt ; Katalytisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, geproduceerd door destillatie van produkten van een katalytisch kraakproces. Bestaat uit koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 65 °C tot 230 °C. Bevat een relatief grote hoeveelheid onverzadigde koolwaterstoffen.]
- PT nafta (petróleo), pesada do cracking catalítico ; Nafta de « cracking » catalítico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{12}$  e destila no intervalo de aproximadamente 65 °C a 230 °C. Contém uma proporção relativamente elevada de hidrocarbonetos insaturados.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

Cas No 64741-55-5

EEC No 265-056-2

No 649-290-00-6

NOTA H


NOTA P

- ES nafta (petróleo), fracción ligera craqueada catalíticamente Nafta craqueada catalíticamente de baja temperatura de inflamación  
Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de menos 20 °C a 190 °C. Contiene una proporción relativamente grande de hidrocarburos insaturados ]
- DA naphtha (råolie), let katalytisk krakket Lavtkogende katalytisk krakket nafta  
[En sammensat blanding af carbonhydrier fremstillet ved destillation af produkter fra en katalytisk krakningsproces. Den består af carbonhydrier, overvejende  $C_4$  til og med  $C_{11}$ , med kogesinterval omtrent fra minus 20 °C til 190 °C. Den indeholder en forholdsvis stor del umættede carbonhydrier ]
- DE Naphtha (Erdöl), leichte katalytisch gekrackte, Katkracknaphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Crackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa minus 20 °C bis 190 °C. Enthält eine relativ große Menge ungesättigter Kohlenwasserstoffe ]
- EL ναφθα (πετρελαίου), ελαφρά, καταλυτικά πυρολυμένη Ελαφρά ναφθα από καταλυτική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παραγεται με την απόσπαση προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{11}$ , και με περιοχή βρασμού από μείον 20 °C έως 190 °C περίπου. Περιέχει σχετικά μεγάλη αναλογία ακόρεστων υδρογονανθράκων ]
- EN Naphtha (petroleum), light catalytic cracked Low boiling point cat-cracked naphtha  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$  and boiling in the range of approximately minus 20 °C to 190 °C (-4 °F to 374 °F). It contains a relatively large proportion of unsaturated hydrocarbons ]
- FR naphtha léger (pétrole), craquage catalytique Naphtha de craquage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre -20 °C et 190 °C. Contient une proportion relativement importante d'hydrocarbures insaturés ]
- IT nafta (petrolio), frazioni leggere di cracking catalitico Nafta di cracking catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$ , e punto di ebollizione nell'intervallo da -20 ° a 190 °C ca. Contiene una percentuale relativamente alta di idrocarburi insaturi ]
- NL nafta (aardolie), licht katalytisch gekraakt Katalytisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, geproduceerd door destillatie van produkten van een katalytisch kraakproces. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer -20 °C tot 190 °C. Bevat een relatief grote hoeveelheid onverzadigde koolwaterstoffen ]
- PT nafta (petróleo), leve do cracking catalítico Nafta de « cracking » catalítico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e destila no intervalo de aproximadamente menos 20 °C a 190 °C. Contem uma proporção relativamente elevada de hidrocarbonetos insaturados ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 68476-46-0

EEC No 270-686-6

No 649-291-00-1

NOTA H  
NOTA P

- ES hidrocarburos,  $C_{3-11}$ , destilados del craqueador catalítico, Nafta craqueada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por las destilaciones de productos de un proceso de craqueo catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_3$  a  $C_{11}$  y con un intervalo de ebullición aproximado de hasta 204 °C.]
- DA carbonhydrider,  $C_{3-11}$ , katalytisk krakkert-destillater, Lavtkogende katalytisk krakket nafta  
[En sammensat blanding af carbonhydrider fremstillet ved destillationer af produkter fra en katalytisk krakningsproces. Den består af carbonhydrider, overvejende  $C_3$  til og med  $C_{11}$ , og koger omtrent op til 204 °C.]
- DE Kohlenwasserstoffe,  $C_{3-11}$ , katalytische Krackdestillate, Katkracknaphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem katalytischen Krackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_3$  bis  $C_{11}$  und siedet im Bereich etwa bis 204 °C.]
- EL υδρογονάνθρακες,  $C_{3-11}$ , αποστάγματα μονάδας καταλυτικής πυρόλυσης. Ελαφρά νάφθα από καταλυτική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_3$  έως και  $C_{11}$  και με περιοχή βρασμού μέχρι 204 °C περίπου.]
- EN Hydrocarbons,  $C_{3-11}$ , catalytic cracker distillates, Low boiling point cat-cracked naphtha  
[A complex combination of hydrocarbons produced by the distillations of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_{11}$  and boiling in a range approximately up to 204 °C (400 °F).]
- FR hydrocarbures en  $C_{3-11}$ , distillats de produits de craquage catalytique, Naphta de craquage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_3$ - $C_{11}$ , et dont le point d'ébullition est approximativement inférieur à 204 °C.]
- IT idrocarburi  $C_{3-11}$ , distillati di cracking catalitico, Nafta di cracking catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_3$ - $C_{11}$ , e punto di ebollizione in un intervallo che va fino a 204 °C ca.]
- NL koolwaterstoffen,  $C_{3-11}$ , destillaten uit katalytische kraker, Katalytisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, gevormd door de destillaties van producten uit een katalytisch kraakproces. Bestaat uit koolwaterstoffen, overwegend  $C_3$  tot en met  $C_{11}$ , met een kooktraject tot ongeveer 204 °C.]
- PT hidrocarbonetos,  $C_{3-11}$ , destilados do cracker catalítico, Nafta de « cracking » catalítico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_3$  ate  $C_{11}$ , e destila num intervalo ate cerca de 204 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Εισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 68783-09-5

EEC No 272-185-8

No 649-292-00-7

NOTA H

NOTA P

- ES nafta (petróleo), destilado ligero craqueado catalíticamente, Nafta craqueada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>12</sub>]
- DA naphtha (råolie), katalytisk krakket let desulleret, Lavkogende katalytisk krakket nafta  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkter fra en katalytisk krakningsproces. Den består af carbonhydrider, overvejende fra C<sub>1</sub> til og med C<sub>12</sub>]
- DE Naphtha (Erdöl), katalytisch gekracktes leichtes Destillat, Katcracknaphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen hergestellt durch Destillation von Produkten aus einem katalytischen Crackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>12</sub>]
- EL ναφθα (πετρελαιο), αλυσταγμένη ελαφρά καταλυτικά πυρολυμένη. Ελαφρά ναφθα από καταλυτική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παραγεται με την απόσπαση προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> έως και C<sub>12</sub>]
- EN Naphtha (petroleum), catalytic cracked light distd., Low boiling point cat-cracked naphtha  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>12</sub>]
- FR naphtha distillé léger (pétrole), craquage catalytique Naphtha de craquage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme C<sub>1</sub>-C<sub>12</sub>]
- IT nafta (petrolio), distillato leggero di cracking catalitico, Nafta di cracking catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>12</sub>]
- NL nafta (aardolie), katalytisch gekraakte gedestilleerde lichte Katalytisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van producten van een katalytisch kraakproces. Bestaat uit koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>12</sub>]
- PT nafta (petróleo), fracção leve do cracking catalítico Nafta de « cracking » catalítico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de C<sub>1</sub> até C<sub>12</sub>]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

Xn; R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45- 65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 91995-50-5

EEC No 295-311-3

No 649-293-00-2

NOTA H

NOTA P

- ES destilados (petróleo), derivados del craqueo a vapor de nafta, fracciones aromaticas ligeras tratadas con hidrógeno Nafta craqueada cataliticamente de baja temperatura de inflamación [Combinación compleja de hidrocarburos obtenida por el tratamiento del desulado ligero de nafta craqueada a vapor Compuesta en su mayor parte de hidrocarburos aromáticos]
- DA destillater (råolie), naphtha-, dampkrakningsudvundne, hydrogenbehandlede lette aromatiske, Lavtkogende katalytisk krakket nafta [En sammensat blanding af carbonhydrider opnået ved at behandle et let destillat fra dampkrakket naphtha Den består overvejende af aromatiske carbonhydrider.]
- DE Destillate (Erdöl), aus Naphtha Dampfkracken erhalten, mit Wasserstoff behandelte leichte aromatische Katkrack-naphtha, niedrig siedend [Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln eines leichten Destillates aus dampfgekrackter Naphtha erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen.]
- EL αποστάγματα (πετρελαίου), παράγωγα ατμοπυρόλυσης ναφθας, ελαφρά αρωματικά κατεργασμένα με υδρογόνο Ελαφρά ναφθα από καταλυτική διάσπαση [Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία ελαφρού αποσταγματος από ατμοπυρολυμένη ναφθα Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες]
- EN Distillates (petroleum), naphtha steam cracking-derived, hydrotreated light arom Low boiling point cat-cracked naphtha. [A complex combination of hydrocarbons obtained by treating a light distillate from steam-cracked naphtha It consists predominantly of aromatic hydrocarbons]
- FR distillats aromatiques légers (petrole), derives de vapocraquage de naphtha, hydrotraites Naphtha de craquage catalytique a point d'ébullition bas [Combinaison complexe d'hydrocarbures obtenue en traitant un distillat léger dérive de naphtha de vapocraquage Se compose principalement d'hydrocarbures aromatiques]
- IT distillati (petrolio), derivati da cracking con vapore di nafta, aromatici leggeri da idrotrattamento Nafta di cracking catalitico con basso punto di ebollizione [Combinazione complessa di idrocarburi ottenuti per trattamento di un distillato leggero da nafta crackizzata a vapore È costituita prevalentemente da idrocarburi aromatici]
- NL destillaten (aardolie), van het stoomkraken van nafta afkomstige, waterstofbehandelde aromatische lichte Katalytisch gekraakte nafta met laag kookpunt [Een complexe verzameling koolwaterstoffen die wordt verkregen door het behandelen van een licht destillaat uit stoomgekraakte nafta. Bestaat voornamelijk uit aromatische koolwaterstoffen]
- PT destilados (petróleo), derivados do steam-cracking da nafta, aromaticos leves tratados com hidrogenio Nafta de «cracking» catalítico de baixo ponto de ebulição [Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de um destilado leve do steam-cracking da nafta É constituída predominantemente por hidrocarbonetos aromaticos]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R: 45-65</p> <p>S: 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C 0 ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 92045-50-6

EEC No 295-431-6

No 649-294-00-8

NOTA.H


NOTA P

- ES nafta (petroleo), fracción pesada craqueada catalíticamente, desazufrada, Nafta craqueada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida sometiendo un destilado del petróleo craqueado catalíticamente a un proceso de desazufrado para transformar los mercaptanos o separar impurezas ácidas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 60 °C a 200 °C]
- DA naphtha (råolie), tung katalytisk krakket, sweetenet Lavtkogende katalytisk krakket nafta  
[En sammensat blanding af carbonhydrier opnået ved at underkaste et katalytisk krakket råoliedestillat en sweeteningproces for at omdanne mercaptaner eller fjerne sure urenheder Den består overvejende af carbonhydrier, overvejende  $C_6$  til og med  $C_{12}$ , med koginterval omtrent fra 60 °C til 200 °C]
- DE Naphtha (Erdöl), schwere katalytisch gekrackte, gesüßt Katkracknaphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man erhält, wenn man ein katalytisch gekracktes Erdöldestillat einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verunreinigungen aussetzt Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 60 °C bis 200 °C]
- EL ναφθα (πετρελαίου), βαρειά καταλυτικά πυρολυμένη, γλυκασμένη Ελαφρά ναφθα από καταλυτική διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται όταν υποβάλλεται καταλυτικά πυρολυμένο αποστάγμα πετρελαίου σε γλύκανση για να μετατραπούν οι μερκαπτανες ή να απομακρυνθούν οι όξινες προσμίξεις Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{12}$  και βράζει στην περιοχή από 60 °C έως 200 °C περίπου]
- EN Naphtha (petroleum), heavy catalytic cracked, sweetened Low boiling point cat-cracked naphtha  
[A complex combination of hydrocarbons obtained by subjecting a catalytic cracked petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$  and boiling in the range of approximately 60 °C to 200 °C (140 °F to 392 °F)]
- FR naphtha lourde de craquage catalytique (petrole), adouci Naphtha de craquage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue en soumettant un distillat pétrolier de craquage catalytique a un procédé d'adoucissement destiné a convertir les mercaptans ou a éliminer les impuretés acides Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_6$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 60 °C et 200 °C]
- IT nafta (petrolio), pesante crackizzata cataliticamente, addolcita Nafta di cracking catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta sottoponendo un distillato di petrolio crackizzato cataliticamente ad un processo di addolcimento per trasformare i mercaptani o per eliminare le impurezze acide È costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$  e con punto di ebollizione nell'intervallo 60 °C-200 °C ca.]
- NL nafta (aardolie), zware katalytisch gekraakte, stankvrij gemaakt, Katalytisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het onderwerpen van een katalytisch gekraakt aardoliedestillaat aan een stankverwijderingsproces om mercaptanen om te zetten of zure onzuiverheden te verwijderen Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 60 °C tot 200 °C]
- PT nafta (petróleo), pesada do cracking catalítico, tratada (sweetened) Nafta de « cracking » catalítico de baixo ponto de ebulição.  
[Uma combinação complexa de hidrocarbonetos obtida submetendo um destilado petrolífero do cracking catalítico a um processo de sweetening para conversão de mercaptanos ou remoção de impurezas ácidas É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{12}$ , e destila no intervalo de aproximadamente 60 °C a 200 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn , R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T, R 45-65
$0.1 \% \leq C < 10 \%$	T: R 45

NOTA 4

Cas No 92045 19-5

EEC No 295-441-0

No 649-295-00-3

NOTA H

NOTA P

- ES nafta (petróleo), fracción ligera craqueada catalíticamente y desazufrada, Nafta craqueada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida sometiendo nafta de un proceso de craqueo catalítico a un proceso de desazufrado para transformar mercaptanos o separar impurezas ácidas. Compuesta en su mayor parte de hidrocarburos con un intervalo de ebullición aproximado de 35 °C a 210 °C]
- DA naphtha (råolie), let katalytisk krakket sweetenet Lavtkogende katalytisk krakket nafta  
[En sammensat blanding af carbonhydrier opnået ved at underkaste naphtha fra en katalytisk krakningsproces en sweetening-proces for at omdanne mercaptaner eller fjerne sure urenheder. Den består overvejende af carbonhydrider med kogesinterval omtrent fra 35 °C til 210 °C]
- DE Naphtha (Erdöl), leichte katalytisch gekrackte gesüßte Katkracknaphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man erhält, wenn man Naphtha aus einem katalytischen Krackverfahren einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verunreinigungen aussetzt. Besteht vorherrschend aus Kohlenwasserstoffen, die im Bereich von etwa 35 °C bis 210 °C siedend]
- EL ναφθα (πετρέλαιο), ελαφρά καταλυτικά πυρόλυμένη γλυκασμένη Ελαφρά ναφθα από καταλυτική διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται όταν ναφθα από καταλυτική πυρόλυση υποβάλλεται σε ναύκανση για να μετατραπουν οι μερκαπτάνες ή να απομακρυνθούν οι όξινες προσμίξεις. Συνίσταται κυρίως από υδρογονανθράκες με περιοχή βρασμού από 35 °C έως 210 °C περίπου]
- EN Naphtha (petroleum), light catalytic cracked sweetened Low boiling point cat-cracked naphtha  
[A complex combination of hydrocarbons obtained by subjecting naphtha from a catalytic cracking process to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of hydrocarbons boiling in a range of approximately 35 °C to 210 °C (95 °F to 410 °F)]
- FR naphtha léger de craquage catalytique (pétrole), adouci Naphta de craquage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue en soumettant du naphtha issu d'un craquage catalytique a un procédé d'adoucissement destiné a convertir les mercaptans ou a éliminer les impuretés acides. Se compose principalement d'hydrocarbures dont le point d'ébullition est compris approximativement entre 35 °C et 210 °C]
- IT nafta (petrolio), leggera crackizzata cataliticamente addolcita Nafta di cracking catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta sottoponendo nafta da un processo di cracking catalitico ad un processo di addolcimento per trasformare i mercaptani o per eliminare le impurezze acide. È costituita prevalentemente da idrocarburi con punto di ebollizione nell'intervallo 35 °C-210 °C ca.]
- NL nafta (aardolie), lichte katalytisch gekraakte stankvrij gemaakte, Katalytisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het onderwerpen van nafta uit een katalytisch kraakproces aan een stankverwijderingsproces waarbij mercaptanen worden omgezet of zure onzuiverheden worden verwijderd. Bestaat voornamelijk uit koolwaterstoffen, met een kooktraject van ongeveer 35 °C tot 210 °C.]
- PT nafta (petróleo), leve tratada (sweetened) do cracking catalítico Nafta de « cracking » catalítico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida submetendo nafta de um processo de cracking catalítico a um processo de sweetening para converter mercaptanos ou remover impurezas ácidas. É constituída predominantemente por hidrocarbonetos que destilam no intervalo de aproximadamente 35 °C a 210 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια σύγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10%	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 92128-94-4

EEC No 295-794-0

No 649-296-00-9

NOTA H  
NOTA P


- ES hidrocarburos,  $C_{8-12}$ , craqueo catalítico, neutralizados químicamente, Nafta craqueada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la destilación de una fracción del proceso de craqueo catalítico, habiendo sido sometida a un lavado alcalino. Compuesta en su mayor parte de hidrocarburos con un número de carbonos dentro del intervalo de  $C_8$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 130 °C a 210 °C.]
- DA carbonhydnder,  $C_{8-12}$ , katalytisk krakning, kemisk neutraliserede, Løtløgende katalytisk krakket nafta  
[En sammensat blanding af carbonhydnder fremskullet ved destillationen af en fraktion, fra den katalytiske krakningsproces, der er undergået en alkalisk vask. Den består overvejende af carbonhydnder, overvejende  $C_8$  til og med  $C_{12}$ , med kogesinterval omtrent fra 130 °C til 210 °C.]
- DE Kohlenwasserstoffe,  $C_{8-12}$ , katalytisches Kracken, chemisch neutralisiert, Katkracknaphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation eines Schnittes aus dem katalytischen Krackverfahren erhält, der einer alkalischen Wäsche unterzogen wurde. Besteht vorwiegend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{12}$  und siedet im Bereich von etwa 130 °C bis 210 °C.]
- EL υδρογονάνθρακες  $C_{8-12}$ , καταλυτικής πυρόλυσης, χημικώς εξουδετερωμένοι. Ελαφρά νάφθα από καταλυτική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσπαση κλάσματος καταλυτικής πυρόλυσης, και το οποίο έχει υποστεί έκπλυση με αλκαλι. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_8$  και  $C_{12}$ , και βράζει στην περιοχή από 130 °C έως 210 °C περίπου.]
- EN Hydrocarbons,  $C_{8-12}$ , catalytic-cracking, chem. neutralized, Low boiling point cat-cracked naphtha  
[A complex combination of hydrocarbons produced by the distillation of a cut from the catalytic cracking process, having undergone an alkaline washing. It consists predominantly of hydrocarbons having carbon numbers in the range of  $C_8$  through  $C_{12}$  and boiling in the range of approximately 130 °C to 210 °C (266 °F to 410 °F).]
- FR hydrocarbures en  $C_{8-12}$  de craquage catalytique, neutralisés chimiquement, Naphta de craquage catalytique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation d'une coupe issue d'un craquage catalytique ayant subi un lavage alcalin. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_8$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 130°C et 210°C.]
- IT idrocarburi,  $C_{8-12}$ , da cracking catalitico, neutralizzati chimicamente, Nafta di cracking catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta dalla distillazione di un taglio dal processo di cracking catalitico, dopo esser stata sottoposta a lavaggio alcalino. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_8$ - $C_{12}$ , e punto di ebollizione nell'intervallo 130 °C - 210 °C ca.]
- NL koolwaterstoffen,  $C_{8-12}$ , katalytisch kraken, chemisch geneutraliseerd, Katalytisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van een fractie uit het katalytische kraakproces, welke een alkalische spoeling heeft ondergaan. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 130°C tot 210°C.]
- PT hidrocarbonetos,  $C_{8-12}$ , do cracking catalítico, neutralizados químicamente, Nafta de «cracking» catalítico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de uma fracção de processo de cracking catalítico, que foi submetida a uma lavagem alcalina. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono na gama de  $C_8$  a  $C_{12}$ , e destila no intervalo de aproximadamente 130°C a 210°C.]



*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Clasificación, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 22
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 101794-97-2

EEC No 309-974-4

No 649-297-00-4

NOTA H


NOTA P

- ES: hidrocarburos,  $C_{8-12}$ , destilados de craqueador catalítico; Nafta craqueada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por destilación de productos de un proceso de craqueo catalítico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{12}$ , y con un intervalo de ebullición aproximado de 140 °C a 210 °C.]
- DA: carbonhydrier,  $C_{8-12}$ , katalytisk krakket, destillater; Lavtkogende katalytisk krakket nafta  
[En sammensat blanding af carbonhydrier opnået ved destillation af produkter fra en katalytisk krakningsproces. Den består overvejende af carbonhydrier, overvejende  $C_8$  til og med  $C_{12}$ , med kogeinterval omtrent fra 140 °C til 210 °C.]
- DE: Kohlenwasserstoffe,  $C_{8-12}$ , katalytische Krackerdestillate; Katkracknaphtha, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von Produkten aus einem katalytischen Krackverfahren erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{12}$  und siedet im Bereich von etwa 140 °C bis 210 °C.]
- EL: υδρογονάνθρακες  $C_{8-12}$ , αποστάγματα μονάδας καταλυτικής πυρόλυσης; Ελαφρά νάφθα από καταλυτική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη προϊόντων καταλυτικής πυρόλυσης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  έως και  $C_{12}$  και με περιοχή βρασμού από 140 °C έως 210 °C περίπου.]
- EN: Hydrocarbons,  $C_{8-12}$ , catalytic cracker distillates; Low boiling point cat-cracked naphtha  
[A complex combination of hydrocarbons obtained by distillation of products from a catalytic cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{12}$  and boiling in the range of approximately 140 °C to 210 °C (284 °F to 410 °F).]
- FR: hydrocarbures en  $C_{8-12}$ , distillats de craquage catalytique; Naphta de craquage catalytique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 140 °C et 210 °C.]
- IT: idrocarburi,  $C_{8-12}$ , distillati da cracking catalitico; Nafta di cracking catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti da un processo di cracking catalitico. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{12}$  e punto di ebollizione nell'intervallo 140 °C-210 °C ca.]
- NL: koolwaterstoffen,  $C_{8-12}$ , destillaten uit katalytische kraker; Katalytisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van produkten uit een katalytisch kraakproces. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 140 °C tot 210 °C.]
- PT: hidrocarbonetos  $C_{8-12}$ , destilados do cracker catalítico; Nafta de « cracking » catalítico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por destilação de produtos de um processo de cracking catalítico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_8$  até  $C_{12}$  e destila no intervalo de aproximadamente 140 °C a 210 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

Cas No 101896-28-0

EEC No 309-987-5

No 649-298-00-X

NOTA H  
NOTA P

- ES: hidrocarburos,  $C_{8-12}$ , craqueo catalítico, neutralizados químicamente, desazufrados; Nafta craqueda catalíticamente de baja temperatura de inflamación
- DA: carbonhydridrer,  $C_{8-12}$ , katalytisk kraknings-, kemisk neutraliserede, befriede for svovl; Lavtkogende katalytisk krakket nafta
- DE: Kohlenwasserstoffe,  $C_{8-12}$ , katalytisches Kracken, chemisch neutralisiert, gesüßt; Katkracknaphtha, niedrig siedend
- EL: υδρογονάνθρακες,  $C_{8-12}$ , καταλυτικής πυρόλυσης, χημικώς εξουδετερωμένοι, γλυκασμένοι; Ελαφρά νάφθα από καταλυτική διάσπαση
- EN: Hydrocarbons,  $C_{8-12}$ , catalytic cracking, chem. neutralized, sweetened; Low boiling point cat-cracked naphtha
- FR: hydrocarbures en  $C_{8-12}$ , craquage catalytique, neutralisation chimique, adoucissement; Naphta de craquage catalytique à point d'ébullition bas
- IT: idrocarburi,  $C_{8-12}$ , da cracking catalitico, neutralizzati chimicamente, addolciti; Nafta di cracking catalitico con basso punto di ebollizione
- NL: koolwaterstoffen,  $C_{8-12}$ , katalytisch gekraakt, chemisch geneutraliseerd, stankvrij gemaakt; Katalytisch gekraakte nafta met laag kookpunt
- PT: hidrocarbonetos,  $C_{8-12}$ , do cracking catalítico, neutralizados químicamente, tratados (sweetened); Nafta de « cracking » catalítico de baixo ponto de ebulição

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45 Xn; R 65

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R: 45-65
	S: 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 10 \%$	T; R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

Cas No 64741-63-5

EEC No 265-065-1

No 649-299-00-5

NOTA H

NOTA P

- ES : nafta (petróleo), fracción ligera reformada catalíticamente ; Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida de la destilación de productos de un proceso de reformado catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 35 °C a 190 °C. Contiene una proporción relativamente grande de hidrocarburos aromáticos de cadena ramificada. Esta corriente contiene un 10% en volumen o más de benceno]
- DA : naphtha (råolie), let katalytisk reformeret ; Lavkogende katalytisk reformeret nafta  
[En sammensat blanding af carbonhydnder fremstillet fra destillation af produkterne fra en katalytisk reformeringsproces. Den består af carbonhydnder, overvejende  $C_7$  til og med  $C_{11}$ , med kogesinterval omtrent fra 35 °C til 190 °C. Den indeholder en forholdsvis stor del aromatiske og forgrenede carbonhydnder. Denne strøm kan indeholde 10 volumenprocent, eller mere, benzen.]
- DE : Naphtha (Erdöl), leichte katalytisch gekrackte ; Reformat  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Reformingverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{11}$  und siedet im Bereich von etwa 35°C bis 190°C. Enthält eine relativ große Menge aromatischer Kohlenwasserstoffe und Kohlenwasserstoffe mit verzweigter Kette. Dieser Lauf kann 10 Gewichtsprozent oder mehr Benzol enthalten]
- EL : ναφθα (πετρελαίου), ελαφρά καταλυτικά αναμορφωμένη ; Ελαφρά νάφθα από καταλυτική διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται από την αποσταξη προϊόντων καταλυτικής αναμόρφωσης. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  έως και  $C_{11}$ , και με περιοχή βρασμού από 35 °C έως 190 °C περίπου. Περιέχει σχετικά μεγάλη αναλογία αρωματικών και διακλαδισμένης αλυσού υδρογονανθράκων. Το ρεύμα αυτό μπορεί να περιέχει 10 % κατ' όγκον ή περισσότερο βενζόλιο.]
- EN : Naphtha (petroleum), light catalytic reformed ; Low boiling point cat-reformed naphtha  
[A complex combination of hydrocarbons produced from the distillation of products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{11}$  and boiling in the range of approximately 35 °C to 190 °C (95 °F to 374 °F). It contains a relatively large proportion of aromatic and branched chain hydrocarbons. This stream may contain 10 vol. % or more benzene]
- FR : naphtha léger (pétrole), reformage catalytique ; Naphta de reformage catalytique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un reformage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_7$ - $C_{11}$  et dont le point d'ébullition est compris approximativement entre 35°C et 190°C. Renferme une proportion relativement importante d'hydrocarbures aromatiques et d'hydrocarbures à chaîne ramifiée. Peut contenir 10 % ou plus, en volume, de benzène.]
- IT : nafta (petrolio), frazioni leggere di reforming catalitico ; Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di reforming catalitico. E' costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{11}$  e punto di ebollizione nell'intervallo 35 °C - 190 °C ca. Contiene una percentuale relativamente alta di idrocarburi a catena ramificata. Questo taglio di distillazione può contenere il 10% o più di benzolo in volume.]
- NL : nafta (aardolie), licht katalytisch gereformeerd ; Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van producten van een katalytisch reformeringsproces. Bestaat uit koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 35°C tot 190°C. Bevat een relatief groot deel aromatische en vertakte koolwaterstoffen. Deze stroom kan 10 of meer volumepercenten benzeen bevatten.]
- PT : nafta (petróleo), leve do reforming catalítico ; Reformado  
[Uma combinação complexa de hidrocarbonetos produzida a partir da destilação de produtos de um processo de reforming catalítico. E é constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_7$  ate  $C_{11}$ , e destila no intervalo de aproximadamente 35°C a 190°C. Contém uma proporção relativamente elevada de hidrocarbonetos aromáticos e de cadeia ramificada. Esta fracção pode conter 10% em volume ou mais de benzeno]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat 2 ; R 45      Xn ; R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="365 468 389 495" data-label="Text">T</div> <div data-bbox="333 517 426 611" data-label="Image"> </div> <div data-bbox="935 519 1048 548" data-label="Text">R : 45-65</div> <div data-bbox="935 573 1048 600" data-label="Text">S : 53-45</div>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 64741-68-0

EEC No 265-070-9

No 649-300-00-9


NOTA H  
NOTA P

- ES nafta (petróleo), fracción pesada reformada catalíticamente, Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida de la destilación de productos de un proceso de reformado catalítico. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>9</sub> a C<sub>12</sub> y con un intervalo de ebullición aproximado de 90 °C a 230 °C.]
- DA naphtha (råolie), tung katalytisk reformeret Lavtkogende katalytisk reformeret nafta  
[En sammensat blanding af carbonhydrier fremstillet ved destillation af produkterne fra en katalytisk reformeringsproces. Den består af overvejende aromatiske carbonhydrier, overvejende C<sub>9</sub> til og med C<sub>12</sub>, med koginterval omtrent fra 90 °C til 230 °C]
- DE Naphtha (Erdöl), schwere katalytisch reformierte, Reformat  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt aus der Destillation von Produkten aus einem katalytischen Reformingverfahren. Besteht aus vorherrschend aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>9</sub> bis C<sub>12</sub> und siedet im Bereich von etwa 90 °C bis 230 °C.]
- EL ναφθα (πετρέλαιο), βαριά καταλυτικά αναμορφωμένη. Ελαφρά ναφθα αναμορφωμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται από την απόσταξη προϊόντων καταλυτικής αναμόρφωσης. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>9</sub> έως και C<sub>12</sub> και με περιοχή βρασμού από 90 °C έως 230 °C περίπου.]
- EN Naphtha (petroleum), heavy catalytic reformed Low boiling point cat-reformed naphtha  
[A complex combination of hydrocarbons produced from the distillation of products from a catalytic reforming process. It consists of predominantly aromatic hydrocarbons having numbers predominantly in the range of C<sub>9</sub> through C<sub>12</sub> and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F)]
- FR naphtha lourde (pétrole), reformage catalytique, Naphta de reformage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un reformage catalytique. Se compose d'hydrocarbures en majeure partie aromatiques dont le nombre de carbones se situe principalement dans la gamme C<sub>9</sub>-C<sub>12</sub> et dont le point d'ébullition est compris approximativement entre 90 °C et 230 °C.]
- IT nafta (petrolio), frazioni pesanti di reforming catalitico Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di prodotti provenienti da un processo di reforming catalitico. È costituita da idrocarburi prevalentemente aromatici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>9</sub>-C<sub>12</sub> e punto di ebollizione nell'intervallo 90 °C-230 °C ca.]
- NL nafta (aardolie), zwaar katalytisch gereformeerd Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van producten van een katalytisch reformeringsproces. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend C<sub>9</sub> tot en met C<sub>12</sub>, met een kooktraject van ongeveer 90 °C tot 230 °C.]
- PT nafta (petróleo), pesada do reforming catalítico Reformado  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de reforming catalítico. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de C<sub>9</sub> até C<sub>12</sub> e destila no intervalo de aproximadamente 90 °C a 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45	Xn : R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentració, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4



Cas No 68475-79-6

EEC No 270-660-4

No 649-301-00-4

NOTA H

NOTA P

- ES: destilados (petróleo), despentanizador para el reformado catalítico; Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos de la destilación de productos de un proceso de reformado catalítico. Compuesta fundamentalmente de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$  y con un intervalo de ebullición aproximado de  $-49\text{ }^{\circ}\text{C}$  a  $63\text{ }^{\circ}\text{C}$ .]
- DA: destillater (råolie), katalytisk reformerede depentanizer; Lavtkogende katalytisk reformeret nafta  
[En sammensat blanding af carbonhydrider fra destillationen af produkterne fra en katalytisk reformeringsproces. Den består overvejende af aliphatiske carbonhydrider, overvejende  $C_1$  til og med  $C_6$ , med kogesinterval omtrent fra  $-49\text{ }^{\circ}\text{C}$  til  $63\text{ }^{\circ}\text{C}$ .]
- DE: Destillate (Erdöl), katalytisch reformierter Depentanizer; Reformat  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem katalytischen Reformingverfahren. Besteht vorherrschend aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$  und siedet im Bereich von etwa  $-49\text{ }^{\circ}\text{C}$  bis  $63\text{ }^{\circ}\text{C}$ .]
- EL: αποσταγμάτα (πετρελαίου), καταλυτικά αναμορφωμένα αποπεντανιωτήρα· Ελαφρά νάφθα αναμορφωμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη προϊόντων καταλυτικής αναμόρφωσης. Συνίσταται κυρίως από αλειφατικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  έως και  $C_6$  και με περιοχή βρασμού από  $-49\text{ }^{\circ}\text{C}$  έως  $63\text{ }^{\circ}\text{C}$  περίπου.]
- EN: Distillates (petroleum), catalytic reformed depentanizer; Low boiling point cat-reformed naphtha  
[A complex combination of hydrocarbons from the distillation of products from a catalytic reforming process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$  and boiling in the range of approximately  $-49\text{ }^{\circ}\text{C}$  to  $63\text{ }^{\circ}\text{C}$  ( $-57\text{ }^{\circ}\text{F}$  to  $145\text{ }^{\circ}\text{F}$ ).]
- FR: distillats (pétrole), dépentaniseur de reformage catalytique; Naphta de réformage catalytique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un reformage catalytique. Se compose principalement d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ - $C_6$  et dont le point d'ébullition est compris approximativement entre  $-49\text{ }^{\circ}\text{C}$  et  $63\text{ }^{\circ}\text{C}$ .]
- IT: distillati (petrolio), dal depentanizzatore di reforming catalitico; Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di prodotti provenienti da un processo di reforming catalitico. È costituita principalmente da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$  e punto di ebollizione nell'intervallo da  $-49\text{ }^{\circ}\text{C}$  a  $63\text{ }^{\circ}\text{C}$  ca.]
- NL: destillaten (aardolie), katalytisch gereformeerde depentanisor; Katalytisch-veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen afkomstig uit de destillatie van producten uit een katalytisch reformeringsproces. Bestaat voornamelijk uit alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ , met een kooktraject van ongeveer  $-49\text{ }^{\circ}\text{C}$  tot  $63\text{ }^{\circ}\text{C}$ .]
- PT: destilados (petróleo), do despentanizador de produtos do reforming catalítico; Reformado  
[Uma combinação complexa de hidrocarbonetos da destilação de produtos de um processo de reforming catalítico. É constituída predominantemente por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$ , e destila no intervalo de aproximadamente  $-49\text{ }^{\circ}\text{C}$  a  $63\text{ }^{\circ}\text{C}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kennmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentration, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0.1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68476-47-1

EEC No 270-687-1

No 649-302-00-X

NOTA H  
NOTA P


- ES: hidrocarburos, C<sub>6</sub>, C<sub>6-8</sub> del reformador catalítico, Nafta reformada catalíticamente de baja temperatura de inflamación
- DA: carbonhydrid, C<sub>6</sub>-, C<sub>6-8</sub>-katalytisk reformer; Lavtkogende katalytisk reformeret nafta
- DE: Kohlenwasserstoffe, C<sub>2-6</sub>-, C<sub>6-8</sub>-katalytisch reformiert, Reformat
- EL: υδρογονανθρακες, C<sub>2-6</sub>, C<sub>6-8</sub> καταλυτικού αναμορφωτή. Ελαφρά νάφθα αναμορφωμένη
- EN: Hydrocarbons, C<sub>6</sub>-, C<sub>6-8</sub> catalytic reformer; Low boiling point cat-reformed naphtha
- FR: hydrocarbures en C<sub>6</sub>-, reformage catalytique en C<sub>6-8</sub>, Naphta de reformage catalytique à point d'ébullition bas
- IT: idrocarburi, C<sub>2-6</sub>, C<sub>6-8</sub> da reforming catalitico di C<sub>6-8</sub>, Nafta di reforming catalitico con basso punto di ebollizione
- NL: koolwaterstoffen, C<sub>6</sub>-, verkregen uit C<sub>2-6</sub>-, katalytische reformator, Katalytisch veredelde nafta met laag kookpunt
- PT: hidrocarbonetos, C<sub>6</sub>-, reforming catalítico de C<sub>6-8</sub>, Reformado

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2, R 45

Xn, R 65

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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Límites de concentración, Koncentrationsgrænser, Konzentration-grenzwerte, Όρια συγκέντρωσης, Concentration limits

Límites de concentración, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68478-15-9

EEC No 270-794-3

No 649-303-00-5

NOTA H

NOTA P

- ES residuos (petróleo), reformador catalítico de  $C_{6-8}$ , Nafta reformada catalíticamente de baja temperatura de inflamación  
[Residuo complejo del reformado catalítico de una alimentación de  $C_{6-8}$ . Compuesto de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_8$ .]
- DA refter (råolie),  $C_{6-8}$ -katalytisk reformer-, Lavtkogende katalytisk reformeret nafta  
[En sammensat remanens fra den katalytiske reformering af  $C_{6-8}$ -føde. Den består af carbonhydrier, overvejende  $C_7$  til og med  $C_8$ .]
- DE Rückstände (Erdöl),  $C_{6-8}$ -katalytische Reformer Reformat  
[Komplexer Rückstand aus dem katalytischen Reforming von  $C_{6-8}$ -Beschickung. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_8$ .]
- EL υπολείμματα (πετρελαίου), μονάδας καταλυτικής αναμόρφωσης  $C_{6-8}$ , Ελαφρά ναφθα αναμορφωμένη  
[Πολύπλοκο υπόλειμμα από την καταλυτική αναμόρφωση πρώτης ύλης  $C_{6-8}$ . Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  έως και  $C_8$ .]
- EN Residues (petroleum),  $C_{6-8}$  catalytic reformer Low boiling point cat-reformed naphtha  
[A complex residuum from the catalytic reforming of  $C_{6-8}$  feed. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_8$ .]
- FR résidu (pétrole), reformage catalytique de charges en  $C_{6-8}$ , Naphta de reformage catalytique a point d'ébullition bas  
[Résidu complexe du reformage catalytique de charges en  $C_{6-8}$ . Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_7$ - $C_8$ .]
- IT residui (petrolio), dal reforming catalitico di  $C_{6-8}$ , Nafta di reforming catalitico con basso punto di ebollizione  
[Residuo complesso del reforming catalitico di una carica  $C_{6-8}$ . È costituito da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_8$ .]
- NL residuen (aardolie), katalytische  $C_{6-8}$ -reformer Katalytisch veredelde nafta met laag kookpunt  
[Een complex residu, afkomstig uit de katalytische reformering van  $C_{6-8}$ -grondstof. Bestaat uit koolwaterstoffen, overwegend  $C_7$  tot en met  $C_8$ .]
- PT resíduos (petróleo), do reformer catalítico de uma carga em  $C_{6-8}$ , Reformado  
[Um residuo complexo do reforming catalítico de uma carga em  $C_{6-8}$ . É constituído por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_7$  ate  $C_8$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificação, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*

$C \geq 10 \%$	T : R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

Cas No 68513-03-1

EEC No 270-993-5

No 649-304-00-0

NOTA H

NOTA P

- ES : nafta (petróleo), fracción ligera reformada catalíticamente, libre de aromáticos ; Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida de la destilación de productos de un proceso de reformado catalítico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_9$ , y con un intervalo de ebullición aproximado de 35 °C a 120 °C. Contiene una proporción relativamente grande de hidrocarburos de cadena ramificada con los componentes aromáticos separados.]
- DA : naphtha (råolie), let katalytisk reformeret, aromatfri ; Lavtkogende katalytisk reformeret nafta  
[En sammensat blanding af carbonhydrier opnået ved destillationen af produkterne fra en katalytisk reformeringsproces. Den består overvejende af carbonhydrier, overvejende  $C_4$  til og med  $C_9$ , med koginterval omtrent fra 35 °C til 120 °C. Den indeholder en forholdsvis stor del forgrenede carbonhydrier, hvorfra de aromatiske komponenter er fjernet.]
- DE : Naphtha (Erdöl), leichte katalytisch reformierte, Aromaten-frei ; Reformat  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem katalytischen Reformingverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_9$  und siedet im Bereich von etwa 35 °C bis 120 °C. Enthält eine relativ große Menge, von aromatischen Bestandteilen befreite, Kohlenwasserstoffe mit verzweigter Kette.]
- EL : ναφθα (πετρελαίου), ελαφρά καταλυτικά αναμορφωμένη, απαλλαγμένη από αρωματικά ; Ελαφρά νάφθα αναμορφωμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από απόσταξη προϊόντων από καταλυτική αναμόρφωση. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_9$  και με περιοχή βρασμού από 35 °C έως 120 °C περίπου. Περιέχει σχετικά μεγάλη αναλογία διακλαδισμένων υδρογονανθράκων με το αρωματικό συστατικό να έχει απομακρυνθεί.]
- EN : Naphtha (petroleum), light catalytic reformed, arom.-free ; Low boiling point cat-reformed naphtha  
[A complex combination of hydrocarbons obtained from distillation of products from a catalytic reforming process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_9$  and boiling in the range of approximately 35 °C to 120 °C (95 °F to 248 °F). It contains a relatively large proportion of branched chain hydrocarbons with the aromatic components removed.]
- FR : naphtha léger de reformage catalytique (pétrole), désaromatisé ; Naphtha de reformage catalytique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un reformage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_9$  et dont le point d'ébullition est compris approximativement entre 35 °C et 120 °C. Contient une proportion relativement importante d'hydrocarbures à chaînes ramifiées dont les composants aromatiques ont été éliminés.]
- IT : nafta (petrolio), taglio leggero di reforming catalitico, privi di composti aromatici ; Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta per distillazione dei prodotti provenienti da un processo di reforming catalitico. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_9$  e punto di ebollizione nell'intervallo 35 °C-120 °C ca. Contiene una percentuale relativamente alta di idrocarburi a catena ramificata dai quali sono stati separati i componenti aromatici.]
- NL : nafta (aardolie), lichte katalytisch gereformeerde, aromaat-vrij ; Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van producten uit een katalytisch reformeringsproces. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_9$ , met een kooktraject van ongeveer 35 °C tot 120 °C. Bevat een relatief grote hoeveelheid vertakte koolwaterstoffen waarbij de aromatische bestanddelen zijn verwijderd.]
- PT : nafta (petróleo), leve do reforming catalítico, sem aromáticos ; Reformado  
[Uma combinação complexa de hidrocarbonetos obtida da destilação dos produtos de um processo de reforming catalítico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_9$  e destila no intervalo de aproximadamente 35 °C a 120 °C. Contém uma proporção relativamente elevada de hidrocarbonetos de cadeia ramificada de que foram removidos os componentes aromáticos.]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classificatiun, Classification, Classificação, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68513-63-3

EEC, No 271-008-1

No 649-305-00-6

NOTA H

NOTA P

- ES** destilados (petróleo), productos de cabeza de nafta de primera destilación reformada catalíticamente ; Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por el reformado catalítico de nafta de primera destilación seguida del fraccionamiento del effluente total. Compuesta de hidrocarburos alifáticos saturados con un numero de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$ .]
- DA** destillater (råolie), katalytisk reformeret straight-run naphtha topfraktioner , Lavtkogende katalytisk reformeret nafta  
[En sammensat blanding af carbonhydrider opnået ved den katalytiske reformering af straight-run naphtha, efterfulgt af fraktionering af det totale udløb. Den består af mættede, aliphatiske carbonhydrider, overvejende  $C_1$  til og med  $C_6$ .]
- DE** Destillate (Erdöl), katalytisch reformierte straight-run Naphtha Kopf ; Reformat  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch katalytisches Reformieren von straight-run Naphtha, gefolgt durch Fraktionierung des gesamten Ausflusses. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$ .]
- EL** αποσταγματα (πετρελαίου), προϊόντων κορυφής καταλυτικά αναμορφωμένης απευθείας νάφθας. Ελαφρά νάφθα αναμορφωμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με καταλυτική αναμόρφωση απευθείας νάφθας που ακολουθείται από κλασμάτωση του συνόλου της απορροής. Συνίσταται από κορεσμένους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  έως και  $C_6$ .]
- EN** Distillates (petroleum), catalytic reformed straight-run naphtha overheads Low boiling point cat-reformed naphtha  
[A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha followed by the fractionation of the total effluent. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ .]
- FR** distillats (pétrole), reformage catalytique de naphtha de distillation directe, produits de tête , Naphtha de reformage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par reformage catalytique de naphtha de distillation directe, puis fractionnement de la totalité de l'effluent. Se compose d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_1$  -  $C_6$ .]
- IT** : distillati (petrolio), frazioni di testa di nafta di prima distillazione sottoposta a reforming catalitico , Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta con il reforming catalitico di nafta di prima distillazione seguito da frazionamento dell'effluente totale. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$  -  $C_6$ .]
- NL** : destillaten (aardolie), topprodukten van katalytisch gereformeerde door directe fractionering verkregen nafta , Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door de katalytische reformering van door directe fractionering verkregen nafta gevolgd door fractionering van de totale uitstroom. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ .]
- PT** destilados (petróleo), da cabeça do reforming catalítico da nafta de destilação directa Reformado  
[Uma combinação complexa de hidrocarbonetos obtida pelo reforming catalítico da nafta de destilação directa seguido do fraccionamento do effluente total. É constituída por hidrocarbonetos alifáticos saturados com numeros de átomos de carbono predominantemente na gama de  $C_1$  ate  $C_6$ .]



*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T; R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

Cas No 68514-79-4

EEC No 271-058-4

No 649-306-00-1

NOTA H

NOTA P

- ES productos del petroleo, reformados en el hidrorrefinador-powerformer Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida en un proceso en el hidrorrefinador-powerformer y con un intervalo de ebullición aproximado de 27 °C a 210 °C.]
- DA råolieprodukter, hydrofiner-powerformer reformater Lavtkogende katalytisk reformeret nafta  
[Den sammensatte blanding af carbonhydnder, opnået ved en hydrofiner-powerformer-proces, med kogesinterval omtrent fra 27 °C til 210 °C]
- DE Erdölprodukte, Wasserstoffaufbereiter-Katalysereformierter Reformate Reformat  
[Komplexe Kombination von Kohlenwasserstoffen aus einem Wasserstoffaufbereitungs-Katalysereformierverfahren, siedet im Bereich von etwa 27 °C bis 210 °C.]
- EL προϊόντα πετρελαίου, αναμορφωμένα αναμορφωτήρα· Ελαφρά νάφθα αναμορφωμένη  
[Ο πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με διαδικασία αναμόρφωσης και που βράζει στην περιοχή από 27 °C έως 210 °C περίπου]
- EN Petroleum products, hydrofiner-powerformer reformates , Low boiling point cat-reformed naphtha  
[The complex combination of hydrocarbons obtained in a hydrofiner-powerformer process and boiling in a range of approximately 27 °C to 210 °C (80 °F to 410 °F).]
- FR produits pétroliers, reformats *Hydrofining-Powerforming* , Naphta de reformage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par un procédé *Hydrofining-Powerforming*, dont le point d'ébullition varie approximativement entre 27 °C et 210 °C.]
- IT prodotti di petrolio, riformati di powerforming hydrofining Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta in un processo di powerforming-hydrofining con punto di ebollizione nell'intervallo 27 °C - 210 °C ca.]
- NL aardolieprodukten, hydrofiner-powerformer-reformaten , Katalytisch veredelde nafta met laag kookpunt  
[De complexe verzameling koolwaterstoffen, verkregen in een hydrofiner-powerformer-proces, met een kooktraject van ongeveer 27 °C tot 210 °C]
- PT produtos petrolíferos, produtos do processo hydrofiner-powerformer , Reformado  
[A combinação complexa de hidrocarbonetos obtida num processo hydrofiner-powerformer e que destila no intervalo de aproximadamente 27 °C ate 210 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçào*

$C \geq 10 \%$	T ; R 45-65
$0,1 \% \leq C < 10 \%$	T ; R 45

NOTA 4

Cas No 68919-37-9

EEC No 272-895-8

No 649-307-00-7

NOTA H  
NOTA P

- ES** nafta (petróleo), serie completa reformada , Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la destilación de los productos de un proceso de reformado catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 35 °C a 230 °C.]
- DA** naphtha (råolie), full-range reformeret , Lavtkogende katalytisk reformeret nafta  
[En sammensat blanding af carbonhydrider fremstillet ved destillationen af produkterne fra en katalytisk reformeringsproces. Den består af carbonhydrider, overvejende fra  $C_4$  til og med  $C_{12}$ , med kogesinterval omtrent fra 35 °C til 230 °C.]
- DE** Naphtha (Erdöl), gesamte reformierte , Reformat  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Reformingverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{12}$  und siedet im Bereich von etwa 35 °C bis 230 °C.]
- EL** νάφθα (πετρελαιο), αναμορφωμένη πλήρους συστάσης· Ελαφρά νάφθα αναμορφωμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη των προϊόντων καταλυτικής αναμόρφωσης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{12}$  και με περιοχή βρασμού από 35 °C έως 230 °C περίπου]
- EN** Naphtha (petroleum, full-range reformed , Low boiling point cat-reformed naphtha  
[A complex combination of hydrocarbons produced by the distillation of the products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{12}$  and boiling in the range of approximately 35 °C to 230 °C (95 °F to 446 °F).]
- FR** naphtha de reformage (pétrole), large intervalle de distillation , Naphta de reformage catalytique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un reformage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 35 °C et 230 °C.]
- IT** nafta (petrolio), da reforming « full-range » , Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione dei prodotti provenienti da un processo di reforming catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{12}$  e punto di ebollizione nell'intervallo 35 °C - 230 °C ca.]
- NL** nafta (aardolie), totaal bereik gereformeerde , Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van de producten uit een katalytisch reformeringsproces. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{12}$ , en heeft een kooktraject van ongeveer 35 °C tot 230 °C.]
- PT** nafta (petróleo), carga do reforming , Reformado  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de reforming catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{12}$  e destila no intervalo de aproximadamente 35 °C a 230 °C.]

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn , R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68955-35-1

EEC No 273-271-8

No 649-308-00-2

NOTA H

NOTA P

- ES** nafta (petróleo), reformada catalíticamente, Nafta reformada catalíticamente de baja temperatura de inflamación [Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de reformado catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 30 °C a 220 °C. Contiene una proporción relativamente grande de hidrocarburos de cadena ramificada y aromáticos. Esta corriente puede contener un 10 % en volumen o más de benceno.]
- DA** naphtha (råolie), katalytisk reformeret, Lavtkogende katalytisk reformeret nafta [En sammensæt blanding af carbonhydrider fremstillet ved destillationen af produkter fra en katalytisk reformeringsproces. Den består af carbonhydrider, overvejende  $C_6$  til og med  $C_{12}$ , med kogesinterval omtrent fra 30 °C til 220 °C. Den indeholder en relativ stor mængde af aromatiske og forgrenede carbonhydrider. Denne strøm kan indeholde 10 volumenprocent, eller mere, benzen.]
- DE** Naphtha (Erdöl), katalytisch reformiert, Reformat [Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Reformierungsverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 30 °C bis 220 °C. Enthält eine relativ große Menge aromatischer Kohlenwasserstoffe mit verzweigter Kette. Dieser Lauf kann 10 Volumenprozent oder mehr Benzol enthalten.]
- EL** νάφθα (πετρελαίου), καταλυτικά αναμορφωμένη, Ελαφρά νάφθα αναμορφωμένη [Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσταξη προϊόντων από διεργασία καταλυτικής αναμόρφωσης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{12}$  και με περιοχή θρασμού από 30 °C έως 220 °C περίπου. Περιέχει σχετικά μεγάλη αναλογία αρωματικών και διακλαδισμένης αλυσού υδρογονανθράκων. Αυτό το ρεύμα μπορεί να περιέχει 10 % κατ' όγκο ή περισσότερο βενζόλιο.]
- EN** Naphtha (petroleum), catalytic reformed, Low boiling point cat-reformed naphtha [A complex combination of hydrocarbons produced by the distillation of products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$  and boiling in the range of approximately 30 °C to 220 °C (90 °F to 430 °F). It contains a relatively large proportion of aromatic and branched chain hydrocarbons. This stream may contain 10 vol. % or more benzene.]
- FR** naphta de reformage catalytique (pétrole), Naphta de reformage catalytique à point d'ébullition bas [Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un reformage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_6$ - $C_{12}$ , et dont le point d'ébullition est compris approximativement entre 30 °C et 220 °C. Renferme une proportion relativement importante d'hydrocarbures aromatiques et d'hydrocarbures à chaînes ramifiées. Peut contenir 10 % ou plus, en volume, de benzène.]
- IT** nafta (petrolio), da reforming catalitico, Nafta di reforming catalitico con basso punto di ebollizione [Combinazione complessa di idrocarburi ottenuta con la distillazione di prodotti provenienti da un processo di reforming catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$  e con punto di ebollizione nell'intervallo 30 °C-220 °C ca. Contiene una percentuale relativamente alta di idrocarburi aromatici e a catena ramificata. Questa corrente può contenere il 10 % o più di benzene in volume.]
- NL** nafta (aardolie), katalytisch gereformeerd, Katalytisch veredelde nafta met laag kookpunt [Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van producten van een katalytisch reformeringsproces. Bestaat uit koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 30 °C tot 220 °C. Bevat een relatief grote hoeveelheid aromatische en vertakte koolwaterstoffen. Deze stroom kan 10 of meer volumeprocenten benzene bevatten.]
- PT** nafta (petróleo), do reforming catalítico, Reformado [Uma combinação complexa de hidrocarbonetos obtida pela destilação de um processo de reforming catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{12}$ , e destila no intervalo de aproximadamente 30 °C a 220 °C. Contém uma proporção relativamente elevada de hidrocarbonetos aromáticos e de cadeia ramificada. Esta fracção pode conter 10 % em volume ou mais de benzeno.]

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentracion, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 85116-58-1

EEC No 285-509-8

No 649-309-00-8

NOTA H

NOTA P


- ES destilados (petróleo), fracción ligera tratada con hidrógeno reformada catalíticamente, fracción aromática de  $C_{8-12}$ , Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de alquilbencenos obtenida por el reformado catalítico de nafta de petróleo. Compuesta fundamentalmente de alquilbencenos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{10}$  y con un intervalo de ebullición aproximado de 160 °C a 180 °C.]
- DA destillatør (råolie), katalytiske reformerede hydrogenbehandlede lette,  $C_{8-12}$ -aromatfraktion Lavtkogende katalytisk reformeret nafta  
[En sammensat blanding af alkylbenzener opnået ved katalytisk reformering af råolienafta. Den består overvejende af alkylbenzener, overvejende  $C_8$  til og med  $C_{10}$ , med kogesinterval omtrent fra 160 °C til 180 °C.]
- DE Destillate (Erdöl), katalytisch reformierte mit Wasserstoff behandelte leichte,  $C_{8-12}$ -aromatische Fraktion, Reformat  
[Komplexe Kombination von Alkylbenzolen, erhalten durch katalytisches Reformieren von Erdölnaphtha. Besteht vorherrschend aus Alkylbenzolen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{10}$  und siedet im Bereich von etwa 160 °C bis 180 °C.]
- EL αποστάγματα (πετρελίου), καταλυτικά αναμορφωμένων κατεργασμένων με υδρογόνο, ελαφρών, αρωματικών κλάσμα  $C_{8-12}$ . Ελαφρά νάφθα αναμορφωμένη  
[Πολύπλοκος συνδυασμός αλκυλοβενζολίων που λαμβάνεται με την καταλυτική αναμόρφωση νάφθας πετρελαίου. Συνίσταται κυρίως από αλκυλοβενζόλια με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  έως και  $C_{10}$  και βράζει στην περιοχή από 160 °C έως 180 °C περίπου.]
- EN Distillates (petroleum), catalytic reformed hydrotreated light,  $C_{8-12}$  arom. fraction, Low boiling point cat-reformed naphtha  
[A complex combination of alkylbenzenes obtained by the catalytic reforming of petroleum naphtha. It consists predominantly of alkylbenzenes having carbon numbers predominantly in the range of  $C_8$  through  $C_{10}$  and boiling in the range of approximately 160 °C to 180 °C (320 °F to 356 °F).]
- FR distillats légers (pétrole), hydrotraitement, reformage catalytique, fraction aromatique en  $C_{8-12}$ , Naphta de reformage catalytique a point d'ébullition bas  
[Combinaison complexe d'alkylbenzènes obtenue par reformage catalytique de naphtha pétrolier. Se compose principalement d'alkylbenzènes dont le nombre de carbones se situe en majeure partie dans la gamme  $C_8$ - $C_{10}$  et dont le point d'ébullition est compris approximativement entre 160 °C et 180 °C.]
- IT distillati (petrolio), leggeri idrotrattati da reforming catalitico, frazione aromatica  $C_{8-12}$  Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di alchilbenzeni ottenuti per reforming catalitico di nafta di petrolio. È costituita prevalentemente da alchilbenzeni con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{10}$  e punto di ebollizione nell'intervallo 160 °C-180 °C ca.]
- NL destillaten (aardolie), katalytisch gereformeerd met waterstof behandelde lichte fractie,  $C_{8-12}$ -aromatische fractie, Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling alkylbenzenen verkregen door de katalytische reformatie van aardolie-nafta. Het bestaat voornamelijk uit alkylbenzenen, overwegend  $C_8$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 160 °C tot 180 °C.]
- PT destilados (petróleo), leves tratados com hidrogénio do reforming catalítico, fracção aromática  $C_{8-12}$ , Reformado  
[Uma combinação complexa de alquilbenzenos obtida pelo reforming catalítico da nafta de petróleo. É constituída predominantemente por alquilbenzenos com números de átomos de carbono predominantemente na gama de  $C_8$  ate  $C_{10}$  e destila no intervalo de aproximadamente 160 °C a 180 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 91995-18-5

EEC No 295-279-0

No 649-310-00-3

NOTA H  
NOTA P

- ES: hidrocarburos aromáticos,  $C_8$ , derivados del reformado catalítico; Nafta reformada catalíticamente de baja temperatura de inflamación
- DA: aromatiske carbonhydrider,  $C_8$ -, katalytisk reformeringsudvundede; Lavtkogende katalytisk reformeret nafta
- DE: Aromatische Kohlenwasserstoffe,  $C_8$ -, durch katalytisches Reformieren; Reformiert
- EL: αρωματικοί υδρογονάνθρακες  $C_8$ , προερχόμενοι από καταλυτική αναμόρφωση; Ελαφρά νάφθα αναμορφωμένη
- EN: Aromatic hydrocarbons,  $C_8$ , catalytic reforming-derived; Low boiling point cat-reformed naphtha
- FR: hydrocarbures aromatiques en  $C_8$ , dérivés du reformage catalytique; Naphta de reformage catalytique à point d'ébullition bas
- IT: idrocarburi aromatici,  $C_8$ , derivati da reforming catalitico; Nafty di reforming catalitico con basso punto di ebollizione
- NL: aromatische koolwaterstoffen,  $C_8$ -, afkomstig uit katalytische reformering; Katalytisch veredelde nafta met laag kookpunt
- PT: hidrocarbonetos aromáticos,  $C_8$ , derivados do reforming catalítico; Reformado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45 Xn; R 65

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45-65 S : 53-45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào

$C \geq 10 \%$	T; R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

Cas No 93571-75-6

EEC No 297-401-8

No 649-311-00-9

NOTA H

NOTA P

- ES:** hidrocarburos aromáticos,  $C_{7-12}$ , ricos en  $C_8$ ; Nafta reformada catalíticamente de baja temperatura de inflamación [Combinación compleja de hidrocarburos obtenidos por separación de la fracción con el reformado al platino. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{12}$  (principalmente  $C_8$ ) y puede contener hidrocarburos no aromáticos, ambos dentro del intervalo de ebullición aproximado de 130 °C a 200 °C.]
- DA:** aromatiske carbonhydrider,  $C_{7-12}$ ,  $C_8$ -rige; Lavkogende katalytisk reformeret nafta [En sammensat blanding af carbonhydrider opnået ved separation fra den platformholdige fraktion. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_8$  til og med  $C_{12}$  (primært  $C_8$ ) og kan indeholde ikke-aromatiske carbonhydrider, begge med koginterval omtrent fra 130 °C til 200 °C.]
- DE:** Aromatische Kohlenwasserstoffe,  $C_{7-12}$ ,  $C_8$ -reich; Reformat [Komplexe Kombination von Kohlenwasserstoffen, die man durch Abtrennen von der Plattform-enthaltenden Fraktion erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{12}$  (in erster Linie  $C_8$ ) und kann nichtaromatische Kohlenwasserstoffe enthalten, beide siedend im Bereich von etwa 130 °C bis 200 °C.]
- EL:** αρωματικοί υδρογονάνθρακες,  $C_{7-12}$ , πλούσιοι σε  $C_8$ ; Ελαφρά νάφθα αναμορφωμένη [Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με διαχωρισμό από το κλάσμα που περιέχει το προϊόν αναμόρφωσης με καταλύτη λευκόχρυσο. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  έως και  $C_{12}$  (πρωτίστως  $C_8$ ) και μπορεί να περιέχει μη αρωματικούς υδρογονάνθρακες, αμφότεροι δε βράζουν στην περιοχή από 130 °C έως 200 °C περίπου.]
- EN:** Aromatic hydrocarbons,  $C_{7-12}$ ,  $C_8$ -rich; Low boiling point cat-reformed naphtha [A complex combination of hydrocarbons obtained by separation from the platformate-containing fraction. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{12}$  (primarily  $C_8$ ) and can contain nonaromatic hydrocarbons, both boiling in the range of approximately 130 °C to 200 °C (266 °F to 392 °F).]
- FR:** hydrocarbures aromatiques en  $C_{7-12}$ , riches en  $C_8$ ; Naphta de reformage catalytique à point d'ébullition bas [Combinaison complexe d'hydrocarbures obtenue par séparation de la fraction contenant du platformat. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_7$ - $C_{12}$  (principalement en  $C_8$ ) ; peut aussi contenir des hydrocarbures non aromatiques. Les deux types d'hydrocarbures ont un point d'ébullition compris approximativement entre 130 °C et 200 °C.]
- IT:** idrocarburi aromatici,  $C_{7-12}$ , ricchi di  $C_8$ ; Nafta di reforming catalitico con basso punto di ebollizione [Combinazione complessa di idrocarburi ottenuta per separazione della frazione contenente benzina da «platforming». È costituita prevalentemente da idrocarburi aromatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{7-12}$  (principalmente  $C_8$ ) e può contenere idrocarburi non aromatici, entrambi con punto di ebollizione nell'intervallo 130 °C-200 °C ca.]
- NL:** aromatische koolwaterstoffen,  $C_{7-12}$ ,  $C_8$ -rijk; Katalytisch veredelde nafta met laag kookpunt [Een complexe verzameling koolwaterstoffen die wordt verkregen door afscheiding van de platina-reformaat-houdende fractie. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{12}$  (hoofdzakelijk  $C_8$ ) en kan niet-aromatische koolwaterstoffen bevatten, beide met een kooktraject van ongeveer 130 °C tot 200 °C.]
- PT:** hidrocarbonetos aromáticos,  $C_{7-12}$ , ricos em  $C_8$ ; Reformado [Uma combinação complexa de hidrocarbonetos obtida por separação de uma fracção contendo produtos do platforming. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{12}$  (principalmente  $C_8$ ) e pode conter hidrocarbonetos não aromáticos, ambos destilando no intervalo de aproximadamente 130 °C a 200 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 93572-29-3

EEC No 297-458-9

No 649-312-00-4

NOTA H

NOTA P

- ES: gasolina,  $C_{5-11}$ , reformado estabilizado con gran proporción de octano; Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos de gran proporción de octano obtenida por la deshidrogenación catalítica de nafta en su mayor parte nafténica. Compuesta fundamentalmente de aromáticos y no aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{11}$  y con un intervalo de ebullición aproximado de 45 °C a 185 °C]
- DA: benzin,  $C_{5-11}$ , højoktan stabiliseret reformeret; Lavkogende katalytisk reformeret nafta  
[En sammensat højoktanblanding af carbonhydrider opnået ved katalytisk dehydrogenering af en overvejende naphthensk naphtha. Den består af aromater og ikke-aromater, overvejende  $C_7$  til og med  $C_{11}$ , med kogesinterval omtrent fra 45 °C til 185 °C.]
- DE: Benzin,  $C_{5-11}$ , hoch-Oktan stabilisiert reformiert; Reformat  
[Komplexe, hoch oktanhaltige, Kombination von Kohlenwasserstoffen, die man durch katalytische Dehydrierung einer vorherrschend naphthenhaltigen Naphtha erhält. Besteht vorherrschend aus Aromaten und Nichtaromaten mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{11}$ , und siedet im Bereich von etwa 45 °C bis 185 °C.]
- EL: βενζίνη,  $C_{5-11}$ , αναμορφωμένη σταθεροποιημένη υψηλού αριθμού οκτανίου· Ελαφρά νάφθα αναμορφωμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων υψηλού αριθμού οκτανίου που λαμβάνεται με την καταλυτική αφυδρογόνωση ναφθας κυρίως ναφθενικής. Συνίσταται κυρίως από αρωματικά και μη αρωματικά με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  έως και  $C_{11}$ , και βράζει στην περιοχή από 45 °C έως 185 °C περίπου.]
- EN: Gasoline,  $C_{5-11}$ , high-octane stabilized reformed; Low boiling point cat-reformed naphtha  
[A complex mixture of hydrocarbons obtained by the catalytic dehydrogenation of a predominantly naphthenic naphtha. It consists predominantly of aromatics and non-aromatics having carbon numbers predominantly in the range of  $C_7$  through  $C_{11}$  and boiling in the range of approximately 45 °C to 185 °C (113 °F to 365 °F).]
- FR: essence en  $C_{5-11}$ , de reformage, stabilisée, haut indice d'octane; Naphta de reformage catalytique à point d'ébullition bas  
[Combinaison d'hydrocarbures complexe à haut indice d'octane, obtenue par déshydrogénation catalytique d'un naphtha à dominante naphthénique. Se compose principalement d'hydrocarbures aromatiques et non aromatiques dont le nombre de carbones se situe majoritairement dans la gamme  $C_7$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 45 °C et 185 °C.]
- IT: benzina,  $C_{5-11}$ , alto ottano stabilizzata riformata; Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa alto ottano di idrocarburi ottenuta per deidrogenazione catalitica di una nafta prevalentemente naftenica. È costituita prevalentemente da aromatici e non aromatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{11}$  e punto di ebollizione nell'intervallo 45 °C-185 °C ca.]
- NL: gasoline,  $C_{5-11}$ , gestabiliseerd gereformeerd met hoog octaangehalte; Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen met hoog octaangehalte die wordt verkregen door de katalytische dehydrogenering van een voornamelijk naftenen bevattende nafta. Bestaat voornamelijk uit aromaten en niet-aromaten, overwegend  $C_7$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 45 °C tot 185 °C.]
- PT: gasolina,  $C_{5-11}$ , do reforming estabilizada com alto índice de octanos; Reformado  
[Uma combinação complexa de hidrocarbonetos com alto índice de octanos obtida pela desidrogenação catalítica de uma nafta predominantemente nafténica. É constituída predominantemente por aromáticos e não aromáticos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{11}$ , e destila no intervalo de aproximadamente 45 °C a 185 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 93572-35-1

EEC No 297-465-7

No 649-313-00-X

NOTA H

NOTA P

- ES: hidrocarburos,  $C_{7,12}$ , aromáticos ricos en  $C_{9,10}$ , fracción pesada del reformado; Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenidos por separación de la fracción con el reformado al platino. Compuesta fundamentalmente de hidrocarburos no aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{12}$ , y con un intervalo de ebullición aproximado de 120 °C a 210 °C e hidrocarburos aromáticos de  $C_9$  y superior.]
- DA: carbonhydrider,  $C_{7,12}$ ,  $C_{9,10}$ -aromatrige, reformering, tung fraktion; Lavtkogende katalytisk reformeret nafta  
[En sammensat blanding af carbonhydrider opnået ved separation fra den platformholdige fraktion. Den består overvejende af ikke-aromatiske carbonhydrider, overvejende  $C_7$  til og med  $C_{12}$ , med koginterval 120 °C til 210 °C, samt  $C_9$  og højere aromatiske carbonhydrider.]
- DE: Kohlenwasserstoffe,  $C_{7,12}$ ,  $C_{9,10}$ -Aromaten-reich, Reforming schwere Fraktion; Reformat  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Abtrennen von der Platform-enthaltenden Fraktion erhält. Besteht vorherrschend aus nichtaromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{12}$  und siedet im Bereich von etwa 130 °C bis 200 °C und enthält  $C_9$  und höhere aromatische Kohlenwasserstoffe.]
- EL: υδρογονάνθρακες  $C_{7,12}$ , πλούσιοι σε αρωματικούς με  $C_{9,10}$ , βαρύ κλάσμα αναμόρφωσης. Ελαφρά νάφθα αναμορφωμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με διαχωρισμό από το κλάσμα που περιέχει το προϊόν αναμόρφωσης με καταλύτη λευκόχρυσου. Συνίσταται κυρίως από μη αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα  $C_7$  έως  $C_{12}$  και βράζει στην περιοχή από 120 °C έως 210 °C περίπου, καθώς και  $C_9$  και ανώτερους αρωματικούς υδρογονάνθρακες.]
- EN: Hydrocarbons,  $C_{7,12}$ ,  $C_{9,10}$ -arom.-rich, reforming heavy fraction; Low boiling point cat-reformed naphtha  
[A complex combination of hydrocarbons obtained by separation from the platformate-containing fraction. It consists predominantly of nonaromatic hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{12}$  and boiling in the range of approximately 120 °C to 210 °C (248 °F to 380 °F) and  $C_9$  and higher aromatic hydrocarbons.]
- FR: hydrocarbures en  $C_{7,12}$ , riches en aromatiques supérieurs à  $C_9$ , fraction lourde de reformage, Naphta de reformage catalytique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par séparation de la fraction contenant du platformat. Se compose principalement d'hydrocarbures non aromatiques dont le nombre de carbonos se situe en majorité dans la gamme  $C_7$  -  $C_{12}$  et dont le point d'ébullition est compris approximativement entre 120 °C et 210 °C, ainsi que d'hydrocarbures aromatiques en  $C_9$  et plus.]
- IT: idrocarburi,  $C_{7,12}$ , ricchi di aromatici  $C_{9,10}$ , frazione pesante da reforming; Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per separazione della frazione contenente benzina da «platforming». È costituita prevalentemente da idrocarburi non aromatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$  -  $C_{12}$  e punto di ebollizione nell'intervallo 120 °C-210 °C ca. e idrocarburi aromatici  $C_9$  e più.]
- NL: koolwaterstoffen,  $C_{7,12}$ , rijk aan  $C_{9,10}$ -aromaten, zware fractie bij reformering; Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door afscheiding uit de platina-reformaat-houdende fractie. Bestaat voornamelijk uit niet-aromatische koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 120 °C tot 210 °C en uit aromatische koolwaterstoffen,  $C_9$  en groter.]
- PT: hidrocarbonetos,  $C_{7,12}$ , ricos em aromáticos  $C_{9,10}$ , fracção pesada do reforming; Reformado  
[Uma combinação complexa de hidrocarbonetos obtida por separação de uma fracção contendo produtos do platforming. É constituída predominantemente por hidrocarbonetos não aromáticos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{12}$  e que destilam no intervalo de aproximadamente 120 °C a 210 °C e hidrocarbonetos aromáticos em  $C_9$  e superiores.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4



Cas No 93572-36-2

EEC No 297-466-2

No 649-314-00-5

NOTA H


NOTA P

- ES: hidrocarburos,  $C_{5-11}$ , ricos en no aromáticos, fracción ligera del reformado; Nafta reformada catalíticamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por separación de la fracción con el reformado al platino. Compuesta fundamentalmente de hidrocarburos no aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_5$  a  $C_{11}$  y con un intervalo de ebullición aproximado de 35 °C a 125 °C, benceno y tolueno.]
- DA: carbonhydrider,  $C_{5-11}$ , ikke-aromat-rige, reformering, let fraktion; Lavtkogende katalytisk reformeret nafta  
[En sammensat blanding af carbonhydrider opnået ved separation fra den platformholdige fraktion. Den består overvejende af ikke-aromatiske carbonhydrider, overvejende  $C_5$  til og med  $C_{11}$ , med koginterval omtrent fra 35 °C til 125 °C, bezen og toluen.]
- DE: Kohlenwasserstoffe,  $C_{5-11}$ , Nichtaromaten-reiche, Reforming leichte Fraktion; Reformat  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Abtrennen von der Plattform-enthaltenden Fraktion erhält. Besteht vorherrschend aus nichtaromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_5$  bis  $C_{11}$  und siedet im Bereich von etwa 35 °C bis 125 °C und enthält Benzol und Toluol.]
- EL: υδρογονάνθρακες,  $C_{5-11}$ , πλούσιοι σε μη αρωματικά, ελαφρό κλάσμα αναμόρφωσης; Ελαφρά νάφθα αναμορφωμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με διαχωρισμό από το κλάσμα το οποίο περιέχει το προϊόν αναμορφωσης με καταλύτη λευκόχρυσου. Συνίσταται κυρίως από μη αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_5$  έως και  $C_{11}$  που βράζουν στην περιοχή από 35 °C έως 125 °C, βενζόλιο και τολουόλιο.]
- EN: Hydrocarbons,  $C_{5-11}$ , nonaroms.-rich, reforming light fraction; Low boiling point cat-reformed naphtha  
[A complex combination of hydrocarbons obtained by separation from the platformate-containing fraction. It consists predominantly of nonaromatic hydrocarbons having carbon numbers predominantly in the range of  $C_5$  to  $C_{11}$  and boiling in the range of approximately 35 °C to 125 °C (94 °F to 257 °F), benzene and toluene.]
- FR: hydrocarbures en  $C_{5-11}$ , riches en non aromatiques, fraction légère de reformage; Naphta de reformage catalytique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par séparation de la fraction contenant du platformat. Se compose principalement d'hydrocarbures non aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_5$ - $C_{11}$  et dont le point d'ébullition est compris approximativement entre 35 °C et 125 °C, ainsi que de benzène et de toluène.]
- IT: idrocarburi,  $C_{5-11}$ , ricchi di non aromatici, frazione leggera da reforming; Nafta di reforming catalitico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per separazione della frazione contenente benzina da -platforming-. È costituita prevalentemente da idrocarburi non aromatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_5$ - $C_{11}$  e punto di ebollizione nell'intervallo 35 °C-125 °C ca., benzene e toluene.]
- NL: koolwaterstoffen,  $C_{5-11}$ , rijk aan niet-aromaten, lichte fractie bij reformering; Katalytisch veredelde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door afscheiding uit de platina-reformaat-houdende fractie. Bestaat voornamelijk uit niet-aromatische koolwaterstoffen, overwegend  $C_5$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 35 °C tot 125 °C, benzeen en toluen.]
- PT: hidrocarbonetos,  $C_{5-11}$ , ricos em não aromáticos, fracção leve do reforming; Reformado  
[Uma combinação complexa de hidrocarbonetos obtida por separação de uma fracção contendo produtos do platforming. É constituída predominantemente por hidrocarbonetos não aromáticos com números de átomos de carbono predominantemente na gama de  $C_5$  até  $C_{11}$ , e que destilam no intervalo de aproximadamente 35 °C a 125 °C; benzeno e tolueno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 97862-77-6

EEC No 308-127-6

No 649-315-00-0

NOTA H

NOTA L

- ES : aceites de sedimentos (petróleo), tratados con ácido silicio ; Aceite de desaceitado de parafinas  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de aceites de sedimentos con ácido silicio para la separación de constituyentes en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos de cadena lineal con un número de carbonos en su mayor parte superior a  $C_{12}$ .]
- DA : Foots oil (råolie), kiseltsyrebehandlet ; Solventekstraherede eller afvoksede tunge restolier  
[En sammensat blanding af carbonhydrier opnået ved behandlingen af Foots oil med kiseltsyre for at fjerne sporbestandele og urenheder. Den består overvejende af mættede ligekædede carbonhydrider, overvejende større end  $C_{12}$ .]
- DE : Klauenöl (Erdöl), Kieselsäure-behandelt ; Weichparaffin  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von Klauenöl mit Kieselsäure erhält, um Spurenbestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit gerader Kette mit Kohlenstoffzahlen vorherrschend größer als  $C_{12}$ .]
- EL : ελαιο Foot (πετρελαίου), κατεργασμένο με πυριτικό οξύ· Φόοτς όιλ  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία ελαίου Foot με πυριτικό οξύ, για να απομακρυνθούν ιχνοσυστατικά και προσμίξεις. Συνίσταται κυρίως από υδρογονάνθρακες ευθείας αλύσου με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{12}$ .]
- EN : Foots oil (petroleum), silicic acid-treated ; Foots oil  
[A complex combination of hydrocarbons obtained by the treatment of Foots oil with silicic acid for removal of trace constituents and impurities. It consists predominantly of straight chain hydrocarbons having carbon numbers predominantly greater than  $C_{12}$ .]
- FR : huile de ressuage (pétrole), traitée à l'acide silicique ; Huile de ressuage  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'huile de ressuage avec de l'acide silicique afin d'éliminer les constituants en traces et les impuretés. Se compose principalement d'hydrocarbures à chaîne droite dont le nombre de carbones est en majorité supérieur à  $C_{12}$ .]
- IT : olio di morchia (petrolio), trattato con acido silicico ; Olio di trasudamento  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di olio di morchia con acido silicico per eliminare costituenti in tracce ed impurezze. E costituita prevalentemente da idrocarburi a catena lineare con numero di atomi di carbonio prevalentemente superiore a  $C_{12}$ .]
- NL : bezinkselolie (aardolie), behandeld met kiezelzuur ; Bezinkselolie uit paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van bezinkselolie met kiezelzuur om sporenbestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit niet-vertakte koolwaterstoffen, overwegend groter dan  $C_{12}$ .]
- PT : óleo da refinação das parafinas (petróleo), tratado com ácido silício ; Óleo de ressudação  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de óleo da refinação das parafinas com ácido silício para remoção de constituintes vestigiais e impurezas. E constituída predominantemente por hidrocarbonetos de cadeia linear com números de átomos de carbono predominantemente superiores a  $C_{12}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-74-8

EEC No 265-075-6

No 649-316-00-6

NOTA H


NOTA P

- ES : nafta (petróleo), fracción ligera craqueada térmicamente ; Nafta craqueada térmicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos de la destilación de los productos de un proceso de craqueo térmico. Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_8$  y con un intervalo de ebullición aproximado de menos 10 °C a 130 °C.]
- DA : naphtha (råolie), let termisk krakket ; Lavtkogende termisk krakket nafta  
[En sammensat blanding af carbonhydrider fra destillation af produkterne fra en termisk krakningsproces. Den består overvejende af umættede carbonhydrider, overvejende  $C_4$  til og med  $C_8$ , med koginterval omtrent fra minus 10 °C til 130 °C.]
- DE : Naphtha (Erdöl), leichte thermisch gekrackte ; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen aus Destillation von Produkten aus einem thermischen Crackverfahren. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_8$  und siedet im Bereich von etwa minus 10 °C bis 130 °C.]
- EL : ναφθα (πετρελαίου), ελαφριά θερμικά πυρολυμένη· Ελαφρά νάφθα από θερμική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από απόσταξη προϊόντων θερμικής πυρόλυσης. Συνίσταται κυρίως από ακόρεστους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_8$  και με περιοχή βρασμού από μείον -10 °C έως 130 °C περίπου.]
- EN : Naphtha (petroleum), light thermal cracked ; Low boiling point thermally cracked naphtha  
[A complex combination of hydrocarbons from distillation of products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_8$  and boiling in the range of approximately minus 10 °C to 130 °C (14 °F to 266 °F).]
- FR : naphtha léger (pétrole), craquage thermique ; Naphtha de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage thermique. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_8$  et dont le point d'ébullition est compris approximativement entre - 10 °C et 130 °C.]
- IT : nafta (petrolio), frazioni leggere di cracking termico ; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuti dalla distillazione di prodotti provenienti da un processo di cracking termico. È costituita prevalentemente da idrocarburi insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_8$  e punto di ebollizione nell'intervallo - 10 °C-130 °C ca.]
- NL : nafta (aardolie), licht thermisch gekraakt ; Thermisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van produkten van een thermisch kraakproces. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend  $C_4$  tot en met  $C_8$ , met een kooktraject van ongeveer - 10 °C tot 130 °C.]
- PT : nafta (petróleo), leve do cracking térmico ; Nafta de « cracking » térmico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos da destilação de produtos de um processo de cracking térmico. É constituída predominantemente por hidrocarbonetos insaturados com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_8$  e destila no intervalo de aproximadamente menos 10 °C a 130 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 64741-83-9

EEC No 265-085-0

No 649-317-00-1

NOTA H

NOTA P

- ES: nafta (petróleo), fracción pesada craqueada térmicamente; Nafta craqueada térmicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos de la destilación de los productos de un proceso de craqueo térmico. Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 65 °C a 220 °C]
- DA: naphtha (råolie), tung termisk krakket; Lavtkogende termisk krakket natta  
[En sammensat blanding af carbonhydrier fra destillation af produkterne fra en termisk krakningsproces. Den består overvejende af umættede carbonhydrier, overvejende  $C_6$  til og med  $C_{12}$ , med kogesinterval omtrent fra 65 °C til 220 °C.]
- DE: Naphtha (Erdöl), schwere thermisch gekrackte; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem thermischen Crackverfahren. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 65 °C bis 220 °C.]
- EL: ναφθα (πετρελαίου), βαριά θερμικά πυρολυμένη. Ελαφρά νάφθα από θερμική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσπαξη των προϊόντων θερμικής πυρόλυσης. Συνίσταται κυρίως από ακόρεστους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{12}$  και με περιοχή βρασμού από 65 °C έως 220 °C περίπου.]
- EN: Naphtha (petroleum), heavy thermal cracked; Low boiling point thermally cracked naphtha  
[A complex combination of hydrocarbons from distillation of the products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$  and boiling in the range of approximately 65 °C to 220 °C (148 °F to 428 °F).]
- FR: naphtha lourd (pétrole), craquage thermique; Naphta de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage thermique. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majorité dans la gamme  $C_6$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 65 °C et 220 °C.]
- IT: nafta (petrolio), frazioni pesanti di cracking termico; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuti dalla distillazione dei prodotti di un processo di cracking termico. È costituita prevalentemente da idrocarburi insaturi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$  e punto di ebollizione nell'intervallo 65 °C-220 °C ca.]
- NL: nafta (aardolie), zwaar thermisch gekraakt; Thermisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de producten van een thermisch kraakproces. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 65 °C tot 220 °C.]
- PT: nafta (petróleo), pesada do cracking térmico; Nafta de « cracking » térmico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos da destilação dos produtos de um processo de cracking térmico. É constituída predominantemente por hidrocarbonetos insaturados com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{12}$  e destila no intervalo de aproximadamente 65 °C a 220 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4



Cas No 67891-79-6

EEC No 267-563-4

No 649-318-00-7

NOTA H

NOTA P

- ES : destilados (petróleo), fracción aromática pesada ; Nafta craqueada térmicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos de la destilación de los productos de craqueo térmico de etano y propano. Fracción de mayor punto de ebullición compuesta en su mayor parte de hidrocarburos aromáticos de  $C_7$ - $C_9$  con algunos hidrocarburos alifáticos insaturados con un número de carbonos en su mayor parte de  $C_7$ . Esta corriente puede contener benceno.]
- DA : destillater (råolie), tunge aromatiske ; Lavtkogende termisk krakket nafta  
[Den sammensatte blanding af carbonhydrier opnået ved destillationen af produkterne fra den termiske krakning af ethan og propan. Denne højere kogende fraktion består overvejende af aromatiske  $C_7$ - $C_9$ -carbonhydrier med nogle umættede aliphatiske carbonhydrier, overvejende  $C_7$ . Denne strøm kan indeholde benzen.]
- DE : Destillate (Erdöl), schwere aromatische ; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus thermischem Kracken von Ethan und Propan. Diese höher siedende Fraktion besteht vorherrschend aus  $C_7$ - $C_9$ -aromatischen Kohlenwasserstoffen mit einigen ungesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend von  $C_7$ . Dieser Lauf kann Benzol enthalten.]
- EL : αποσταγματα (πετρελαίου), βαρέα αρωματικά· Ελαφρά νάφθα από θερμική διάσπαση  
[Ο πολύπλοκος συνδυασμός υδρογονάνθρακων από την απόσπαση των προϊόντων της θερμικής πυρόλυσης αιθανίου και προπανίου. Αυτό το κλάσμα υψηλότερης περιοχής βρασμού συνίσταται μαζί κυρίως από αρωματικούς υδρογονάνθρακες με  $C_7$ - $C_9$ , μαζί με μερικούς ακόρεστους αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως  $C_7$ . Το ρεύμα αυτό μπορεί να περιέχει βενζόλιο.]
- EN : Distillates (petroleum), heavy arom. ; Low boiling point thermally cracked naphtha  
[The complex combination of hydrocarbons from the distillation of the products from the thermal cracking of ethane and propane. This higher boiling fraction consists predominantly of  $C_7$ - $C_9$  aromatic hydrocarbons with some unsaturated aliphatic hydrocarbons having carbon number predominantly of  $C_7$ . This stream may contain benzene.]
- FR : distillats aromatiques lourds (pétrole) ; Naphta de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant du craquage thermique de l'éthane et du propane. Se compose principalement d'hydrocarbures aromatiques en  $C_7$ - $C_9$ , avec quelques hydrocarbures aliphatiques insaturés majoritairement en  $C_7$  et possède un point d'ébullition relativement élevé. Peut contenir du benzène.]
- IT : distillati (petrolio), aromatici pesanti , Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi provenienti dalla distillazione dei prodotti di cracking termico di etano e propano. Questa frazione altobollente è costituita prevalentemente da idrocarburi aromatici  $C_7$ - $C_9$ , e da alcuni idrocarburi alifatici insaturi con numero di atomi di carbonio prevalentemente  $C_7$ . Questa frazione può contenere benzene.]
- NL : destillaten (aardolie), zware aromatische fractie ; Thermisch gekraakte nafta met laag kookpunt  
[De complexe verzameling koolwaterstoffen, verkregen door destillatie van de produkten van het thermisch kraken van ethaan en propaan. Deze bij hogere temperaturen kokende fractie bestaat voornamelijk uit  $C_7$ - $C_9$ -aromatische koolwaterstoffen met enige onverzadigde alifatische koolwaterstoffen, overwegend  $C_7$ . Deze stroom kan benzeen bevatten, ook aanwezig zijn als bonden, carbidien, chloriden, fluonden, nitriden, siliciden of sulfiden, in meerdere oxidatietoestanden, of in meer complexe verbindingen.]
- PT : destilados (petróleo), aromáticos pesados ; Nafta de « cracking » térmico de baixo ponto de ebulição  
[A combinação complexa de hidrocarbonetos da destilação dos produtos do cracking térmico do etano e propano. Esta fracção de ponto de ebulição mais elevado é constituída predominantemente por hidrocarbonetos aromáticos em  $C_7$ - $C_9$ , com alguns hidrocarbonetos alifáticos insaturados com números de átomos de carbono predominantemente de  $C_7$ . Esta fracção pode conter benzeno. A sua composição pode incluir uma qualquer ou uma combinação destas substâncias. Podem estar presentes vestígios de óxidos e outras substâncias. Os seguintes elementos representativos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 67891-80-9

EEC No 267-565-5

No 649-319-00-2

NOTA H

NOTA P

- ES : destilados (petróleo), fracción aromática ligera ; Nafta craqueada térmicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos de la destilación de los productos de craqueo térmico de etano y propano. Fracción de menor punto de ebullición compuesta en su mayor parte de hidrocarburos aromáticos  $C_7$ - $C_9$  con algunos hidrocarburos alifáticos insaturados con un número de carbonos en su mayor parte de  $C_7$ . Esta corriente puede contener benceno.]
- DA : destillater (råolie), lette aromatiske ; Lavtkogende termisk krakket nafta  
[En sammensat blanding af carbonhydrider opnået ved destillationen af produkterne fra den termiske krakning af ethan og propan. Denne laverekogende fraktion består overvejende af aromatiske  $C_7$ - $C_9$ -carbonhydrider med nogle umættede aliphatiske carbonhydrider, overvejende  $C_7$ . Denne strøm kan indeholde benzen.]
- DE : Destillate (Erdöl), leichte aromatische ; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus thermischem Kracken von Ethan und Propan. Diese niedrigere siedende Fraktion besteht vorherrschend aus  $C_7$ - $C_9$  aromatischen Kohlenwasserstoffen mit einigen ungesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend von  $C_7$ . Dieser Lauf kann Benzol enthalten.]
- EL : αποσταγμάτα (πετρελαίου), ελαφρά αρωματικά· Ελαφρά νάφθα από θερμική διάσπαση  
[Ο πολύπλοκος συνδυασμός υδρογονάνθρακων από την αποσταγή των προϊόντων της θερμικής πυρόλυσης αιθανίου και προπανίου. Αυτό το κλάσμα χαμηλότερης περιοχής βρασμού συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με  $C_7$ - $C_9$ , μαζί με μερικούς αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως  $C_7$ . Το ρεύμα αυτό μπορεί να περιέχει βενζόλιο.]
- EN : Distillates (petroleum), light arom. ; Low boiling point thermally cracked naphtha  
[The complex combination of hydrocarbons from the distillation of the products from the thermal cracking of ethane and propane. This lower boiling fraction consists predominantly of  $C_7$ - $C_9$  aromatic hydrocarbons with some unsaturated aliphatic hydrocarbons having a carbon number predominantly of  $C_7$ . This stream may contain benzene.]
- FR : distillats aromatiques légers (pétrole) ; Naphta de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant du craquage thermique de l'éthane et du propane. Se compose principalement d'hydrocarbures aromatiques en  $C_7$ - $C_9$ , avec quelques hydrocarbures aliphatiques insaturés majoritairement en  $C_7$  et possède un point d'ébullition relativement bas. Peut contenir du benzène.]
- IT : distillati (petrolio), aromatici leggeri ; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi provenienti dalla distillazione dei prodotti di cracking termico di etano e propano. Questa frazione bassobollente è costituita prevalentemente da idrocarburi aromatici  $C_7$ - $C_9$  e da alcuni idrocarburi alifatici insaturi con numero di atomi di carbonio prevalentemente  $C_7$ . Questa corrente può contenere benzene.]
- NL : destillaten (aardolie), lichte aromatische fractie ; Thermisch gekraakte nafta met laag kookpunt  
[De complexe verzameling koolwaterstoffen, verkregen door destillatie van de producten van het thermisch kraken van ethaan en propaan. Deze bij lagere temperaturen kokende fractie bestaat voornamelijk uit  $C_7$ - $C_9$ -aromatische koolwaterstoffen met enige onverzadigde alifatische koolwaterstoffen overwegende  $C_7$ . Deze stroom kan benzeen bevatten.]
- PT : destilados (petróleo), aromáticos leves ; Nafta de « cracking » térmico de baixo ponto de ebulição  
[A combinação complexa de hidrocarbonetos da destilação dos produtos do cracking térmico do etano e propano. Esta fracção de ponto de ebulição mais baixo é constituída predominantemente por hidrocarbonetos aromáticos em  $C_7$ - $C_9$ , com alguns hidrocarbonetos alifáticos insaturados com números de átomos de carbono predominantemente em  $C_7$ . Esta fracção pode conter benzeno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rosulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68425-29-6

EEC No 270-344-6

No 649-320-00-8

NOTA H


NOTA P

- ES : destilados (petróleo), derivado del pirolizado de nafta y refinado, mezcla de gasolina ; Nafta craqueada térmicamente da baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por el fraccionamiento por pirólisis a 816 °C de nafta y refinado. Compuesta en su mayor parte de hidrocarburos con un número de carbonos de C<sub>6</sub> y con un intervalo de ebullición aproximado de 204 °C.]
- DA : destillater (råolie), naphtha- og raffinatpyrolysatafledte, benzinblanding ; Lavtkogende temisk krakket nafta  
[Den sammensatte blanding af carbonhydrider opnået ved pyrolysefraktionering ved 816 °C af naphtha og raffinat. Den består overvejende af C<sub>6</sub>-carbonhydrider og koger omtrent ved 204 °C.]
- DE : Destillate (Erdöl), Naphtha-Raffinat durch Pyrolyse erhalten, Benzin-Verschnitt ; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Pyrolysefraktionierung bei 816 °C von Naphtha und Raffinat. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen von C<sub>6</sub> und siedet etwa bei 204 °C.]
- EL : αποσταγματα (π. τρελαίου), προερχόμενα από προϊόν πυρόλυσης νάφθας-εκχυλισμένου προϊόντος, ανάμιξης δενζίνης. Ελαφρά νάφθα από θερμική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την πυρολυτική κλασμάτωση τους 816 °C, νάφθας και εκχυλισμένου προϊόντος. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα C<sub>6</sub> και βράζει στους 204 °C περίπου.]
- EN : Distillates (petroleum), naphtha-raffinate pyrolyzate-derived, gasoline-blending ; Low boiling point thermally cracked naphtha  
[The complex combination of hydrocarbons obtained by the pyrolysis fractionation at 816 °C (1 500 °F) of naphtha and raffinate. It consists predominantly of hydrocarbons having a carbon number of C<sub>6</sub> and boiling at approximately 204 °C (400 °F).]
- FR : distillats (pétrole), dérivés de pyrolysat de naphtha et de raffinat, mélange de l'essence ; Naphtha de craquage thermique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement par pyrolyse à 816 °C de naphtha et de raffinat. Se compose principalement d'hydrocarbures en C<sub>6</sub> dont le point d'ébullition est approximativement de 204 °C.]
- IT : distillati (petrolio), derivati da pirolisi di raffinato e nafta, miscelazione benzine ; Nafta di cracking termico con basso punto di ebollizione  
[Complessa combinazione di idrocarburi ottenuta per frazionamento da pirolisi a 816 °C di nafta e raffinato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio C<sub>6</sub> e punto di ebollizione 204 °C ca.]
- NL : destillaten (aardolie), nafta-raffinaat afkomstig uit pyrolysaat, gasoline-menging ; Thermisch gekraakte nafta met laag kookpunt  
[De complexe verzameling koolwaterstoffen, verkregen door pyrolyse-fraktionering bij 816 °C van nafta en raffinaat. Bestaat voornamelijk uit C<sub>6</sub>-koolwaterstoffen, die koken bij ongeveer 204 °C.]
- PT : destilados (petróleo), derivados do pirolisado de nafta-refinado, fracção gasolina ; Nafta de « cracking » térmico de baixo ponto de ebulição  
[A combinação complexa de hidrocarbonetos obtida por fraccionamento por pirólise a 816 °C de nafta e refinado. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono de C<sub>6</sub> e destila a aproximadamente 204 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68475-70-7

EEC No 270-658-3

No 649-321-00-3

NOTA H

NOTA P

- ES : hidrocarburos aromáticos,  $C_{6-9}$ , derivados del pirolizado y refinado de nafta ; Nafta craqueada térmicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por pirolisis para el fraccionamiento a 816 °C de nafta y refinado. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_9$ , incluyendo benceno.]
- DA : aromatiske carbonhydrider,  $C_{6-9}$ , naphtha- og raffinatpyrolysatudvundne ; Lavtkogende termisk krakket nafta  
[En sammensat blanding af carbonhydrider opnået ved fraktioneringspyrolyse ved 816 °C af naphtha og raffinat. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_6$  til og med  $C_9$ , herunder benzen.]
- DE : Aromatische Kohlenwasserstoffe,  $C_{6-9}$ , Naphtha-Raffinat durch Pyrolyse erhalten ; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch fraktionierte Pyrolyse von Naphtha und Raffinat bei 816 °C. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_9$ , einschließlich Benzol.]
- EL : αρωματικοί υδρογονάνθρακες,  $C_{6-9}$ , από πυρόλυση νάφθας και εκχυλισμένου προϊόντος νάφθας· Ελαφρά νάφθα από θερμική διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με την πυρολυτική κλασμάτωση, σε 816 °C νάφθας και εκχυλισμένου προϊόντος. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_9$ , περιλαμβανομένου βενζολίου.]
- EN : Aromatic hydrocarbons,  $C_{6-9}$ , naphtha-raffinate pyrolyzate-derived ; Low boiling point thermally cracked naphtha  
[A complex combination of hydrocarbons obtained by the fractionation pyrolysis at 816 °C (1 500 °F) of naphtha and raffinate. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_9$ , including benzene.]
- FR : hydrocarbures aromatiques en  $C_{6-9}$ , dérivés de pyrolysat de naphtha et de raffinat ; Naphtha de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement par pyrolyse à 816 °C de naphtha et de raffinat. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_6$ - $C_9$ , et notamment de benzène.]
- IT : idrocarburi aromatici,  $C_{6-9}$ , derivati da pirolisi di raffinato e nafta ; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento per pirolisi a 816 °C di nafta e raffinato. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_9$ , comprendenti anche benzene.]
- NL : aromatische koolwaterstoffen,  $C_{6-9}$ , nafta-raffinaat verkregen uit pyrolysaat ; Thermisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de fractioneringspyrolyse bij 816 °C van nafta en raffinaat. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_6$  tot en met  $C_9$ , inclusief benzeen.]
- PT : hidrocarbonetos aromáticos,  $C_{6-9}$ , derivados do pirolisado de nafta-refinado ; Nafta de « cracking » térmico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida pelo fraccionamento por pirólise a 816 °C de nafta e refinado. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_9$ , incluindo benzeno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, -  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4



Cas No 68603-00-9

EEC No 271-631-9

No 649-322-00-9

NOTA H


NOTA P

- ES : destilados (petróleo), gasoleo y nafta craqueados termicamente ; Nafta craqueada termicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la destilación de nafta y/o gasoleo craqueado térmicamente. Compuesta en su mayor parte de hidrocarburos olefinicos con un número de carbonos de  $C_4$  y con un intervalo de ebullición aproximado de 33 °C a 60 °C.]
- DA : destillater (råolie), termisk krakket naphtha og gasolie , Lavtkogende termisk krakket nafta  
[En sammensat blanding af carbonhydnder fremstillet ved destillationen af termisk krakket naphtha og/eller gasolie. Den består overvejende af olefiniske carbonhydnder med carbonantal  $C_4$  med koginterval omtrent fra 33 °C til 60 °C.]
- DE : Destillate (Erdöl), thermisch gekrackte Naphtha und Gasöl ; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von thermisch gekrackter Naphtha und/oder Gasöl. Besteht vorherrschend aus olefinischen Kohlenwasserstoffen mit einer Kohlenstoffzahl von  $C_4$  und siedet im Bereich von etwa 33 °C bis 60 °C.]
- EL : αποσταγματα (πετρελίου), νάφθας και ακάθαρτου πετρελαίου θερμικά πυρολυμένων· Ελαφρά νάφθα από θερμική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που παράγεται με απόσπαση νάφθας ή και ακάθαρτου πετρελαίου που έχουν υποστεί θερμική πυρόλυση. Συνίσταται κυρίως από ολεφινικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα  $C_4$  και βράζει στην περιοχή από 33 °C έως 60 °C περίπου.]
- EN : Distillates (petroleum), thermal cracked naphtha and gas oil ; Low boiling point thermally cracked naphtha  
[A complex combination of hydrocarbons produced by distillation of thermally cracked naphtha and/or gas oil. It consists predominantly of olefinic hydrocarbons having a carbon number of  $C_4$  and boiling in the range of approximately 33 °C to 60 °C (91 °F to 140 °F).]
- FR : distillats (pétrole), naphtha et gazole de craquage thermique ; Naphtha de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation de naphtha et/ou de gazole de craquage thermique. Se compose principalement d'hydrocarbures oléfiniques en  $C_4$  dont la température d'ébullition est comprise approximativement entre 33 °C et 60 °C.]
- IT : distillati (petrolio), nafta e gasolio di cracking termico ; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta per distillazione di nafta e/o gasolio di cracking termico. È costituita prevalentemente da idrocarburi olefinici con numero di atomi di carbonio  $C_4$  e punto di ebollizione nell'intervallo 33 °C-60 °C ca.]
- NL : destillaten (aardolie), thermisch gekraakte nafta en gasolie ; Thermisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de desullatie van thermisch gekraakte nafta en/of gasolie. Bestaat voornamelijk uit olefinische  $C_4$ -koolwaterstoffen, met een kooktraject van ongeveer 33 °C tot 60 °C.]
- PT : destilados (petróleo), do gásóleo e da nafta do cracking térmico ; Nafta de • cracking • térmico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida por destilação de gásóleo e/ou da nafta do cracking térmico. É constituída predominantemente por hidrocarbonetos olefinicos com números de átomos de carbono em  $C_4$  e destila no intervalo de aproximadamente 33 °C a 60 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T ; R 45-65
$0,1 \% \leq C < 10 \%$	T ; R 45

NOTA 4

Cas No 68603-01-0

EEC No 271-632-4

No 649-323-00-4

NOTA H


NOTA P

- ES: destilados (petróleo), gasóleo y nafta craqueados térmicamente con dimeros de  $C_6$ ; Nafta craqueada termicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la destilación extractiva de nafta y/o gasóleo craqueado termicamente. Compuesta en su mayor parte de hidrocarburos con un número de carbonos de  $C_6$  con algunas olefinas de  $C_6$  dimerizadas y con un intervalo de ebullición aproximado de 33 °C a 184 °C.]
- DA: destillater (råolie), termisk krakket naphtha-og gasolie,  $C_6$ -dimer-holdig; Lavtkogende termisk krakket nafta  
[En sammensat blanding af carbonhydrider fremstillet ved den ekstraktive destillation af termisk krakket naphtha og/eller gasolie. Den består overvejende af  $C_6$ -carbonhydrider med nogle dimenserede  $C_6$ -olefiner, og har kogesinterval omtrent fra 33 °C til 184 °C.]
- DE: Destillate (Erdöl), thermisch gekrackte Naphtha und Gasöl,  $C_6$ -Dimer-enthaltend; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch extrahierende Destillation von thermisch gekrackter Naphtha und/oder Gasöl. Besteht vorherrschend aus Kohlenwasserstoffen mit einer Kohlenstoffzahl von  $C_6$  mit einigen dimensierten  $C_6$ -Olefinen und siedet im Bereich von etwa 33 °C bis 184 °C.]
- EL: αποσταγμάτα (πετρελαίου), νάφθας και ακάθαρτου πετρελαίου θερμικά πυρολυμένου, με πρόσμειξη διμερών  $C_6$ ; Ελαφρά νάφθα από θερμική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την εκχυλιστική απόσταξη νάφθας ή και ακαθάρτου πετρελαίου που έχουν υποστεί θερμική πυρόλυση. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα  $C_6$ , μαζί με λίγες διμερισμένες  $C_6$  ολεφίνες και θράζει στην περιοχή από 33 °C έως 184 °C περίπου.]
- EN: Distillates (petroleum), thermal cracked naphtha and gas oil,  $C_6$ -dimer-contg.; Low boiling point thermally cracked naphtha  
[A complex combination of hydrocarbons produced by the extractive distillation of thermal cracked naphtha and/or gas oil. It consists predominantly of hydrocarbons having a carbon number of  $C_6$  with some dimerized  $C_6$  olefins and boiling in the range of approximately 33 °C to 184 °C (91 °F to 363 °F).]
- FR: distillats (pétrole), naphtha et gazole de craquage thermique, contenant des dimères de  $C_6$ ; Naphtha de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation extractive de naphtha et/ou de gazole de craquage thermique. Se compose principalement d'hydrocarbures en  $C_6$ , avec quelques oléfines en  $C_6$  dimensées, dont la température d'ébullition est comprise approximativement entre 33 °C et 184 °C.]
- IT: distillati (petrolio), nafta e gasolio di cracking termico, contenenti dimero  $C_6$ ; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta per distillazione estrattiva di nafta e/o gasolio di cracking termico. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio  $C_6$  e alcuni olefine  $C_6$  dimerizzate e punto di ebollizione nell'intervallo 33 °C-184 °C ca.]
- NL: destillaten (aardolie), thermisch gekraakte nafta en gasolie,  $C_6$ -dimeer-bevattend; Thermisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de extractieve destillatie van thermisch gekraakte nafta en/of gasolie. Bestaat voornamelijk uit  $C_6$ -koolwaterstoffen, met enige gedimenseerde  $C_6$ -olefinen, met een kooktraject van ongeveer 33 °C tot 184 °C.]
- PT: destilados (petróleo), do gasóleo e da nafta do cracking térmico, contendo dimeros de  $C_6$ ; Nafta de « cracking » térmico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação extractiva do gasóleo e/ou da nafta do cracking térmico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono em  $C_6$ , com algumas olefinas em  $C_6$  dimerizadas e destila no intervalo de aproximadamente 33 °C a 184 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68603-03-2

EEC No 271-634-5

No 649-324-00-X

NOTA H

NOTA P

- ES: destilados (petróleo), gasóleo y nafta craqueados térmicamente, productos de extracción; Nafta craqueada térmicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la destilación extractiva de nafta y/o gasóleo craqueado térmicamente. Compuesta de hidrocarburos olefinicos y parafinicos, en su mayor parte isoamilenos tales como 2-metil-1-buteno y 2-metil-2-buteno y con un intervalo de ebullición aproximado de 31 °C a 40 °C.]
- DA: destillater (råolie), termisk krakket naphtha og gasolie, ekstraktive; Lavtkogende termisk krakket nafta  
[En sammensat blanding af carbonhydrider fremstillet ved den ekstraktive destillation af termisk krakket naphtha og/eller gasolie. Den består af paraffinske og olefiniske carbonhydrider, overvejende isoamylene, såsom 2-methyl-1-buten og 2-methyl-2-buten med kogesinterval omtrent fra 31 °C indtil 40 °C.]
- DE: Destillate (Erdöl), thermisch gekrackte Naphtha und Gasöl, extrahierend; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch extrahierende Destillation von thermisch gekrackter Naphtha und/oder Gasöl. Besteht aus paraffinhaltigen und olefinhaltigen Kohlenwasserstoffen, vorherrschend Isoamylene wie 2-Methyl-1-buten und 2-Methyl-2-buten und siedet im Bereich von etwa 31 °C bis 40 °C.]
- EL: αποστάγματα (πετρελαίου), νάφθας και ακαθάρτου πετρελαίου θερμικά πυρολυμένων, εκχυλιστικά: Ελαφρά νάφθα από θερμική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την εκχυλιστική απόσταξη νάφθας ή και ακαθάρτου πετρελαίου που έχουν υποστεί θερμική πυρόλυση. Συνίσταται από παραφινικούς και ολεφινικούς υδρογονάνθρακες, κυρίως ισοαμυλένια, όπως 2-μεθυλο-2-βουτένιο και δράζει στην περιοχή από 31 °C έως 40 °C περίπου.]
- EN: Distillates (petroleum), thermal cracked naphtha and gas oil, extractive: Low boiling point thermally cracked naphtha  
[A complex combination of hydrocarbons produced by the extractive distillation of thermal cracked naphtha and/or gas oil. It consists of paraffinic and olefinic hydrocarbons, predominantly isoamylenes such as 2-methyl-1-butene and 2-methyl-2-butene and boiling in the range of approximately 31 °C to 40 °C (88 °F to 104 °F).]
- FR: distillats (pétrole), distillation extractive de naphtha et de gazole de craquage thermique; Naphtha de craquage thermique a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation extractive de naphtha et/ou de gazole de craquage thermique. Se compose d'hydrocarbures paraffiniques et oléfiniques, principalement des iso-amylènes tels que le méthyl-2 butène-1 et le méthyl-2 butène-2, dont la température d'ébullition est comprise approximativement entre 31 °C et 40 °C.]
- IT: distillati (petrolio), da nafta e gasolio di cracking termico, estrattivi; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi prodotta per distillazione estrattiva di nafta e/o gasolio di cracking termico. È costituita da idrocarburi paraffinici e olefinici, prevalentemente isoamileni quali 2-metil-1-butene e 2-metil-2-butene, con punto di ebollizione nell'intervallo 31 °C-40 °C ca.]
- NL: destillaten (aardolie), thermisch gekraakte nafta en gasolie, extractieve; thermisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit de extractieve destillatie van thermisch gekraakte nafta en/of gasolie. Bestaat uit paraffinische en olefinische koolwaterstoffen, overwegend isoamylene zoals 2-methyl-1-buteen en 2-methyl-2-buteen, met een kooktraject van ongeveer 31 °C tot 40 °C.]
- PT: destilados (petróleo), do gasóleo e da nafta do cracking térmico, de destilação extractiva; Nafta de « cracking » térmico de baixo ponto de ebulição.  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação extractiva do gasóleo e/ou nafta do cracking térmico. É constituído por hidrocarbonetos parafínicos e olefínicos, predominantemente isomilenos tais como 2-metil-1-buteno e 2-metil-2-buteno e destila no intervalo de aproximadamente 31 °C a 40 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 68955-29-3

EEC No 273-266-0

No 649-325-00-5

NOTA H

NOTA P

- ES : destilados (petróleo), fracción ligera craqueada térmicamente, fracción aromática desbutanizada ; Nafta craqueada térmicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo térmico. Compuesta en su mayor parte de hidrocarburos aromáticos, principalmente benceno.]
- DA : destillater (råolie), let termisk krakkede, debutaniserede aromatiske ; Lavtkogende termisk krakket nafta  
[En sammensat blanding af carbonhydrier fremstillet ved destillationen af produkterne fra en termisk krakningsproces. Den består overvejende af aromatiske carbonhydrier, primært benzen.]
- DE : Destillate (Erdöl), leichte thermisch gekrackte, debutanisierte aromatische ; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem thermischen Crackverfahren. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen, in erster Linie Benzol.]
- EL : αποσταγματα (πετρελαίου), ελαφρά θερμοπυρολυμένα, αρωματικά αποδουτανιωμένα· Ελαφρά νάφθα από θερμική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με την απόσπαση προϊόντων θερμοπυρόλυσης. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες, πρωτίστως βενζόλιο.]
- EN : Distillates (petroleum), light thermal cracked, debutanized arom. ; Low boiling point thermally cracked naphtha  
[A complex combination of hydrocarbons produced by the distillation of products from a thermal cracking process. It consists predominantly of aromatic hydrocarbons, primarily benzene.]
- FR : distillats légers (pétrole), craquage thermique, aromatiques débutanisés , Naphta de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage thermique. Se compose principalement d'hydrocarbures aromatiques, en majorité du benzène.]
- IT : distillati (petrolio), leggeri, da cracking termico, aromatici debutanizzati ; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti di cracking termico. È costituita prevalentemente da idrocarburi aromatici, principalmente benzene.]
- NL : destillaten (aardolie), lichte thermisch gekraakte, gedebutaniseerde aromatische ; Thermisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van producten van een thermisch kraakproces. Bestaat voornamelijk uit aromatische koolwaterstoffen, hoofdzakelijk benzeen.]
- PT : destilados (petróleo), leves do cracking térmico, aromáticos desbutanizados ; Nafta de « cracking » térmico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de cracking térmico. É constituída predominantemente por hidrocarbonetos aromáticos, principalmente benzeno.]

*Classificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	T; R 45-65
01 % ≤ C < 10 %	T, R 45

NOTA 4



Cas No 92045-65-3

EEC No 295-447-7

No 649-326-001-0

NOTA H

NOTA P

- ES : nafta (petróleo), fracción ligera craqueada térmicamente, desazutrada ; Nafta craqueada térmicamente de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida sometiendo un destilado de petróleo de un craqueo térmico a elevada temperatura de fracciones de aceite pesado a un proceso de desazutrado para transformar mercaptanos. Compuesta en su mayor parte de hidrocarburos aromáticos, olefinicos y saturados con un intervalo de ebullición aproximado de 20 °C a 100 °C.]
- DA : naphtha (råolie), let termisk krakket sweetenet ; Lavtkogende termisk krakket nafta  
[En sammensat blanding af carbonhydroder opnået ved at underkaste et råoliedestillat, fra den højtemperaturtermiske krakning af tunge oliefraktioner, en sweetening-proces for at omdanne mercaptaner. Den består overvejende af aromater, olefiner og mættede carbonhydroder med kogesinterval omtrent fra 20 °C til 100 °C.]
- DE : Naphtha (Erdöl), leichte thermisch gekrackte, gesüßt ; Naphtha, thermisch gekrackt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man erhält, wenn man ein Erdöldestillat aus dem Hochtemperaturthermischen Cracken von Schweröl-Fractionen einem Süßungsverfahren zur Konvertierung von Mercaptanen aussetzt. Besteht vorherrschend aus Aromaten, Olefinen und gesättigten Kohlenwasserstoffen, die im Bereich von etwa 20 °C bis 100 °C siedend.]
- EL : ναφθα (πετρελαιο), ελαφρά θερμικά πυρολυμένη, γλυκασμένη. Ελαφρά νάφθα από θερμική διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται όταν αποσταγμα πετρελαιο από την θερμική πυρόλυση σε υψηλή θερμοκρασία κλασμάτων βαρέως ελαίου υποβάλλεται σε κατεργασία γλυκανσης για την μετατροπή των μερκαπτανών. Συνίσταται κυρίως από αρωματικούς, ολεφινικούς και κορεσμένους υδρογονάνθρακες και βράζει στην περιοχή από 20 °C έως 100 °C περίπου.]
- EN : Naphtha (petroleum), light thermal cracked, sweetened ; Low boiling point thermally cracked naphtha  
[A complex combination of hydrocarbons obtained by subjecting a petroleum distillate from the high temperature thermal cracking of heavy oil fractions to a sweetening process to convert mercaptans. It consists predominantly of aromatics, olefins and saturated hydrocarbons boiling in the range of approximately 20 °C to 100 °C (68 °F to 212 °F).]
- FR : naphtha léger de craquage thermique (pétrole), adouci ; Naphtha de craquage thermique à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue en soumettant un distillat pétrolier résultant du craquage thermique à haute température de fractions d'huile lourde à un procédé d'adoucisement destiné à convertir les mercaptans. Se compose principalement d'aromatiques, d'oléfinés et d'hydrocarbures saturés dont le point d'ébullition est compris approximativement entre 20 °C et 100 °C.]
- IT : nafta (petrolio), leggera crackizzata termicamente, addolcita ; Nafta di cracking termico con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta sottoponendo un distillato di petrolio dal cracking termico ad alta temperatura di frazioni di petrolio pesante ad un processo di addolcimento per trasformare i mercaptani. È costituita prevalentemente da aromatici, olefine ed idrocarburi saturi con punto di ebollizione nell'intervallo 20 °C-100 °C ca.]
- NL : nafta (aardolie), lichte thermisch gekraakte, stankvrij gemaakt ; Thermisch gekraakte nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het onderwerpen van een aardoliedestillaat uit het thermisch kraken bij hoge temperatuur van zware oliefracties aan een stankverwijderingsproces om mercaptanen om te zetten. Bestaat voornamelijk uit aromaten, olefinen en verzadigde koolwaterstoffen en heeft een kooktraject van ongeveer 20 °C tot 100 °C.]
- PT : nafta (petróleo), leve, do cracking térmico, tratada (sweetened) ; Nafta de « cracking » térmico de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida submetendo um destilado petrolífero do cracking térmico a temperatura elevada de fracções petrolíferas pesadas a um processo de sweetening par converter mercaptans. É constituída predominantemente por hidrocarbonetos aromáticos, olefinas e hidrocarbonetos saturados que destilam no intervalo de aproximadamente 20 °C a 100 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 64742-48-9

EEC No 265-159-3

No 649-327-00-6

NOTA H


NOTA P

- ES : nafta (petróleo), fracción pesada tratada con hidrógeno ; Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrógeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{11}$  y con un intervalo de ebullición aproximado de 65 °C a 230 °C]
- DA : naphtha (råolie), hydrogenbehandlet tung ; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, overvejende  $C_6$  til og med  $C_{11}$ , med koginterval omtrent fra 65 °C til 230 °C]
- DE : Naphtha (Erdöl), mit Wasserstoff behandelte schwere ; Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{11}$  und siedet im Bereich von etwa 65 °C bis 230 °C.]
- EL : ναφθα (πετρελαιο), βαριά κατεργασμένη με υδρογόνο· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πομπόλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία κλάσματος πετρελαίου με υδρογόνο παρουσία καταλύτη. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{11}$ , και με περιοχή δρασμού από 65 °C έως 230 °C περίπου.]
- EN : Naphtha (petroleum), hydrotreated heavy ; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{11}$  and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F).]
- FR : naphtha lourde (pétrole), hydrotraité ; Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_6$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 65 °C et 230 °C.]
- IT : nafta (petrolio), frazione pesante di « hydrotreating » ; Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per trattamento di una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi aventi un numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$  -  $C_{11}$ , e punto di ebollizione nell'intervallo 65 °C - 230 °C ca.]
- NL : nafta (aardolie), met waterstof behandeld zwaar ; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 65 °C tot 230 °C]
- PT : nafta (petróleo), pesada tratada com hidrogénio ; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída por hidrocarbonetos na gama de  $C_6$  até  $C_{11}$ , e desúla no intervalo de aproximadamente 65 °C a 230 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificaton, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

NOTA 4

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

Cas No 64742-49-0

E.C. No 265-151-9

No 649-328-00-1

NOTA H

NOTA F

- ES: nafta (petróleo), fracción ligera tratada con hidrógeno. Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrógeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$  y con un intervalo de ebullición aproximado de menos 20 °C a 190 °C.]
- DA: naphtha (råolie), hydrogenbehandlet let; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, overvejende  $C_4$  til og med  $C_{11}$ , med kogesinterval fra minus 20 °C til 190 °C.]
- DE: Naphtha (Erdöl), mit Wasserstoff behandelte leichte; Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa minus 20 °C bis 190 °C.]
- EL: ναφθα (πετρελαίου), ελαφριά κατεργασμένη με υδρογόνο· Ελαφρά νάφθα από υδρογονοπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία κλάσματος πετρελαίου με υδρογόνο παρουσία καταλύτη. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{11}$  και με περιοχή βρασμού από 20 °C έως 190 °C περίπου.]
- EN: Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$  and boiling in the range of approximately minus 20 °C to 190 °C (−4 °F to 374 °F).]
- FR: naphtha léger (pétrole), hydrotraité; Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{11}$  et dont le point d'ébullition est compris approximativement entre −20 °C et 190 °C.]
- IT: nafta (petrolio), frazione leggera di « hydrotreating »; Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per trattamento di una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$  e punto di ebollizione nell'intervallo −20 °C - 190 °C ca.]
- NL: nafta (aardolie), met waterstof behandeld licht; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer −20 °C tot 190 °C.]
- PT: nafta (petróleo), leve tratada com hidrogénio; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e destula no intervalo de aproximadamente menos 20 °C a 190 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn: R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 64742-73-0

EEC No 265-178-6

No 649-329-00-7

NOTA H

NOTA P

- ES nafta (petróleo), fracción ligera hidrodesulfurada, Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por un proceso de hidrodesulfuración. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y un intervalo de ebullición aproximado de menos 20 °C a 190 °C.]
- DA naphtha (råolie), hydroafsvovlet let; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider opnået ved en katalytisk hydroafsvovningsproces. Den består af carbonhydrider, overvejende  $C_4$  til og med  $C_{11}$ , med kogeminterval omtrent fra minus 20 °C til 190 °C.]
- DE Naphtha (Erdöl), hydrodesulfurierte leichte, Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem katalytischen Hydrodesulfurierungsverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa minus 20 °C bis 190 °C.]
- EL νάφθα (πετρελαιο), ελαφρά υδρογονοαποθεωμένη. Ελαφρά νάφθα από υδρογονοαπεξεργασία  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από καταλυτική υδρογονοαποθείωση. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{11}$  και βράζει στην περιοχή από μέγιστο 20 °C έως 90 °C περίπου.]
- EN Naphtha (petroleum), hydrodesulfurized light, Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$ , and boiling in the range of approximately minus 20 °C to 190 °C (-4 °F to 374 °F).]
- FR naphtha léger (pétrole), hydrodésulfuré Naphtha hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par un procédé d'hydrodesulfuration catalytique. Se compose d'hydrocarbures dont le nombre de carbonos se situe principalement dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre -20 °C et 190 °C.]
- IT nafta (petrolio), leggera idrodesolforata, Nafta di «hydrotreating» con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta da un processo di idrodesolfurazione catalitica. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$  e punto di ebollizione nell'intervallo -20 °C-190 °C ca.]
- NL nafta (aardolie), met waterstof ontzwaveld licht, Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit een katalytisch waterstofontzwavelingsproces. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer -20 °C tot 190 °C.]
- PT: nafta (petróleo), leve hidrogenodessulfurada Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de hidrogenodessulfuração catalítica. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e desula no intervalo de aproximadamente menos 20 °C a 190 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45; Xn; R 65

*Etiquetado, Etikettering, Kennzeichnung, Ετικευση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgränzer, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4



Cas No 64742-82-1

EEC No 265-185-4

No 649-330-00-2

NOTA H

NOTA P

- ES : nafta (petróleo), fracción pesada hidrodesulfurada ; Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida de un proceso de hidrodesulfuración catalítica. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>9</sub> a C<sub>12</sub> y con un intervalo de ebullición aproximado de 90 °C a 230 °C.]
- DA : naphtha (råolie), hydroafsvovlet tung ; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydnder opnået ved en katalytisk hydroafsvovlningsproces. Den består af carbonhydnder, overvejende C<sub>9</sub> til og med C<sub>12</sub>, med koginterval omtrent fra 90 °C til 230 °C.]
- DE : Naphtha (Erdöl), hydrodesulfurierte schwere ; Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem katalytischen Hydrodesulfurierungsverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>9</sub> bis C<sub>12</sub> und siedet im Bereich von etwa 90 °C bis 230 °C.]
- EL : ναφθα (πετρελαίου), βαρεία υδρογονοαποδεδειγμένη· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από καταλυτική υδρογονοαποδείωση. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>9</sub> έως και C<sub>12</sub> και βράζει στην περιοχή από 90 °C έως 230 °C περίπου.]
- EN : Naphtha (petroleum), hydrodesulfurized heavy ; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>9</sub> through C<sub>12</sub> and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F).]
- FR : naphta lourd (pétrole), hydrodésulfuré ; Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par un procédé d'hydrodésulfuration catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme C<sub>9</sub>-C<sub>12</sub> et dont le point d'ébullition est compris approximativement entre 90 °C et 230 °C.]
- IT : nafta (petrolio), pesante idrodesolforata ; Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta da un processo di idrodesolfurazione catalitica. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>9</sub>-C<sub>12</sub> e punto di ebollizione nell'intervallo 90 °C-230 °C ca.]
- NL : nafta (aardolie), met waterstof ontwaveld zwaar ; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen uit een waterstofontzwavelingsproces. Bestaat uit koolwaterstoffen, overwegend C<sub>9</sub> tot en met C<sub>12</sub>, met een kooktraject van ongeveer 90 °C tot 230 °C.]
- PT : nafta (petróleo), pesada hidrogenodessulfunzada ; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de hidrogenodessulfuração catalítica. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de C<sub>9</sub> até C<sub>12</sub> e destila no intervalo de aproximadamente 90 °C a 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68410-96-8

EEC No 270-092-7

No 649-331-00-8

NOTA H


NOTA P

- ES : destilados (petróleo), fracción intermedia tratada con hidrógeno, punto de ebullición intermedio ; Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por la destilación de productos de un proceso de tratamiento con hidrógeno del destilado intermedio. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{10}$  y con un intervalo de ebullición aproximado de 127 °C a 188 °C.]
- DA : destillater (råolie), hydrogenbehandlede middeltunge, intermediært kogende ; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider opnået ved destillationen af produkter fra en hydrogenbehandlingsproces af middeltunge destillater. Den består af carbonhydrider, overvejende  $C_7$  til og med  $C_{10}$ , med kogesinterval omtrent fra 127 °C til 188 °C.]
- DE : Destillate (Erdöl), mit Wasserstoff behandelte mittlere, intermediär siedend ; Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation von Produkten aus einem Verfahren der Wasserstoffbehandlung von Mitteldestillat. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{10}$  und siedet im Bereich von etwa 127 °C bis 188 °C.]
- EL : αποσταγματα (πετρελαίου), υδρογονοκατεργασμένα μεσαία, ενδιάμεσης θερμοκρασίας βρασμού· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με την απόσταξη προϊόντων από υδρογονοκατεργασία μεσαίου αποσταγματος. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  έως και  $C_{10}$  και βράζει στην περιοχή από 127 °C έως 188 °C περίπου.]
- EN : Distillates (petroleum), hydrotreated middle, intermediate boiling ; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by the distillation of products from a middle distillate hydrotreating process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{10}$  and boiling in the range of approximately 127 °C to 188 °C (262 °F to 370 °F).]
- FR : distillats moyens hydrotraités (pétrole), à point d'ébullition intermédiaire ; Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits issus de l'hydrotraitement de distillats moyens. Se compose d'hydrocarbures dont le nombre de carbonos se situe principalement dans la gamme  $C_7$ - $C_{10}$  et dont le point d'ébullition est approximativement compris entre 127 °C et 188 °C.]
- IT : distillati (petrolio), frazioni intermedie di idrotrattamento, punto di ebollizione intermedio ; Nafta di • hydrotreating • con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di hydrotreating di distillati intermedi. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{10}$  e punto di ebollizione nell'intervallo 127 °C - 188 °C ca.]
- NL : destillaten (aardolie), waterstofbehandelde middenfracties, tussenfracties ; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van produkten van het waterstofbehandelingsproces van middendestillaat. Bestaat uit koolwaterstoffen, voornamelijk  $C_7$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 127 °C tot 188 °C.]
- PT : destilados (petróleo), médios tratados com hidrogénio, de intervalo de destilação intermédio ; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação dos produtos de um processo de tratamento de um destilado médio com hidrogénio. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{10}$  e destila no intervalo de aproximadamente 127 °C a 188 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2 : R 45	Xn : R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45- 65
0.1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68410-97-9

EEC No 270-093-2

No 649-332-00-3

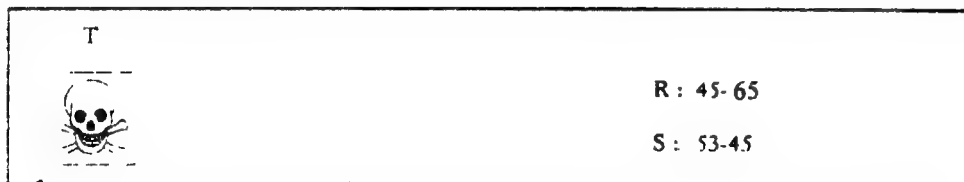
NOTA H  
NOTA P

- ES destilados (petroleo), proceso de tratamiento con hidrógeno del destilado ligero, bajo punto de ebullición , Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por la destilación de productos del proceso de tratamiento con hidrógeno del destilado ligero. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_9$ , y con un intervalo de ebullición aproximado de 3 °C a 194 °C]
- DA destillater (råolie), let destillat hydrogenbehandlingsproces-, lavtkogende , Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrier opnået ved destillationen af produkter fra hydrogenbehandlingsprocessen af en let destillat. Den består af carbonhydrier, overvejende  $C_4$  til og med  $C_9$ , med kogesinterval omtrent fra 3 °C til 194 °C.]
- DE Destillate (Erdöl), leichtes Destillat Verfahren zur Behandlung mit Wasserstoff, niedrig siedend , Naphtha wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation von Produkten aus einem Verfahren der Wasserstoffbehandlung von Leichtdestillat. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_9$  und siedet im Bereich von etwa 3 °C bis 194 °C]
- EL αποσταγµατα (πετρελαιο), υδρογονοκατεργασίας ελαφρου αποστάγµατος, χαµηλής θερμοκρασίας βρασµού· Ελαφρά ναφθα απο υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασµός υδρογονανθράκων που λαµβάνεται µε την απόσταξη προϊόντων από την υδρογονοκατεργασία ελαφρου αποστάγµατος. Συνίσταται κυρίως από υδρογονάνθρακες µε αριθµό ατόµων ανθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_9$  και βράζει στην περιοχή από 3 °C έως 194 °C περίπου.]
- EN Distillates (petroleum), light distillate hydrotreating process, low-boiling , Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by the distillation of products from the light distillate hydrotreating process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_9$  and boiling in the range of approximately 3 °C to 194 °C (37 °F to 382 °F).]
- FR : distillats légers hydrotraités (pétrole), a bas point d'ébullition , Naphta hydrotraité a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits issus de l'hydrotraitement de distillats légers. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_9$ , et dont le point d'ébullition est approximativement compris entre 3 °C et 194 °C.]
- IT distillati (petrolio), bassobollenti, processo di idrotattamento di distillati leggeri , Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di hydrotreating di distillati leggeri. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_9$ , e punto di ebollizione nell'intervallo 3 °C - 194 °C ca.]
- NL destillaten (aardolie), licht destillaat waterstofbehandelingsproces, laagkokend , Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van produkten van het waterstofbehandelingsproces van licht destillaat. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_9$ , met een kooktraject van ongeveer 3 °C tot 194 °C.]
- PT destilados (petróleo), do processo de tratamento de destilado leve com hidrogénio, de intervalo de destilação baixo , Nafta desulfurada de baixo de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação dos produtos de um processo de tratamento de um destilado leve com hidrogénio. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_9$ , e destila no intervalo de aproximadamente 3 °C a 194 °C]

*Classification Klassificering Einstufung Ταξινόμηση Classification, Classificação Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68410-98-0

EEC No 270-094-8

No 649-333-00-9

NOTA H

NOTA P

- ES destilados (petroleo), nafta pesada tratada con hidrogeno, traccion de cabeza del deisohexanizador Nafta hidroge-  
nada de baja temperatura de inflamacion  
[Combinacion compleja de hidrocarburos obtenida por destilacion de los productos del proceso de tratamiento con hidrogeno de  
nafta pesada Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>6</sub> y con un  
intervalo de ebullicion aproximado de -49 °C a 68 °C]
- DA destillater (råolie), hydrogenbehandlet tung naphtha, deisohexanizer-topfraktioner Lavtkogende hydrogenet nafta  
[En sammensat blanding af carbonhydrider opnaet ved destillation af produkterne fra en hydrogenbehandlingsproces af tung  
naphtha Den består af carbonhydrider, overvejende C<sub>1</sub> til og med C<sub>6</sub>, med kogesinterval omtrent fra -49 °C til 68 °C]
- DE Destillate (Erdöl), mit Wasserstoff behandelte schwere Naphtha, Deisohexanisierer Überschüsse, Naphtha, wasser-  
stoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation von Produkten aus einem Verfahren der Wasser-  
stoffbehandlung von schwerer Naphtha Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub>  
bis C<sub>6</sub> und siedet im Bereich von etwa -49 °C bis 68 °C]
- EL αποστανματα (πετρελαιο), υδρογονοκατεργασμένης βαρείας ναφθας, προϊόντα κορυφής από ισοεξανιωτήρα  
Ελαφρά ναφθα από υδρογονοεπεξεργασία  
[Περίπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με αποστάξη των προϊόντων από υδρογονοκατεργασία βαρείας  
ναφθας Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>1</sub> έως και C<sub>6</sub> και βράζει στην  
περιοχή από -49 °C έως 68 °C περίπου]
- EN Distillates (petroleum), hydrotreated heavy naphtha, deisohexanizer overheads Low boiling point hydrogen treated  
naphtha  
[A complex combination of hydrocarbons obtained by distillation of the products from a heavy naphtha hydrotreating process It  
consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>6</sub> and boiling in the range of  
approximately -49 °C to 68 °C (-57 °F to 155 °F)]
- FR distillats de naphtha lourd hydrotraité (pétrole), produits de tête du desisohexaniseur, Naphtha hydrotraité a point  
d'ébullition bas  
[Combinaison complexe d'hydrocarbures issue de la distillation des produits résultant de l'hydrotraitement de naphtha lourd. Se  
compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme C<sub>1</sub>-C<sub>6</sub> et dont le point d'ébullition  
est approximativement compris entre -49 °C et 68 °C]
- IT distillati (petrolio), nafta pesante di idrotattamento, frazioni di testa del deisoesanizzatore Nafta di « hydrotreating »  
con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di hydrotreating di nafta  
pesante È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>6</sub> e punto di ebollizione  
nell'intervallo da -49 °C a 68 °C ca]
- NL destillaten (aardolie), met waterstof behandelde zware nafta, deisohexanisator-topprodukten, gehydrogeneerde nafta  
met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van de producten uit een waterstofbehandelings-  
proces van zware nafta Bestaat uit koolwaterstoffen, overwegend C<sub>1</sub> tot en met C<sub>6</sub>, met een kooktraject van ongeveer -49 °C tot  
68 °C]
- PT destilados (petróleo), de nafta pesada com hidrogénio, de cabeça do desiohexanizador, Nafta desulfurada de baixo  
ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por destilação dos produtos de um processo de tratamento de uma nafta  
pesada com hidrogénio É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  
C<sub>1</sub> até C<sub>6</sub> e destila no intervalo de aproximadamente -49 °C a 68 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Eichetatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4



Cas No 68512-78-7

EEC No 270-988-8

No 649-334-00-4

NOTA H

NOTA P

- ES: nafta disolvente (petróleo), fracciones aromáticas ligeras, tratadas con hidrógeno; Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrógeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{10}$  y con un intervalo de ebullición aproximado de 135 °C a 210 °C.]
- DA: solventnaphtha (råolie), let aromatisk, hydrogenbehandlet; Lavtkogende hydrogeneret nafta  
[En sammensæt blanding af carbonhydrider opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_8$  til og med  $C_{10}$ , med koginterval omtrent fra 135 °C til 210 °C.]
- DE: Lösungsmittelnaphtha (Erdöl), leicht aromatisch, mit Wasserstoff behandelt; Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{10}$  und siedet im Bereich von etwa 135 °C bis 210 °C.]
- EL: διαλυτής νάφθα (πετρελαίου), ελαφρός αρωματικός, κατεργασμένος με υδρογόνο· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία κλάσματος πετρελαίου με υδρογόνο παρουσία καταλύτη. Συνίσταται από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  έως και  $C_{10}$  και με περιοχή βρασμού από 135 °C έως 210 °C περίπου.]
- EN: Solvent naphtha (petroleum), light arom., hydrotreated; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{10}$  and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).]
- FR: solvant naphtha aromatique léger (pétrole), hydrotraité; Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ - $C_{10}$  et dont le point d'ébullition est compris approximativement entre 135 °C et 210 °C.]
- IT: nafta solvente (petrolio), frazione aromatica leggera, idrotrattata; Nafta di «hydrotreating» con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{10}$  e punto di ebollizione nell'intervallo 135 °C-210 °C ca.]
- NL: solventnafta (aardolie), lichte aromatische, waterstofbehandeld; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 135 °C tot 210 °C.]
- PT: nafta de petróleo (petróleo), aromática leve, tratada com hidrogénio; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_8$  até  $C_{10}$  e destila no intervalo de aproximadamente 135 °C a 210 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 85116-60-5

EEC No 285-511-9

No 649-335-00-X

NOTA H

NOTA P

- ES: nafta (petróleo), fracción ligera hidrodesulfurada craqueada térmicamente; Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por el fraccionamiento del destilado hidrodesulfurado del craqueador térmico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 23 °C a 195 °C.]
- DA: naphtha (råolie), hydroafsvovlet termisk krakket let; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider opnået ved fraktionering af et hydroafsvovlet termisk krakket destillat. Den består overvejende af carbonhydrider, overvejende  $C_7$  til  $C_{11}$ , med koginterval omtrent fra 23 °C til 195 °C.]
- DE: Naphtha (Erdöl), hydrodesulfurierte thermisch gekrackte leichte; Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung von hydrodesulfuriertem thermisch gekracktem Destillat. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{11}$  und siedet im Bereich von etwa 23 °C bis 195 °C.]
- EL: ναφθα (πετρελαίου), ελαφρά υδρογονοαποθειωμένη, θερμικά πυρολυμένη· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κλασμάτωση υδρογονοαποθειωμένου αποστάγματος θερμικής πυρόλυσης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  έως  $C_{11}$  και βράζει στην περιοχή από 23 °C έως 195 °C περίπου.]
- EN: Naphtha (petroleum), hydrodesulfurized thermal cracked light; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by fractionation of hydrodesulfurized thermal cracker distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_7$  to  $C_{11}$  and boiling in the range of approximately 23 °C to 195 °C (73 °F to 383 °F).]
- FR: naphtha léger (pétrole), craquage thermique, hydrodésulfuration; Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement d'un distillat de craquage thermique hydrodésulfuré. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_7$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 23 °C et 195 °C.]
- IT: nafta (petrolio), leggera crackizzata termicamente idrodesolforata; Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuti per frazionamento di distillato crackizzato cataliticamente idrodesolforato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{11}$  e punto di ebollizione nell'intervallo 23 °C-195 °C ca.]
- NL: nafta (aardolie), met waterstof ontwaveld thermisch gekraakte lichte fractie; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen verkregen door fractionering van met waterstof ontwaveld thermisch gekraakt destillaat. Het bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_7$  tot  $C_{11}$ , met een kooktraject van ongeveer 23 °C tot 195 °C.]
- PT: nafta (petróleo), leve do cracking térmico hidrogenodessulfurizada; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por fracionamento de destilado do cracking térmico hidrogenodessulfurizado. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{11}$ , e destila no intervalo de aproximadamente 23 °C a 195 °C.]

*Clasificación, Klasificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 85116-61-6

EEC No 285-512-4

No 649-336-00-5

NOTA H

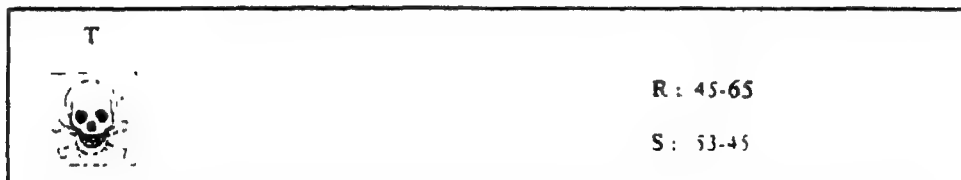
NOTA P

- ES: nafta (petroleo), fracción ligera tratada con hidrogeno, con cicloalcanos, Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida de la destilación de una fracción de petróleo. Compuesta en su mayor parte de alcanos y cicloalcanos con un intervalo de ebullición aproximado de menos 20 °C a 190 °C]
- DA: naphtha (råolie), hydrogenbehandlet let. cycloalkanholdig; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrier opnået ved destillationen af en råoliefraktion. Den består overvejende af alkaner og cycloalkaner med koginterval omtrent fra minus 20 °C til 190 °C.]
- DE: Naphtha (Erdöl), mit Wasserstoff behandelte leichte, Cycloalkan-enthaltend, Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus der Destillation einer Erdöl-Fraktion. Besteht vorherrschend aus Alkanen und Cycloalkanen und siedet im Bereich von etwa minus 20 °C bis 190 °C.]
- EL: ναφθα (πετρελαίου), κατεργασμένη με υδρογόνο ελαφρά, που περιέχει κυκλοαλκάνια. Ελαφρά ναφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη πετρελαίου. Συνίσταται κυρίως από αλκάνια και κυκλοαλκάνια και δράζει στην περιοχή από μείον 20 °C έως 190 °C περίπου.]
- EN: Naphtha (petroleum), hydrotreated light, cycloalkane-contg.; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained from the distillation of a petroleum fraction. It consists predominantly of alkanes and cycloalkanes boiling in the range of approximately minus 20 °C to 190 °C (-4 °F to 374 °F)]
- FR: naphta léger hydrotraité (pétrole), contenant des cycloalcanes, Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation d'une fraction pétrolière. Se compose principalement d'alcane et de cycloalcanes dont le point d'ébullition est compris approximativement entre -20 °C et 190 °C]
- IT: nafta (petrolio), leggera idrotrattata, contenuta cicloalcani; Nafta di «hydrotreating» con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuti per distillazione di una frazione di petrolio. È costituita prevalentemente da alcani e cicloalcani con un punto di ebollizione nell'intervallo -20 °C a 190 °C.]
- NL: natta (aardolie), met waterstof behandelde lichte fractie, bevat cycloalkaan; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen verkregen door destillatie van een aardoliefractie. Bestaat voornamelijk uit alkanen en cycloalkanen, met een kooktraject van ongeveer -20 °C tot 190 °C.]
- PT: natta (petróleo), leve tratada com hidrogénio, contendo cicloalcanos; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de uma fracção petrolífera. É constituída predominantemente por alcanos e cicloalcanos destilando no intervalo de aproximadamente menos 20 °C a 190 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classifikation, Classificazione, Indeling, Classificatião*

Cat. 2, R 45 Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

Cas No 92045-51-7

EEC No 295-432-1

No 649.337-00-0

NOTA H


NOTA P

- ES nafta (petroleo), fracción pesada craqueada a vapor, hidrogenada , Nafta hidrogenada de baja temperatura de inflamacion
- DA naphtha (råolie), tung dampkrakket, hydrogeneret , Lavtkogende hydrogeneret nafta
- DE Naphtha (Erdöl), schwer, Dampf-gekrackt, hydriert Naphtha, wasserstoffbehandelt, niedrig siedend
- EL ναφθα (πετρελαιο), ατμοπυρολυμένη βαρεία, υδρογονωμένη Ελαφρά ναφθα από υδρογονοεπεξεργασία
- EN Naphtha (petroleum), heavy steam-cracked, hydrogenated Low boiling point hydrogen treated naphtha
- FR naphtha lourde (pétrole), vapocraquage, hydrogenation Naphtha hydrotraité a point d'ébullition bas
- IT nafta (petrolio), pesante crackizzata con vapore, idrogenata Nafta di • hydrotreating con basso punto di ebollizione
- NL nafta (aardolie), met stoom gekraakte zware fractie, gehydrogeneerd Gehydrogeneerde nafta met laag kookpunt
- PT nafta (petróleo), pesada do steam-cracking, hidrogenada Nafta desulfurada de baixa ponto de ebulição

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 92045-52 x

EEC No 295-433-7

No 649-338-00-6

NOTA H

NOTA P

- ES** nafta (petróleo), serie completa hidrodesulfurada. Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida en un proceso de hidrodesulfuración catalítico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 30 °C a 250 °C]
- DA** naphtha (råolie), hydroafsvovlet full-range. Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrier opnået fra en katalytisk hydroafsvovlingsproces. Den består overvejende af carbonhydrier overvejende  $C_4$  til og med  $C_{11}$  med kogesinterval omtrent fra 30 °C til 250 °C]
- DE** Naphtha (Erdöl), hydrodesulfuriert gesammte. Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus einem katalytischen Hydrodesulfurierungsverfahren erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$ , und siedet im Bereich von etwa 30 °C bis 250 °C]
- EL** ναφθα (πετρέλαιον), υδρογονοαποθειωμένη πλήρους συστάσης. Ελαφρά ναφθα από υδρογονοεπεξεργασία  
[Πολυπλοκός συνιστάμενος υδρογονανθράκων που λαμβάνεται από καταλυτική υδρογονοαποθείωση. Συνίσταται κυρίως από υδρογονανθράκες με περίπου ατομών άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{11}$  και βράζει στην περιοχή από 30 °C έως 250 °C περίπου]
- EN** Naphtha (petroleum), hydrodesulfurized full-range. Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$ , and boiling in the range of approximately 30 °C to 250 °C (86 °F to 482 °F)]
- FR** naphta a large intervalle de distillation (pétrole), hydrodesulfure. Naphta hydrotraite a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par une hydrodesulfuration catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 30 °C et 250 °C]
- IT** nafta (petrolio), gamma completa idrodesolforata. Nafta di "hydrotreating" con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta da un processo di idrodesolforazione catalitico. È costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$ , e con punto di ebollizione nell'intervallo 30 °C - 250 °C ca.]
- NL** nafta (aardolie), waterstofontzwaveld totaal bereik. Gehydrogeneerde nafta met laag kookpunt  
[En complexe verzameling koolwaterstoffen die wordt verkregen uit een katalytisch waterstofontzwapelingsproces. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 30 °C tot 250 °C]
- PT** nafta (petróleo), de carga hidrogenodessulfurizada. Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de hidrogenodessulfuração catalítica. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e destila no intervalo de aproximadamente 30 °C a 250 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 92045-57-3

EEC No 295-438-4

No 649-339-00-1

NOTA H

NOTA P

- ES** nafta (petróleo), fracción ligera craqueada a vapor tratada con hidrógeno, Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de una fracción de petróleo, derivada de un proceso de pirólisis, con hidrógeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 35 °C a 190 °C]
- DA** naphtha (råolie), hydrogenbehandlet let dampkrakket, Lavtkogende hydrogeneret nafta  
[En sammensæt blanding af carbonhydrider opnået ved at behandle en råoliefraktion, fremkommet ved en pyrolyseproces, med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af umættede carbonhydrider, overvejende  $C_4$  til og med  $C_{11}$ , med kogesinterval omfremt fra 35 °C til 190 °C.]
- DE** Naphtha (Erdöl), mit Wasserstoff behandelte leichte dampfgecrackte, Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln einer Erdöl-Fraktion aus einem Pyrolyseverfahren mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa 35 °C bis 190 °C.]
- EL** νάφθα (πετρελαίου), υδροπυρολυμένη κατεργασμένη με υδρογόνο· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία κλάσματος πετρελαίου, που προέρχεται από διεργασία πυρόλυσης με υδρογόνο παρουσία καταλυτή. Συνίσταται από ακόρεστους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{11}$ , και με περιοχή βρασμού από 35 °C έως 190 °C περίπου.]
- EN** Naphtha (petroleum), hydrotreated light steam-cracked, Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction, derived from a pyrolysis process, with hydrogen in the presence of a catalyst. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$ , and boiling in the range of approximately 35 °C to 190 °C (95 °F to 374 °F).]
- FR** naphtha léger de vapocraquage (pétrole), hydrotraité, Naphta hydrotraité a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par traitement à l'hydrogène en présence d'un catal. seur d'une fraction pétrolière dénuée d'une pyrolyse. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbonos se situe en majorité dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 35 °C et 190 °C.]
- IT** nafta (petrolio), leggera idrotrattata crackizzata a vapore, Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per trattamento di una frazione di petrolio, derivata da un processo di pirólisi, con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi insaturi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$ , e con punto di ebollizione nell'intervallo 35 °C-190 °C ca.]
- NL** nafta (aardolie), waterstofbehandelde lichte stoomgekraakte, Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardoliefractie, afkomstig uit een pyrolyseproces, met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 35 °C tot 190 °C.]
- PT** nafta (petróleo), leve do steam-cracking tratada com hidrogénio, Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera, proveniente de um processo de pirólise, com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos insaturados com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e desula no intervalo de aproximadamente 35 °C a 190 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 92045-61-9

EEC No 295-443-1

No 649-340-00-7

NOTA H  
NOTA P

- ES** hidrocarburos,  $C_{4-12}$ , craqueo de nafta, tratada con hidrógeno Nafta hydrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida por destilación del producto de un proceso de craqueo a vapor de nafta y posterior hidrogenación catalítica selectiva de formadores de goma. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 30 °C a 230 °C.]
- DA** carbonhydrider,  $C_{4-12}$ , naphtha-krækning, hydrogenbehandlede, Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider opnået ved destillation af produktet fra en naphtha dampkrækningsproces og efterfølgende selektiv katalytisk hydrogenering af gumbildnere. Den består af carbonhydrider, overvejende  $C_4$  til og med  $C_{12}$ , med koginterval omtrent fra 30 °C til 230 °C.]
- DE** Kohlenwasserstoffe,  $C_{4-12}$ , Naphthakracken, mit Wasserstoff behandelt, Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation eines Produktes aus einem Naphthadampfkrackverfahren und nachfolgender katalytischer selektiver Hydrierung von Gumbildnern erhält. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{12}$  und siedet im Bereich von etwa 30 °C bis 230 °C.]
- EL** υδρογονάνθρακες,  $C_{4-12}$ , πυρόλυσης νάφθας, κατεργασμένοι με υδρογόνο· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσπαση από το προϊόν ατμοπυρόλυσης νάφθας και στη συνέχεια καταλυτικής εκλεκτικής υδρογόνωσης ουσιών που σχηματίζουν κόμματα. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή  $C_4$  έως και  $C_{12}$  και δράζει στην περιοχή από 30 °C έως 230 °C περίπου.]
- EN** Hydrocarbons,  $C_{4-12}$ , naphtha-cracking, hydrotreated, Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by distillation from the product of a naphtha steam cracking process and subsequent catalytic selective hydrogenation of gum formers. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{12}$  and boiling in the range of approximately 30 °C to 230 °C (86 °F to 446 °F).]
- FR** hydrocarbures en  $C_{4-12}$ , craquage de naphta, hydrotraités; Naphta hydrotraité a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par distillation du produit résultant du vapocraquage de naphta, puis d'une hydrogénation catalytique sélective des produits formant des gommes. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{12}$ , et dont le point d'ébullition est compris approximativement entre 30 °C et 230 °C.]
- IT** idrocarburi,  $C_{4-12}$ , cracking della nafta, idrotrattati, Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per distillazione dal prodotto di un processo di cracking con vapore di nafta e la successiva idrogenazione catalitica selettiva di formatori di gomme. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{12}$  e con punto di ebollizione nell'intervallo 30 °C-230 °C ca.]
- NL** koolwaterstoffen,  $C_{4-12}$ , naftakracken, waterstofbehandeld, Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van het produkt uit een naftastoomkrakproces gevolgd door katalytische selectieve hydrogenering van gommvormers. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 30 °C tot 230 °C.]
- PT** hidrocarbonetos,  $C_{4-12}$ , do cracking da nafta, tratados com hidrogénio, Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida por destilação dos produtos de um processo de steam-cracking da nafta e subsequente hidrogenação catalítica selectiva dos produtos formadores de gomas. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_4$  ate  $C_{12}$ , e destila no intervalo de aproximadamente 30 °C a 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

No 92062-15-2

EEC No 295-529-9

No 649-341-00-2

NOTA H

NOTA P

- nafta disolvente (petroleo), tracci3n naftenica ligera tratada con hidr3geno ; Nafta hidrogenada de baja temperatura de inflamacion  
[Combinaci3n compleja de hidrocarburos obtenida por tratamiento de una fracci3n de petr3leo con hidr3geno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos cicloparaf3nicos con un n3mero de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$ , y con un intervalo de ebullici3n aproximado de 73 °C a 85 °C]
- solventnaphtha (r3olie), hydrogenbehandlet let naphthen- ; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydnder opn3et ved at behandle en r3olietraktion med hydrogen i tilstedev3relse af en katalysator. Den best3r overvejende af cycloparaffincarbonhydnder, overvejende  $C_6$  til og med  $C_{12}$ , med kogesinterval omirent fra 73 °C til 85 °C].
- L3sungsmittelnaphtha (Erd3l), mit Wasserstoff behandelte leichte naphthenhaltige ; Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln einer Erd3l-Fraktion mit Wasserstoff in Gegenwart eines Katalysators erhalt. Besteht vorherrschend aus cycloparaffinhaltigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$ , und siedet im Bereich von etwa 73 °C bis 85 °C.]
- διαλυτης ν3φθα (πετρελαιο), υδρογονοκατεργασμ3νη ελαφρά ναφθενική ; Ελαφρά ν3φθα απ3 υδρογονοεπεξεργασια  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία κλάσματος πετρελαίου με υδρογόνο παρουσία καταλυτη. Συνιστάται απ3 κυκλοπαρραφινικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή απ3  $C_6$  έως και  $C_{12}$ , και βράζει στην περιοχή απ3 73 °C έως 85 °C περίπου.]
- Solvent naphtha (petroleum), hydrotreated light naphthenic ; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists predominantly of cycloparaffinic hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$ , and boiling in the range of approximately 73 °C to 85 °C (163 °F to 185 °F).]
- solvant naphtha naphténique léger (petrole), hydrotraité ; Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures cycloparaffiniques dont le nombre de carbonos se situe en majorité dans la gamme  $C_6$ - $C_{12}$ , et dont le point d'ébullition est compris approximativement entre 73 °C et 85 °C.]
- nafta solvente (petrolio), naftenica leggera idrotrattata ; Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta per trattamento di una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi cicloparraffinici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$ , e punto di ebollizione nell'intervallo 73 °C-85 °C ca.]
- solvent-nafta (aardolie), met waterstof behandelde lichte nafteenhoudende ; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het behandelen van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit cycloparaffinische koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 73 °C tot 85 °C]
- nafta de petr3leo (petr3leo), nafténica leve tratada com hidrogénio ; Nafta desulfurada de baixo ponto de ebuliç3o  
[Uma combinaç3o complexa de hidrocarbonetos obtida por tratamento de uma fracç3o petrolífera com hidrogénio na presença de um catalisador. É constituida predominantemente por hidrocarbonetos cicloparraf3nicos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{12}$ , e destila no intervalo de aproximadamente 73 °C a 85 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45 Xn; R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10%	T, R 45-65
0,1% ≤ C < 10%	T, R 45

NOTA 4

Cas No 93165-55-0

EEC No 296-942-7

No 649-342-00-8

NOTA H

NOTA P

- ES:** nafta (petróleo), fracción ligera craqueada a vapor, hidrogenada, Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos producida por la separación e hidrogenación subsecuente de los productos de un proceso de craqueo a vapor para producir etileno. Compuesta fundamentalmente de parafinas saturadas e insaturadas, parafinas cíclicas e hidrocarburos aromáticos cíclicos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{10}$  y con un punto de ebullición aproximado de 50 °C a 200 °C. La proporción de hidrocarburos de benceno puede variar hasta un 30 % en peso y la corriente también puede contener pequeñas cantidades de azufre y compuestos oxigenados.]
- DA:** naphtha (råolie), let dampkrakket, hydrogeneret, Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider fremstillet ved separation og efterfølgende hydrogenering af produkterne fra en dampkrakningsproces til fremstilling af ethylen. Den består overvejende af mættede og umættede paraffiner, cykliske paraffiner og cykliske aromatiske carbonhydrider, overvejende  $C_4$  til og med  $C_{10}$ , med kogesinterval omtrent fra 50 °C til 200 °C. Forholdet mellem benzencarbonhydrider kan variere op til 30 vægtprocent, og strømmen kan også indeholde mindre mængder svovl og oxygenerede forbindelser.]
- DE:** Naphtha (Erdöl), leichte dampfgekrackte, hydriert Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Abtrennen und nachfolgender Hydrierung der Produkte aus einem Dampfkrackverfahren zur Ethylenherstellung. Besteht vorherrschend aus gesättigten und ungesättigten Paraffinen, cyclischen Paraffinen und cyclischen aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{10}$  und siedet im Bereich von etwa 50 °C bis 200 °C. Der Anteil der Benzolkohlenwasserstoffe kann bis zu 30 Gewichtsprozent variieren und der Lauf kann auch geringe Mengen Schwefel und oxygenierte Verbindungen enthalten.]
- EL:** νάφθα (πετρελαίου) ατμοπυρολυμένη ελαφρά, υδρογονωμένη· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται από τον διαχωρισμό και στη συνέχεια υδρογόνωση των προϊόντων ατμοπυρόλυσης για την παραγωγή αιθυλενίου. Συνίσταται κυρίως από κορεσμένες και ακόρεστες παραφίνες, κυκλοπαραφίνες και κυκλικούς αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{10}$  και βράζει στην περιοχή από 50 °C έως 200 °C περίπου. Η αναλογία των βενζολικών υδρογονανθράκων μπορεί να ποικίλει μέχρι 30 % κατά βάρος και το ρεύμα μπορεί να περιέχει επίσης μικροποσότητες θείου και οξυγονούχων ενώσεων.]
- EN:** Naphtha (petroleum), light steam-cracked, hydrogenated, Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons produced from the separation and subsequent hydrogenation of the products of a steam-cracking process to produce ethylene. It consists predominantly of saturated and unsaturated paraffins, cyclic paraffins and cyclic aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{10}$  and boiling in the range of approximately 50 °C to 200 °C (122 °F to 392 °F). The proportion of benzene hydrocarbons may vary up to 30 wt. % and the stream may also contain small amounts of sulphur and oxygenated compounds.]
- FR:** naphtha léger (pétrole), vapocraquage, hydrogénation, Naphtha hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures produite par séparation puis hydrogénation des produits résultant d'un vapocraquage destiné à la production d'éthylène. Se compose principalement de paraffines saturées et insaturées, de paraffines cycliques et d'hydrocarbures aromatiques cycliques dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{10}$ , et dont le point d'ébullition est compris approximativement entre 50 °C et 200 °C. La proportion d'hydrocarbures benzéniques, variable, peut atteindre 30 % en poids. Cette combinaison peut aussi contenir de petites quantités de soufre et de composés oxygénés.]
- IT:** nafta (petrolio), leggera da cracking con vapore, idrogenata, Nafta di «hydrotreating» con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta dalla separazione e successiva idrogenazione dei prodotti di un processo di cracking con vapore per la produzione di etilene. È costituita prevalentemente da paraffine sature ed insature, paraffine cicliche e idrocarburi cicloaromatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{10}$  e punto di ebollizione nell'intervallo 50 °C-200 °C ca. La quantità di idrocarburi benzenici può variare fino al 30 % in peso e la corrente può anche contenere piccole quantità di zolfo e composti ossigenati.]



NL : nafta (aardolie), stoomgekraakte lichte, gehydrogeneerd ; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de scheiding en daaropvolgende hydrogenering van de produkten van een stoomkraakproces om ethyleen te produceren. Bestaat voornamelijk uit verzadigde en onverzadigde paraffinen, cyclische paraffinen en cyclische aromatische koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 50 °C tot 200 °C. Het aandeel van benzeen-koolwaterstoffen kan oplopen tot 30 gewichtsprocenten en de stroom kan ook kleine hoeveelheden zwavel en geoxygeneerde verbindingen bevatten.]

PT : nafta (petróleo), leve do steam-cracking, hidrogenada ; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos produzida por separação e hidrogenação subsequente dos produtos de um processo de steam-cracking para produzir etileno. É constituída predominantemente por hidrocarbonetos saturados, e insaturados, parafinas cíclicas, e hidrocarbonetos aromáticos cíclicos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{10}$ , e destila no intervalo de aproximadamente 50 °C a 200 °C. A proporção de hidrocarbonetos benzénicos pode variar até 30 % em peso e esta fracção também pode conter pequenas quantidades de compostos sulfurados e oxigenados.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 93763-33-8

EEC No 297-852-0

No 649-343-00-3

NOTA H

NOTA P

- ES: hidrocarburos,  $C_{6-11}$ , tratados con hidrogeno, desaromatizados; Nafta hidrogenada de baja temperatura de inflamacion  
[Combinacion compleja de hidrocarburos obtenida como disolventes que han sido sometidos a tratamiento con hidrógeno para transformar aromáticos en naftenos por hidrogenación catalítica.]
- DA: carbonhydrider,  $C_{6-11}$ -, hydrogenbehandlede, afaromatiserede; Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider opnået som solventer, der har været underkastet hydrogenbehandling for at omdanne aromater til naphthener ved katalytisk hydrogenering.]
- DE: Kohlenwasserstoffe,  $C_{6-11}$ -, mit Wasserstoff behandelt, dearomatisiert; Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Lösungsmittel erhält, die einer Behandlung mit Wasserstoff ausgesetzt wurden, um Aromaten in Naphthene durch katalytische Hydrierung umzuwandeln.]
- EL: υδρογονάνθρακες,  $C_{6-11}$ , κατεργασμένοι με υδρογόνο, απαλλαγμένοι από αρωματικά· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν διαλύτες, που έχουν υποβληθεί σε κατεργασία με υδρογόνο για να μετατραπούν τα αρωματικά σε ναφθενικά, με καταλυτική υδρογόνωση.]
- EN: Hydrocarbons,  $C_{6-11}$ , hydrotreated, dearomatized; Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained as solvents which have been subjected to hydrotreatment in order to convert aromatics to naphthenes by catalytic hydrogenation.]
- FR: hydrocarbures en  $C_{6-11}$ , hydrotraités, désaromatisés; Naphta hydrotraité à point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par hydrotraitement de solvants afin de convertir les aromatiques en naphthènes par hydrogénation catalytique.]
- IT: idrocarburi,  $C_{6-11}$ , idrotrattati, dearomatizzati; Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta come solventi che sono stati sottoposti a idrotrattamento con lo scopo di convertire gli aromatici in naftenici per idrogenazione catalitica.]
- NL: koolwaterstoffen,  $C_{6-11}$ -, met waterstof behandeld, gedearomatiseerd; Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als solventen die zijn onderworpen aan een behandeling met waterstof teneinde aromaten om te zetten in naftenen door katalytische hydrogenering.]
- PT: hidrocarbonetos,  $C_{6-11}$ , tratados com hidrogénio, desaromatizados; Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida como solventes que foram submetidos a tratamento com hidrogenio para converter aromaticos em naftenicos por hidrogenação catalítica.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 93763-34-9

EEC No 297-853-6

No 649-344-00-9

NOTA H  
NOTA P

- ES hidrocarburos,  $C_{9-12}$ , tratados con hidrógeno, desaromatizados, Nafta hidrogenada de baja temperatura de inflamación  
[Combinación compleja de hidrocarburos obtenida como disolventes que han sido sometidos a tratamiento con hidrógeno para transformar aromáticos en naftenos por hidrogenación catalítica.]
- DA carbonhydrider,  $C_{9-12}$ , hydrogenbehandlede, afaromatiserede, Lavtkogende hydrogeneret nafta  
[En sammensat blanding af carbonhydrider opnået som solventer, der har været underkastet hydrogenbehandling for at omdanne aromater til naphthener ved katalytisk hydrogenering.]
- DE Kohlenwasserstoffe,  $C_{9-12}$ , mit Wasserstoff behandelt, dearomatisiert, Naphtha, wasserstoffbehandelt, niedrig siedend  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Lösungsmittel erhält, die einer Behandlung mit Wasserstoff ausgesetzt wurden, um Aromaten in Naphthene durch katalytische Hydrierung umzuwandeln.]
- EL υδρογονάνθρακες,  $C_{9-12}$ , κατεργασμένοι με υδρογόνο, απαλλαγμένοι από αρωματικά· Ελαφρά νάφθα από υδρογονοεπεξεργασία  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν διαλύτες, που έχουν υποβληθεί σε κατεργασία με υδρογόνο για να μετατραπουν τα αρωματικά σε ναφθενικά με καταλυτική υδρογόνωση.]
- EN Hydrocarbons,  $C_{9-12}$ , hydrotreated, dearomatized Low boiling point hydrogen treated naphtha  
[A complex combination of hydrocarbons obtained as solvents which have been subjected to hydrotreatment in order to convert aromatics to naphthenes by catalytic hydrogenation.]
- FR hydrocarbures en  $C_{9-12}$ , hydrotraités, désaromatisés, Naphta hydrotraité a point d'ébullition bas  
[Combinaison complexe d'hydrocarbures obtenue par hydrotraitement de solvants afin de convertir les aromatiques en naphthènes par hydrogénation catalytique.]
- IT idrocarburi,  $C_{9-12}$ , idrotrattati, dearomatizzati, Nafta di « hydrotreating » con basso punto di ebollizione  
[Combinazione complessa di idrocarburi ottenuta come solventi che sono stati sottoposti a idrotrattamento con lo scopo di convertire gli aromatici in naftenici per idrogenazione catalitica.]
- NL koolwaterstoffen,  $C_{9-12}$ , met waterstof behandeld, gedearomatiseerd, Gehydrogeneerde nafta met laag kookpunt  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als solventen die zijn onderworpen aan een behandeling met waterstof teneinde aromaten om te zetten in naftenen door katalytische hydrogenering.]
- PT hidrocarbonetos,  $C_{9-12}$ , tratados com hidrogénio, desaromatizados Nafta desulfurada de baixo ponto de ebulição  
[Uma combinação complexa de hidrocarbonetos obtida como solventes que foram submetidos a tratamento com hidrogénio para converter aromáticos em nafténicos por hidrogenação catalítica.]

*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 8052-41-3

EEC No 232-489-3

No 649-345-00-4

NOTA H

NOTA P

- ES: disolvente de Stoddard; Nafta de baja temperatura de inflamación, sin especificar  
[Destilado incoloro del petróleo refinado, libre de olores rancios o inconvenientes y que tiene un intervalo de ebullición aproximado de 300 °F a 400 °F.]
- DA: mineralsk terpentin; Lavtkogende uspecificeret nafta  
[Et farveløst, raffineret råoliedestillat, der er fri for harske eller frastødende lugte, med kogesinterval omtrent fra 149 °C til 204 °C.]
- DE: Stoddard Lösungsmittel; Naphtha, niedrig siedend, nicht spezifiziert  
[Farbloses, aufbereitetes Erdöldestillat, frei von ranzigen oder unangenehmen Gerüchen. Siedet im Bereich von etwa 300 °F bis 400 °F.]
- EL: διαλύτης Stoddard· Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Άχρουν, διωλισμένο απόσταγμα πετρελαίου που είναι απαλλαγμένο από ταγγές ή δυσάρεστες οσμές και δράζει σε περιοχή από 149 °C ως 204 °C περίπου.]
- EN: Stoddard solvent; Low boiling point naphtha — unspecified  
[A colourless, refined petroleum distillate that is free from rancid or objectionable odors and that boils in a range of approximately 300 °F to 400 °F.]
- FR: solvant Stoddard; Naphta à point d'ébullition bas — non spécifié  
[Distillat pétrolier raffiné incolore ne dégageant pas d'odeur de rance ou d'autre odeur nauséabonde et dont l'intervalle d'ébullition s'étend approximativement de 150 °C à 205 °C.]
- IT: solvente di Stoddard; Nafta con basso punto di ebollizione — non specificata  
[Distillato di petrolio raffinato, incolore, privo di odore di rancido o altri odori sgradevoli, che bolle nell'intervallo 300 °F-400 °F.]
- NL: Stoddard-solvent; Nafta met laag kookpunt — niet gespecificeerd  
[Een kleurloos geraffineerd aardoliedestillaat, vrij van ranzige of onaangename geuren, met een kooktraject van ongeveer 150 °C tot 205 °C.]
- PT: solvente de Stoddard; Nafta de baixo de ponto de ebulição — não especificada  
[Um destilado incolor do petróleo com cheiros rancidos ou desagradáveis e que destila no intervalo de aproximadamente 300 °F a 400 °F.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn : R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 64741-47-5

EEC No 265-047-3

No 649-346-00-X

NOTA H  
NOTA P

- ES** condensados de gas natural (petróleo), Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos separada como un líquido del gas natural en un separador de superficie por condensación retrograda. Compuesta principalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_{20}$ . Es un líquido a temperatura y presión atmosférica.]
- DA** naturgaskondensater (råolie), Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrier adskilt som en væske fra naturgas i en overfladeseparator ved retrograd kondensation. Den består hovedsageligt af carbonhydrier, overvejende  $C_1$  til  $C_{20}$ . Den er en væske ved atmosfærisk temperatur og tryk.]
- DE** Naturgaskondensate (Erdöl), Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, von Naturgas als Flüssigkeit in einem Oberflächenseparator durch rückwärtige Kondensation abgetrennt. Besteht hauptsächlich aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_{20}$ . Flüssig bei atmosphärischer Temperatur und atmosphärischem Druck.]
- EL** φυσικού αερίου συμπυκνώματα (πετρελαίου): Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που διαχωρίζεται σαν υγρό από φυσικό αέριο σε διαχωριστήρα επιφάνειας με παροδική συμπύκνωση. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{20}$ . Σε ατμοσφαιρική θερμοκρασία και πίεση είναι υγρό.]
- EN** Natural gas condensates (petroleum), Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons separated as a liquid from natural gas in a surface separator by retrograde condensation. It consists mainly of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  to  $C_{20}$ . It is a liquid at atmospheric temperature and pressure.]
- FR** gaz naturel (pétrole), condensats, Naphta à point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures séparée sous forme liquide du gaz naturel dans un séparateur de surface par condensation retrograde. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_1$ - $C_{20}$ . Liquide à température et pression atmosphériques.]
- IT** gas naturale, condensati (petrolio), Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi separati come liquido dal gas naturale in un separatore superficiale mediante condensazione retrograda. È costituita principalmente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_{20}$ . A temperatura e pressione atmosferica e allo stato liquido.]
- NL** aardgascondensaten (aardolie), Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, als vloeistof afgescheiden van aardgas in een oppervlakte-separator door middel van retrograde condensatie. Bestaat voornamelijk uit koolwaterstoffen, onverwend  $C_1$  tot  $C_{20}$ . Bij atmosferische temperatuur en druk vloeibaar.]
- PT** condensados de gas natural (petróleo), Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos separada como um líquido de gas natural num separador de superfície por condensação retrograda. É constituída sobretudo por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_1$  ate  $C_{20}$ . É um líquido a temperatura e pressão atmosféricas.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45	Xn : R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

NOTA 4

C ≥ 10 %	T : R 45-65
0,1 % ≤ C < 10 %	T : R 45

Cas No 64741-48-6

EEC No 265-048-9

No 649-347-00-5

NOTA H


NOTA P

- ES : gas natural (petroleo), mezcla líquida cruda ; Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos separada como un líquido del gas natural en una planta de reciclaje de gas por procesos tales como refrigeración o absorción. Compuesta principalmente de hidrocarburos alifáticos saturados con un número de carbonos dentro del intervalo de  $C_2$  a  $C_4$ .]
- DA : naturgas (råolie), rå væskeblanding ; Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider adskilt som en væske fra naturgas i et gasgenanvendelses anlæg ved processer, såsom nedkøling eller absorption. Den består hovedsageligt af mættede, aliphatiske carbonhydrider,  $C_2$  til og med  $C_4$ .]
- DE : Naturgas (Erdöl), rohe flüssige Mischung ; Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, von Naturgas als Flüssigkeit in einer Gasrecyclinganlage durch Kühlungs- oder Absorptionsverfahren abgetrennt. Besteht hauptsächlich aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_2$  bis  $C_4$ .]
- EL : φυσικού αερίου (πετρελαίου), ακατέργαστο υγρό μείγμα· Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων, που διαχωρίζεται σαν υγρό από φυσικό αέριο σε εγκατάσταση ανακύκλωσης αερίου με διεργασίες όπως ψύξη ή απορρόφηση. Συνίσταται από κορεσμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_2$  ως και  $C_4$ .]
- EN : Natural gas (petroleum), raw liq. mix ; Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons separated as a liquid from natural gas in a gas recycling plant by processes such as refrigeration or absorption. It consists mainly of saturated aliphatic hydrocarbons having carbon numbers in the range of  $C_2$  through  $C_4$ .]
- FR : gaz naturel (pétrole), mélange liquide brut ; Naphta à point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures séparée sous forme liquide du gaz naturel dans une unité de recyclage des gaz par des procédés tels que la réfrigération ou l'absorption. Se compose principalement d'hydrocarbures aliphatiques saturés dont le nombre de carbones se situe dans la gamme  $C_2$ - $C_4$ .]
- IT : gas naturale (petrolio), miscela liquida grezza ; Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi separata in forma liquida dal gas naturale in un impianto di riciclaggio del gas con processi quali la refrigerazione o l'assorbimento. È costituita principalmente da idrocarburi alifatici saturi con numero di atomi di carbonio nell'intervallo  $C_2$ - $C_4$ .]
- NL : aardgas (aardolie), ruw vloeibaar mengsel ; Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, als vloeistof afgescheiden van aardgas in een gasrecyclingsfabriek door processen als afkoeling en absorptie. Bestaat hoofdzakelijk uit verzadigde alifatische koolwaterstoffen, overwegend  $C_2$  tot en met  $C_4$ .]
- PT : gas natural (petróleo), mistura líquida bruta ; Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos separada como um líquido do gás natural numa unidade de reciclagem de gás por processos como a refrigeração ou a absorção. É constituída sobretudo por hidrocarbonetos alifáticos saturados com números de átomos de carbono na gama de  $C_2$  até  $C_4$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn , R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

$C \geq 10 \%$	T ; R 45-65
$0,1 \% \leq C < 10 \%$	T ; R 45

NOTA 4

Cas No 64741-69-1

EEC No 265 071-4

No 649-348-00-0

NOTA H

NOTA P

- ES nafta (petroleo), fracción ligera hidrocraqueada Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos de la destilación de los productos de un proceso de hidrocrqueo. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{10}$  y con un intervalo de ebullición aproximado de menos 20 °C a 180 °C]
- DA naphtha (råolie), let hydrokrakket, Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydinder fra destillation af produkterne fra en hydrokrakningsproces. Den består overvejende af mættede carbonhydrider overvejende  $C_4$  til og med  $C_{10}$ , med kogeeinterval omtrent fra minus 20 °C til 180 °C]
- DE Naphtha (Erdöl), leichte hydrogekrackte Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Hydrokrackverfahren. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{10}$ , und siedet im Bereich von etwa minus 20 °C bis 180 °C]
- EL ναφθα (πετρελαιο), ελαφρά υδρογονοπυρολυμένη. Ελαφρα ναφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων από απήσπαξη των προϊόντων υδρογονοπυρόλυσης. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{10}$  και με περιοχή βρασμού από μείον 20 °C ως 180 °C περίπου]
- EN Naphtha (petroleum), light hydrocracked Low boiling naphtha — unspecified  
[A complex combination of hydrocarbons from distillation of the products from a hydrocracking process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{10}$ , and boiling in the range of approximately minus 20 °C to 180 °C (−4 °F to 356 °F)]
- FR naphtha léger (pétrole), hydrocraquage, Naphta a point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un hydrocraquage. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_{10}$  et dont le point d'ébullition est compris approximativement entre −20 °C et 180 °C]
- IT nafta (petrolio), frazioni leggere di idrocracking Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuti dalla distillazione dei prodotti di un processo di idrocracking. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{10}$  e punto di ebollizione nell'intervallo da −20 °C a 180 °C ca.]
- NL nafta (aardolie), licht waterstofgekraakt Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van producten van een waterstofkraakproces. Bestaat voor namelijk uit verzadigde koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{10}$ , met een kooktraject van ongeveer −20 °C tot 180 °C]
- PT nafta (petroleo), leve do hidrocracking Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos da destilação dos produtos de um processo de hidrocracking. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{10}$  e destila no intervalo de aproximadamente menos 20 °C a 180 °C]

*Classification Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 64741-78-2

EEC No 265-079-8

No 649-349-00-6

NOTA H

NOTA P


- ES** nafta (petróleo), fracción pesada hidrocraqueada, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos de la destilación de los productos de un proceso de hidrocrqueo. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 65 °C a 230 °C.]
- DA** naphtha (råolie), tung hydrokrækket, Lavt kogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider fra destillation af produkterne fra en hydrokrækningsproces. Den består overvejende af mættede carbonhydrider, overvejende  $C_6$  til og med  $C_{12}$ , med koginterval omtrent fra 65 °C til 230 °C.]
- DE** Naphtha (Erdöl), schwere hydrogekrackte, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Hydrokrackverfahren. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 65 °C bis 230 °C.]
- EL** νάφθα (πετρελαιο), βαριά υδρογονοπυρλούμενη· Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από απόσταξη των προϊόντων υδρογονοπυρόλυσης. Συνίσταται από κορεσμένους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή  $C_6$  ως και  $C_{12}$  και με περιοχή βρασμού από 65 °C ως 230 °C περίπου.]
- EN** Naphtha (petroleum), heavy hydrocracked Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons from distillation of the products from a hydrocracking process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$  and boiling in the range of approximately 65 °C to 230 °C (148 °F to 446 °F).]
- FR** naphtha lourde (pétrole), hydrocraquage, Naphtha a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un hydrocraquage. Se compose principalement d'hydrocarbures saturés dont le nombre de carbonos se situe en majorité dans la gamme  $C_6$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 65 °C et 230 °C.]
- IT** nafta (petrolio), frazioni pesanti di idrocracking, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione dei prodotti di un processo di idrocracking. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$  e punto di ebollizione nell'intervallo 65 °C-230 °C ca.]
- NL** nafta (aardolie), zwaar waterstofgekraakt Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de produkten van een waterstofkraakproces. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 65 °C tot 230 °C.]
- PT** nafta (petróleo), pesada do hidrocracking, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos da destilação dos produtos de um processo de hidrocracking. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{12}$  e destila no intervalo de aproximadamente 65 °C a 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45- 65
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 64741-87-3

EEC No 265-089-2

No 649-350-00-1

NOTA H

NOTA P

- ES** nafta (petroleo), desazufrada, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida sometiendo una nafta de petróleo a un proceso de desazufrado para transformar mercaptanos o para separar impurezas ácidas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{12}$ , y con un intervalo de ebullición aproximado de menos 10 °C a 230 °C.]
- DA** naphtha (råolie), sweetet, Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider opnået ved at underkaste en råolienaphtha en sweetening-proces for at omdanne mercaptaner eller ljerne sure urenheder. Den består af carbonhydrider, overvejende  $C_4$  til og med  $C_{12}$ , med koginterval omtrent fra minus 10 °C til 230 °C.]
- DE** Naphtha (Erdöl), gesüßte, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Aussetzen von Erdölnaphtha einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verschmutzungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{12}$  und siedet im Bereich von etwa minus 10 °C bis 230 °C.]
- EL** ναφθα (πετρελαίου), γλυκασμένη, Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με γλύκανση νάφθας πετρελαίου για να μετατραπούν μερκαπτάνες ή να απομακρυνθούν όξινες προσμίξεις. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{12}$  και με περιοχή βρασμού από -10 °C ως 230 °C περίπου.]
- EN** Naphtha (petroleum), sweetened, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by subjecting a petroleum naphtha to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{12}$  and boiling in the range of approximately minus 10 °C to 230 °C (14 °F to 446 °F).]
- FR** naphtha (pétrole), adouci, Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par adoucissement d'un naphtha pétrolier afin de convertir les mercaptans ou d'éliminer les impuretés acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre -10 °C et 230 °C.]
- IT** nafta (petrolio), addolcita, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta sottoponendo una nafta di petrolio a un processo di addolcimento per convertire i mercaptani o per eliminare impurezze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{12}$  e punto di ebollizione nell'intervallo -10 °C a 230 °C ca.]
- NL** nafta (aardolie), stankvrij gemaakt, nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door een aardolienafta een stankverwijderend proces te laten ondergaan, waarbij mercaptanen worden omgezet of zure verontreinigingen worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{12}$ , met een kooktraject van ongeveer -10 °C tot 230 °C.]
- PT** nafta (petroleo), tratada (sweetened), Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida submetendo uma nafta petrolífera a processo de sweetening para converter mercaptans ou remover impurezas ácidas. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{12}$ , e destila no intervalo de aproximadamente menos 10 °C a 230 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10%	T ; R 45-65
0,1% ≤ C < 10%	T ; R 45

NOTA 4

Cas No 64742-15-0

EEC No 265-115-2

No 649-351-00-7

NOTA H

NOTA P

- ES nafta (petroleo), tratada con acido Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida como un refinado de un proceso de tratamiento con ácido sulfúrico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 90 °C a 230 °C.]
- DA naphtha (råolie), syrebehandlet, Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider opnået som et raffinat fra en svovlsyrebehandlingsproces. Den består af carbonhydrider, overvejende  $C_7$  til og med  $C_{12}$  med kogesinterval omtrent fra 90 °C til 230 °C.]
- DE Naphtha (Erdöl), Saure-behandelte Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Verfahren durch Einwirkung von Schwefelsäure. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{12}$  und siedet im Bereich von etwa 90 °C bis 230 °C.]
- EL ναφθα (πετρελαίου), κατεργασμένη με οξύ: Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν εκχυλισμένο προϊόν από κατεργασία με θειικό οξύ. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  ως και  $C_{12}$  και με περιοχή βρασμού από 90 °C ως 230 °C περίπου.]
- EN Naphtha (petroleum), acid-treated Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{12}$  and boiling in the range of approximately 90 °C to 230 °C (194 °C to 446 °F).]
- FR naphtha (pétrole), traité à l'acide naphtha à point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'un traitement à l'acide sulfurique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_7$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 90 °C et 230 °C.]
- IT nafta (petrolio), trattata con acido, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di trattamento con acido solforico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{12}$  e punto di ebollizione nell'intervallo 90 °C-230 °C ca.]
- NL nafta (aardolie), met zuur behandeld Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen als het raffinaat uit een zwavelzuurbehandelingsproces. Bestaat uit koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{12}$  met een kooktraject van ongeveer 90 °C tot 230 °C.]
- PT nafta (petroleo), tratada com acido, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida como um refinado de um processo de tratamento com ácido sulfúrico. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{12}$  e destila no intervalo de aproximadamente 90 °C a 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T : R 45-65
0,1 % ≤ C < 10 %	T : R 45

NOTA 4

Cas No 64742-22-9

EEC No 265-122-0

No 649-352-00-2

NOTA H

NOTA P

- ES** nafta (petróleo), fracción pesada neutralizada químicamente Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos producida por un proceso de tratamiento para separar materiales ácidos. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 65 °C a 230 °C]
- DA** naphtha (råolie), kemisk neutraliseret tung, Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrider fremskullet ved en behandlingsproces for at fjerne sure materialer. Den består af carbonhydrider, overvejende  $C_6$  til og med  $C_{12}$ , med koginterval omfrent fra 65 °C til 230 °C.]
- DE** Naphtha (Erdöl), chemisch neutralisierte schwere, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch eine Behandlungsmethode zur Beseitigung saurer Stoffe. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 65 °C bis 230 °C.]
- EL** ναφθα (πετρελαίου), βαριά χημικά εξουδετερωμένη. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία για να απομακρυνθούν όξινες ουσίες. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  ως και  $C_{12}$  και με περιοχή θρασμού από 65 °C ως 230 °C περίπου.]
- EN** Naphtha (petroleum), chemically neutralized heavy, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$  and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F)]
- FR** naphta lourd (pétrole), neutralisé chimiquement, Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_6$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 65 °C et 230 °C]
- IT** nafta (petrolio), frazione pesante neutralizzata chimicamente Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi prodotta con un processo di trattamento per la rimozione delle sostanze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$  e punto di ebollizione nell'intervallo 65 °C-230 °C ca.]
- NL** nafta (aardolie), chemisch geneutraliseerd zwaar, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit een behandelingsproces om zure materialen te verwijderen. Bestaat uit koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 65 °C tot 230 °C]
- PT** nafta (petróleo), pesada neutralizada químicamente, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos produzida por um processo de tratamento para remoção de materiais ácidos. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_6$  ate  $C_{12}$  e destila no intervalo de aproximadamente 65 °C a 230 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 64742-23-0

EEC No 265-123-6

No 649-353-00-8

NOTA H  
NOTA P

- ES** nafta (petróleo), fracción ligera neutralizada químicamente, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos producida por un proceso de tratamiento para separar materiales ácidos. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de menos 20 °C a 190 °C.]
- DA** naphtha (råolie), kemisk neutraliseret let, Lavkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider fremskillet ved en behandlingsproces til fjernelse af sure materialer. Den består af carbonhydrider, overvejende  $C_4$  til og med  $C_{11}$ , med kogesinterval omtrent fra minus 20 °C til 190 °C.]
- DE** Naphtha (Erdöl), chemisch-neutralisierte leichte, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch eine Behandlungsmethode zur Beseitigung saurer Stoffe. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$ , und siedet im Bereich von etwa minus 20 °C bis 190 °C.]
- EL** νάφθα (πετρελαιο), ελαφρά χημικώς εξουδετερωμένη. Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία για να απομακρυνθούν όξινες ουσίες. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{11}$ , και με περιοχή βρασμού από μείον 20 °C ως 190 °C περίπου.]
- EN** Naphtha (petroleum), chemically neutralized light, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$ , and boiling in the range of approximately minus 20 °C to 190 °C (– 4 °F to 374 °F).]
- FR** naphta léger (pétrole), neutralisé chimiquement, Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre – 20 °C et 190 °C.]
- IT** nafta (petrolio), frazione leggera neutralizzata chimicamente. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta con un processo di trattamento per la rimozione delle sostanze acide. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$ , e punto di ebollizione nell'intervallo – 20 °C-190 °C ca.]
- NL** nafta (aardolie), chemisch geneutraliseerd licht; Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen verkregen uit een behandelingsproces om zure materialen te verwijderen. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer – 20 °C tot 190 °C.]
- PT** nafta (petróleo), leve neutralizada químicamente, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos produzida por um processo de tratamento para remoção de materiais ácidos. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e destila no intervalo de aproximadamente menos 20 °C a 190 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

Cas No 64742-66-1

EEC No 265-170-2

No 649-354-00-3

NOTA H  
NOTA P

- ES** nafta (petróleo), desparafinada catalíticamente, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida de la desparafinación catalítica de una fracción de petróleo. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 35 °C a 230 °C.]
- DA** naphtha (råolie), katalytisk afvokset, Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider opnået ved katalytisk afvoksning af en råoliefraktion. Den består overvejende af carbonhydrider, overvejende  $C_7$  til og med  $C_{12}$ , med koginterval omtrent fra 35 °C til 230 °C.]
- DE** Naphtha (Erdöl), katalytisch entwachst, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch katalytisches Entwachsen einer Erdölfraktion. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{12}$  und siedet im Bereich von etwa 35 °C bis 230 °C.]
- EL** νάφθα (πετρελαίου), καταλυτικά αποκηρωμένη. Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από καταλυτική αποκήρωση κλάσματος πετρελαίου. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  ως και  $C_{12}$  και με περιοχή βρασμού από 35 °C ως 230 °C περίπου.]
- EN** Naphtha (petroleum), catalytic dewaxed, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained from the catalytic dewaxing of a petroleum fraction. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{12}$  and boiling in the range of approximately 35 °C to 230 °C (95 °F to 446 °F).]
- FR** naphtha (pétrole), déparaffinage catalytique Naphtha a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par déparaffinage catalytique d'une fraction pétrolière. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_7$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 35 °C et 230 °C.]
- IT** nafta (petrolio), decerata cataliticamente, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta dalla deparaffinazione catalitica di una frazione di petrolio. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{12}$  e punto di ebollizione nell'intervallo 35 °C - 230 °C ca.]
- NL** nafta (aardolie), katalytisch van was ontdaan, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit het katalytisch van was ontdoen van een aardoliefractie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 35 °C tot 230 °C.]
- PT** nafta (petróleo), desparafinada catalíticamente, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de desparafinação catalítica de uma fracção petrolífera. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{12}$ , e destila no intervalo de aproximadamente 35 °C a 230 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45	Xn , R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10\%$	T ; R 45-65
$0.1 \% \leq C < 10 \%$	T ; R 45

NOTA 4

Cas No 64742-83-2

EEC No 265-187-5

No 649-355-00-9

NOTA H

NOTA P

- ES** nafta (petróleo), fracción ligera craqueada a vapor, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida por la destilación de los productos de un proceso de craqueo a vapor. Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de menos 20 °C a 190 °C. Esta corriente es probable que contenga un 10 % de volumen o más de benceno]
- DA** naphtha (råolie), let dampkrakket, Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider opnået ved destillation af produktene fra en dampkrakningsproces. Den består overvejende af umættede carbonhydrider, overvejende  $C_4$  ul og med  $C_{11}$ , med kogesinterval omtrent fra minus 20 °C til 190 °C. Denne strøm indeholder sandsynligvis 10 volumenprocent, eller mere, benzen.]
- DE** Naphtha (Erdöl), leichte Dampf-gekrackte, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation des Produktes aus einem Dampfkrackverfahren. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa minus 20 °C bis 190 °C. Dieser Lauf enthält wahrscheinlich 10 Volumenprozent oder mehr Benzol]
- EL** ναφθα (πετρελαίου), ελαφρά ατμοπυρολυμένη· Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την απόσπαση των προϊόντων ατμοπυρόλυσης. Συνίσταται κυρίως από ακόρεστους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{11}$  και δράζει στην περιοχή από μείον 20 °C ως 190 °C περίπου. Το ρεύμα αυτό συνήθως περιέχει 10 % κατ' όγκο ή και περισσότερο βενζόλιο.]
- EN** Naphtha (petroleum), light steam-cracked, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by the distillation of the products from a steam cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$  and boiling in the range of approximately minus 20 °C to 190 °C (−4 °F to 374 °F). This stream is likely to contain 10 vol. % or more benzene.]
- FR** naphta léger (pétrole), vapocraquage, Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre −20 °C et 190 °C. Peut contenir 10 % ou plus, en volume, de benzène.]
- IT** nafta (petrolio), leggera crackizzata con vapore acqueo, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione dei prodotti provenienti da un processo di cracking con vapore d'acqua. È costituita prevalentemente da idrocarburi insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$ , e punto di ebollizione nell'intervallo −20 °C 190 °C. Questa frazione può contenere il 10 % o più di benzene in volume.]
- NL** nafta (aardolie), licht stoomgekraakt, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door de destillatie van de produkten van een stoomkraakproces. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer −20 °C tot 190 °C. Deze stroom bevat waarschijnlijk 10 of meer volumepercenten benzeen.]
- PT** nafta (petróleo), leve do steam-cracking, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida por destilação dos produtos de um processo de steam-cracking. É constituída predominantemente por hidrocarbonetos insaturados com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e destila no intervalo de aproximadamente menos 20 °C a 190 °C. Esta fracção geralmente contém 10 % em volume ou mais de benzeno.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2; R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 64742-95-6

EEC No 265-199-0

No 649-356-00-4

NOTA H

NOTA P

- ES nafta disolvente (petróleo), fracción aromática ligera. Nafta de baja temperatura de inflamación, sin especificar [Combinación compleja de hidrocarburos obtenida de la destilación de corrientes aromáticas. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{10}$  y con un intervalo de ebullición aproximado de 135 °C a 210 °C.]
- DA solvenaphtha (råolie), let aromatisk, Lavtkogende uspecificeret nafta [En sammensat blanding af carbonhydrier opnået fra destillation af aromatiske strømme. Den består overvejende af aromatiske carbonhydrier, overvejende  $C_8$  til og med  $C_{10}$ , med koginterval omtrent fra 135 °C til 210 °C.]
- DE Lösungsmittelnaphtha (Erdöl), leichte aromatische, Naphtha, niedrig siedend, nicht spezifiziert [Komplexe Kombination von Kohlenwasserstoffen aus der Destillation aromatischer Läufe. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{10}$  und siedet im Bereich von etwa 135 °C bis 210 °C.]
- EL διαλύτης νάφθα (πετρελαίου), ελαφρά αρωματική. Ελαφρά νάφθα — μη προδιαγεγραμμένη [Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από απόσταξη αρωματικών ρευμάτων. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  ως και  $C_{10}$  και βράζει στην περιοχή από 135 °C ως 210 °C περίπου.]
- EN Solvent naphtha (petroleum), light arom., Low boiling point naphtha — unspecified [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{10}$  and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).]
- FR solvant naphta aromatique léger (pétrole), Naphta a point d'ébullition bas — non spécifié [Combinaison complexe d'hydrocarbures obtenue par distillation de fractions aromatiques. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ - $C_{10}$  et dont le point d'ébullition est compris approximativement entre 135 °C et 210 °C.]
- IT nafta solvente (petrolio), aromatica leggera, Nafta con basso punto di ebollizione — non specificata [Combinazione complessa di idrocarburi ottenuta dalla distillazione di correnti aromatiche. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{10}$  e punto di ebollizione 135 °C-210 °C ca.]
- NL solvent-nafta (aardolie), licht aromatisch, Nafta met laag kookpunt — niet gespecificeerd [Een complexe verzameling koolwaterstoffen, verkregen door destillatie van aromatische stromen. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 135 °C tot 210 °C.]
- PT nafta de petróleo (petróleo), aromática leve, Nafta de baixo ponto de ebulição — não especificada [Uma combinação complexa de hidrocarbonetos obtida da destilação de frações aromáticas. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_8$  até  $C_{10}$  e destila no intervalo de aproximadamente 135 °C a 210 °C.]

*Classificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn: R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10 \%$	T; R 45-65
$0,1 \% \leq C < 10 \%$	T; R 45

NOTA 4

Cas No 68131-49-7

EEC No 268-618-5

No 649-357-00-X

NOTA H  
NOTA P

- ES hidrocarburos aromaticos,  $C_{6-10}$ , tratados con acido, neutralizados, Nafta de baja temperatura de inflamación, sin especificar
- DA aromatiske carbonhydnder,  $C_{6-10}$ , syrebehandlede, neutraliserede, Lavtkogende uspecifiseret nafta
- DE Aromatische Kohlenwasserstoffe,  $C_{6-10}$ , säurebehandelt, neutralisiert Naphtha, niedrig siedend, nicht spezifiziert
- EL αρωματικοί υδρογονάνθρακες,  $C_{6-10}$ , κατεργασμένοι με οξύ, εξουδετερωμένοι: Ελαφρά νάφθα — μη προδιαγεγραμμένη
- EN Aromatic hydrocarbons,  $C_{6-10}$ , acid-treated, neutralized, Low boiling point naphtha — unspecified
- FR hydrocarbures aromatiques en  $C_{6-10}$ , traités à l'acide, neutralisés, Naphta a point d'ébullition bas — non spécifié
- IT idrocarburi aromatici,  $C_{6-10}$ , trattati con acido, neutralizzati, Nafta con basso punto di ebollizione — non specificata
- NL aromatische koolwaterstoffen,  $C_{6-10}$ , met zuur behandeld, geneutraliseerd Nafta met laag kookpunt — niet gespecificeerd
- PT hidrocarbonetos aromaticos,  $C_{6-10}$ , tratados com acido, neutralizados, Nafta de baixo ponto de ebulição — não especificada

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 68477-34-9

EEC No 270-725-7

No 649-358-00-5

NOTA H

NOTA P

- ES: destilados (petróleo),  $C_{3,5}$ , ricos en 2-metil-2-butenos; Nafta de baja temperatura de inflamación, sin especificar [Combinación compleja de hidrocarburos de la destilación de hidrocarburos normalmente con un número de carbonos dentro del intervalo de  $C_3$  a  $C_6$ , en su mayor parte isopentano y 3-metil-1-butenos. Compuesta de hidrocarburos saturados e insaturados con un número de carbonos dentro del intervalo de  $C_3$  a  $C_6$ , en su mayor parte 2-metil-2-butenos.]
- DA: destillater (råolie),  $C_{3,5}$ , 2-methyl-2-butenrige; Lavtkogende uspecificeret nafta [En sammensat blanding af carbonhydrier fra destillationen af carbonhydrier, sædvanligvis  $C_3$  til og med  $C_6$ , overvejende isopentan og 3-methyl-1-buten. Den består af mættede og umættede carbonhydrier,  $C_3$  til og med  $C_6$ , overvejende 2-methyl-2-buten.]
- DE: Destillate (Erdöl),  $C_{3,5}$ , 2-Methyl-2-buten-reich; Naphta, niedrig siedend, nicht spezifiziert [Komplexe Kombination von Kohlenwasserstoffen, erhalten aus der Destillation von Kohlenwasserstoffen mit Kohlenstoffzahlen, die sich gewöhnlich von  $C_3$  bis  $C_6$  erstrecken, vorherrschend von Isopentan und 3-Methyl-1-buten. Besteht aus gesättigten und ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_6$ , vorherrschend 2-Methyl-2-buten.]
- EL: αποσταγματα (πετρελαίου),  $C_{3,5}$ , πλούσια σε 2-μεθυλο-2-βουτένιο· Ελαφρά νάφθα — μη προδιαγεγραμμένη [Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη υδρογονανθράκων με αριθμό ατόμων άνθρακα, που συνήθως κυμαίνεται από  $C_3$  ως και  $C_6$  κυρίως ισοπεντάνιο και 3-μεθυλο-1-βουτένιο. Συνίσταται από κορεσμένους και ακόρεστους υδρογονανθράκες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_3$  ως και  $C_6$  κυρίως 2-μεθυλο-2-βουτένιο.]
- EN: Distillates (petroleum),  $C_{3,5}$ , 2-methyl-2-butene-rich; Low boiling point naphtha — unspecified [A complex combination of hydrocarbons from the distillation of hydrocarbons usually ranging in carbon numbers from  $C_3$  through  $C_6$ , predominantly isopentane and 3-methyl-1-butene. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_6$ , predominantly 2-methyl-2-butene.]
- FR: distillats en  $C_{3,5}$  (pétrole), riches en méthyl-2 butène-2; Naphta à point d'ébullition bas — non spécifié [Combinaison complexe d'hydrocarbures issue de la distillation d'hydrocarbures dont le nombre de carbones varie habituellement de  $C_3$  à  $C_6$ , principalement de l'isopentane et du méthyl-3 butène-1. Se compose d'hydrocarbures saturés et insaturés dont le nombre de carbones se situe dans la gamme  $C_3$ - $C_6$ , du méthyl-2 butène-2 en majorité.]
- IT: distillati (petrolio),  $C_{3,5}$ , ricchi di 2-metil-2-butene; Nafta con basso punto di ebollizione — non specificata [Combinazione complessa di idrocarburi ottenuta dalla distillazione di idrocarburi, solitamente con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_6$ , prevalentemente isopentano e 3-metil-1-butene. È costituita da idrocarburi saturi e insaturi con numero di atomi di carbonio nell'intervallo  $C_3$ - $C_6$ , prevalentemente 2-metil-2-butene.]
- NL: destillaten (aardolie),  $C_{3,5}$ , rijk aan 2-methyl-2-buteen; Nafta met laag kookpunt — niet gespecificeerd [Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van koolwaterstoffen,  $C_3$  tot en met  $C_6$ , overwegend isopentaan en 3-methyl-1-buteen. Bestaat uit verzadigde en onverzadigde koolwaterstoffen,  $C_3$  tot en met  $C_6$ , overwegend 2-methyl-2-buteen.]
- PT: destilados (petróleo),  $C_{3,5}$ , ricos em 2-metil-2-butenos; Nafta de baixo ponto de ebulição — não especificada [Uma combinação complexa de hidrocarbonetos da destilação de hidrocarbonetos com números de átomos de carbono normalmente na gama de  $C_3$  até  $C_6$ , predominantemente isopentano e 3-metil-1-butenos. É constituída por hidrocarbonetos saturados e insaturados com números de átomos de carbono na gama de  $C_3$  até  $C_6$ , predominantemente 2-metil-2-butenos.]

*Classification, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4



Cas No 68477-50-9

EEC No 270-735-1

No 649-359-00-0

NOTA H

NOTA P

- ES** destilados (petroleo), destilados polimerizados del petroleo craqueado a vapor, fraccion de  $C_{5,12}$  Nafta de baja temperatura de inflamacion, sin especificar  
[Combinacion compleja de hidrocarburos obtenida de la destilacion del destilado polimerizado del petroleo craqueado a vapor Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_5$  a  $C_{12}$ ]
- DA** destillater (råolie), polymeriserede dampkrakkede råoliedestillater,  $C_{5,12}$ -fraktion Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydnder opnaet ved destillationen af polymenseret dampkrakket råoliedestillat Den består overvejende af carbonhydnder, overvejende  $C_5$  til og med  $C_{12}$ ]
- DE** Destillate (Erdöl), polymerisierte Dampf-gekrackte Erdöldestillate,  $C_{5,12}$ -Fraktion Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von polymensiertem Dampf-gekracktem Erdöldestillat Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_5$  bis  $C_{12}$ ]
- EL** αποσταγματα (πετρελαίου), πολυμερισμένων ατμοπυρολυμένων αποσταγμάτων πετρελαίου, κλάσμα  $C_{5,12}$  Ελαφρα ναφθα — μη προδιαγεγραμμένη  
[Πολυπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη πολυμερισμένου αποσταγματος πετρελαίου, που προέρχεται από ατμοπυρόλυση Συνίσταται κυρίως από υδρογονανθρακες με αριθμό ατόμων ανθρακα κυρίως στην περιοχή  $C_5$  ως και  $C_{12}$ ]
- EN** Distillates (petroleum), polymd steam-cracked petroleum distillates,  $C_{5,12}$  fraction Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained from the distillation of polymerized steam-cracked petroleum distillate It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_5$  through  $C_{12}$ ]
- FR** distillats (pétrole), distillats pétroliers de vapocraquage polymerisés, fraction  $C_{5,12}$  Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation d'un distillat pétrolier ayant subi vapocraquage et polymensation Se compose principalement d'hydrocarbures dont le nombre d carbonos se situe en majorite dans la gamme  $C_5$   $C_{12}$ ]
- IT** distillati (petrolio), distillati di petrolio crackizzati con vapore d'acqua polymerizzati, frazione  $C_{5,12}$  Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione in un distillato di petrolio crackizzato con vapore d'acqua polimerizzato È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_5$ - $C_{12}$ ]
- NL** destillaten (aardolie), gepolymeriseerde stoomgekraakte aardoliedestillaten,  $C_{5,12}$ -fractie Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door de destillatie van gepolymenseerd stoomgekraakt aardoliedestillaat Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_5$  tot en met  $C_{12}$ ]
- PT** destilados (petróleo), de destilados polimerizados do steam-cracking de petroleo, fracção  $C_{5,12}$ , Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de um destilado polimerizado do steam-cracking de petroleo É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_5$  ate  $C_{12}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn , R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T , R 45-65
0,1 % ≤ C < 10 %	T , R 45

NOTA 4

Cas No 68477-53-2

EEC No 270-736-7

No 649-360-00-6

NOTA H

NOTA P

- ES destilados (petroleo), craqueados a vapor, traccion de  $C_{5-12}$  Nafta de baja temperatura de inflamación, sin especificar  
[Combinacion compleja de compuestos organicos obtenida por la destilacion de productos de un proceso de craqueo a vapor  
Compuesta de hidrocarburos insaturados con un numero de carbonos en su mayor parte dentro del intervalo de  $C_5$  a  $C_{12}$ ]
- DA destillater (råolie), dampkrakkede,  $C_{5-12}$  fraktion Lavtkogende uspecifiseret nafta  
[En sammensat blanding af organiske forbindelser opnået ved destillationen af produkter fra en dampkrakningsproces Den består af umættede carbonhydrier, overvejende  $C_5$  ul og med  $C_{12}$ ]
- DE Destillate (Erdöl), Dampf-gekrackt,  $C_{5-12}$ -Fraktion Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination organischer Verbindungen, erhalten durch Destillation von Produkten aus einem Dampf-Krackverfahren  
Besteht aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_5$  bis  $C_{12}$ ]
- EL αποσταγµατα (πετρελαιου), ατμοπυρολυµενα, κλασµα  $C_{5-12}$  Ελαφρα ναφθα — μη προδιαγεγραµµενη  
[Πολύπλοκος συνδυασµός οργανικων ενωσεων που λαμβανεται µε την αποσταξη προϊόντων ατμοπυρόλυσης Συνιστάται από ακόρεστους υδρογονάνθρακες µε αριθµό ατοµων ανθρακα κυρίως στην περιοχή από  $C_5$  ως και  $C_{12}$ ]
- EN Distillates (petroleum), steam-cracked,  $C_{5-12}$  fraction Low boiling point naphtha — unspecified  
[A complex combination of organic compounds obtained by the distillation of products from a steam cracking process It consists of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_5$  through  $C_{12}$ ]
- FR distillats de vapocraquage (petrole), fraction  $C_{5-12}$  Naphta a point d'ebullition bas — non specifié  
[Combinaison complexe de composés organiques obtenue par distillation des produits résultant d'un vapocraquage Se compose d'hydrocarbures insaturés dont le nombre de carbones se situe en majeure partie dans la gamme  $C_5$  -  $C_{12}$ ]
- IT distillati (petrolio), crackizzati a vapore, frazione  $C_{5-12}$  Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di composti organici ottenuta per distillazione di prodotti provenienti da un processo di cracking con vapore È costituita da idrocarburi insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_5$  -  $C_{12}$ ]
- NL destillaten (aardolie), stoomgekraakt,  $C_{5-12}$  fractie Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling organische verbindingen, verkregen door de destillatie van producten uit een stoomkraakproces  
Bestaat uit onverzadigde koolwaterstoffen, overwegend  $C_5$  tot en met  $C_{12}$ ]
- PT destilados (petroleo), do steam-cracking, fracção  $C_{5-12}$  Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de compostos organicos obtida pela destilação dos produtos de um processo de steam-cracking É constituída por hidrocarbonetos insaturados com numeros de átomos de carbono predominantemente na gama de  $C_5$  ate  $C_{12}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>Γ</p>  </div> <div> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68477-55-4

EEC No 270-738-8

No 649-361-00-1

NOTA H

NOTA P

- ES destilados (petróleo), craqueados a vapor, fracción de  $C_{10}$ , mezclados con la fracción de  $C_4$  de nafta ligera de petróleo craqueada a vapor, Nafta de baja temperatura de inflamación, sin especificar
- DA destillater (råolie), dampkrakkede,  $C_{10}$ -fraktion, blandet med let dampkrakket raolienaphtha- $C_4$ -fraktion Lavtkogende uspecifiseret nafta
- DE Destillate (Erdöl), durch Dampf-Kracken,  $C_{10}$ -Fraktion, gemischt mit leichter durch Dampf Kracken gewonnener Erdöl-Naphtha- $C_4$ -Fraktion Naphtha, niedrig siedend, nicht spezifiziert
- EL αποσταγμάτων (πετρελαιο), πυρολυμένων με ατμό, κλασμάτων  $C_{10}$  μείγμα με ελαφρό  $C_4$  κλάσμα ναφθας πετρελαιο από πυρόλυση με ατμό Ελαφρά ναφθα — μη προδιαγεγραμμένη
- EN Distillates (petroleum), steam-cracked,  $C_{10}$  fraction mixed with light steam cracked petroleum naphtha  $C_4$  fraction Low boiling point naphtha — unspecified
- FR distillats de vapocraquage (pétrole), fraction en  $C_{10}$ , mélange avec la fraction en  $C_4$  de naphtha pétrolier de vapocraquage léger Naphtha a point d'ébullition bas — non spécifique
- IT distillati (petrolio), crackizzati con vapore, frazione  $C_{10}$  miscelati con nafta leggera da petrolio crackizzato con vapore frazione  $C_4$  Nafta con basso punto di ebollizione — non specificata
- NL destillaten (aardolie), stoomgekraakt,  $C_{10}$ -fractie, gemengd met lichte stoomgekraakte aardolienafta  $C_4$  fractie Nafta met laag kookpunt — niet gespecificeerd
- PT destilados (petróleo), do steam-cracking, fracção  $C_{10}$ , misturados com a fracção  $C_4$  da nafta leve do steam cracking nafta de baixo ponto de ebulição — não especificada

Classification, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificasjon, Classificazione, Indeling, Classificação

Carb. Cat. 2, R 45 Xn, R 65

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Etiketage, Etichettatura, Kenmerken, Rotulagem

T	
	R 45-65
	S 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentrações

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	I, R 45
-	

NOTA 4

Cas No 68477-61-2

EEC No 270-741-4

No 649-362-00-7

NOTA H

NOTA P

- ES extractos (petroleo), acido-en frio,  $C_{4-6}$ , Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de compuestos orgánicos producida por la extracción en la unidad de acido en frio de hidrocarburos alifáticos saturados e insaturados normalmente con un numero de carbonos dentro del intervalo de  $C_3$  a  $C_6$  fundamentalmente pentanos y amilenos. Compuesta de hidrocarburos saturados e insaturados con un numero de carbonos dentro del intervalo de  $C_3$  a  $C_6$ , pncipalmente  $C_5$ ]
- DA ekstrakter (råolie), koldsyre-,  $C_{4-6}$ , Lavtkogende uspecifiseret nafta  
[En sammensat blanding af organiske forbindelser, fremstillet ved koldsyre-enhedsekstraktion af mættede og umættede, aliphatiske carbonhydnder, sædvanligvis  $C_3$  til og med  $C_6$ , overvejende pentaner og amylenes. Den består overvejende af mættede og umættede carbonhydnder,  $C_3$  til og med  $C_6$ , overvejende  $C_5$ ]
- DE Extrakte (Erdöl), Kalt-Säure,  $C_{4-6}$  Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination organischer Verbindungen, hergestellt durch Extraktion gesättigter und ungesättigter aliphatischer Kohlenwasserstoffe mit Kohlenstoffzahlen, die gewöhnlich von  $C_3$  bis  $C_6$  reichen, vorherrschend von Pentanen und Amylenen, in einer Kalt-Säureanlage. Besteht vorherrschend aus gesättigten und ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_3$  bis  $C_6$ , vorherrschend  $C_5$ ]
- EL Εκχυλίσματα (πετρελαίου), εν ψυχρώ με οξύ,  $C_{4-6}$  Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός οργανικών ενώσεων που παραγεται με εκχυλιση σε μονάδα οξέος εν ψυχρώ κορεσμένων και ακορεστων αλειφατικών υδρογονάνθρακων με αριθμό ατόμων άνθρακα που συνήθως κυμαίνεται από  $C_3$  ως και  $C_6$ , κυρίως πεντάνια και αμυλένια. Συνίσταται κυρίως από κορεσμένους και ακόρεστους υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_3$  ως και  $C_6$ , κυρίως  $C_5$ ]
- EN Extracts (petroleum), cold-acid,  $C_{4-6}$  Low boiling point naphtha — unspecified  
[A complex combination of organic compounds produced by cold acid unit extraction of saturated and unsaturated aliphatic hydrocarbons usually ranging in carbon numbers from  $C_3$  through  $C_6$ , predominantly pentanes and amylenes. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_6$ , predominantly  $C_5$ ]
- FR extraits à l'acide à froid en  $C_{4-6}$  (pétrole) Naphta à point d'ébullition bas — non spécifié  
[Combinaison complexe de composés organiques produite par extraction acide à froid d'hydrocarbures aliphatiques saturés et insaturés dont le nombre de carbones varie habituellement de  $C_3$  à  $C_6$ , principalement des pentanes et des amylenes en majorité. Se compose principalement d'hydrocarbures saturés et insaturés dont le nombre de carbones se situe dans la gamme  $C_{4-6}$ , surtout en  $C_5$ ]
- IT estratti (petrolio), estrazione acida a freddo,  $C_{4-6}$  Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di composti organici prodotta per estrazione acida a freddo di idrocarburi alifatici saturi e insaturi con numero di atomi di carbonio solitamente nell'intervallo  $C_{4-6}$ , prevalentemente pentani e amileni. È costituita prevalentemente da idrocarburi saturi e insaturi con numero di atomi di carbonio nell'intervallo  $C_{4-6}$ , prevalentemente  $C_5$ ]
- NL extracten (aardolie), koudzuur,  $C_{4-6}$  Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling organische verbindingen, gevormd door koudzuur-installatie-extractie van verzadigde en onverzadigde alifatische koolwaterstoffen, gewoonlijk  $C_3$  tot en met  $C_6$ , voornamelijk pentanen en amylenen. Bestaat voornamelijk uit verzadigde en onverzadigde koolwaterstoffen,  $C_3$  tot en met  $C_6$ , overwegend  $C_5$ ]
- PT extractos (petróleo), da extracção a frio com acido,  $C_{4-6}$ , Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de compostos orgânicos produzida pela extracção a frio com acido de hidrocarbonetos alifáticos saturados e insaturados com numeros de átomos de carbono geralmente na gama de  $C_3$  ate  $C_6$ , predominantemente pentanos e amilenos. É constituída predominantemente por hidrocarbonetos saturados e insaturados com numeros de átomos de carbono na gama de  $C_3$  ate  $C_6$ , predominantemente  $C_5$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Limites de concentracion, Koncentration grenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçao*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68477-894-4

EEC No 270-771-8

No 649-363-00-2

NOTA H

NOTA P


- ES destilados (petróleo), productos de cabeza del despentanizador. Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida de una corriente de gas craqueado catalíticamente. Compuesta de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_6$ .]
- DA destillater (råolie), depentanizer-topfraktioner, Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrier opnået fra en katalytisk krakket gasstrøm. Den består af aliphatiske carbonhydrider, overvejende  $C_4$  til og med  $C_6$ .]
- DE Destillate (Erdöl), Depentaniserer Kopf, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus einem katalytisch gekrackten Gaslauf. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_6$ .]
- EL αποστάγματα (πετρελαίου), προϊόντων κορυφής αποπεντανιωτήρα. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από ρεύμα αερίου αλειφατικού που έχει υποστεί καταλυτική πυρόλυση. Συνίσταται από υδρογονανθράκες με αριθμό ανθράκα κυρίως στην περιοχή από  $C_4$  ως και  $C_6$ .]
- EN Distillates (petroleum), depentanizer overheads, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained from a catalytic cracked gas stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_6$ .]
- FR distillats de tête (pétrole), dépentaniseur. Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue à partir d'un mélange de gaz de craquage catalytique. Se compose d'hydrocarbures alipha-tiques dont le nombre de carbones se situe principalement dans la gamme  $C_4$ ,  $C_6$ .]
- IT distillati (petrolio), frazioni di testa del depentanizzatore. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta da una corrente di gas crackizzata cataliticamente. È costituita da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_6$ .]
- NL destillaten (aardolie), depentanisor-topprodukten. Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen uit een katalytisch gekraakte gasstroom. Bestaat uit alifatische koolwaterstoffen, overwegend  $C_4$  tot en met  $C_6$ .]
- PT destilados (petróleo), de cabeça do despentanizador. Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida de uma corrente gasosa do cracking catalítico. É constituída hidro-carbonetos alifáticos de números de átomos de carbono predominantemente na gama de  $C_4$  ate  $C_6$ .]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45	Xn ; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçãõ*

$C \geq 10 \%$	T ; R 45-65
$0.1 \% \leq C < 10 \%$	T ; R 45

NOTA 4

Cas No 68478-12-6

EEC No 270-791-7

No 649-364-00-8

NOTA H


NOTA P

- ES · residuos (petróleo), residuos del fondo del separador de butano , Nafta de baja temperatura de inflamación, sin especificar  
[Residuo complejo de la destilación de corriente de butano. Compuesto de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_6$ .]
- DA · rester (råolie), butansplitter-bundfraktioner , Lavtkogende uspecificeret nafta  
[En sammensæt remanens fra destillationen af butanstrøm. Den består af aliphatiske carbonhydnder, overvejende  $C_4$  til og med  $C_6$ .]
- DE · Rückstände (Erdöl), Butan Spalt Boden , Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexer Rückstand aus der Destillation vom Butanauf. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_6$ .]
- EL · υπολείμματα (πετρελαίου), πυθμένα στηλης διαχωρισμού βουτανίου· Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως  $C_6$ .]
- EN · Residues (petroleum), butane splitter bottoms , Low boiling point naphtha — unspecified  
[A complex residuum from the distillation of butane stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_6$ .]
- FR · résidus (pétrole), fonds de colonne de séparation du butane · Naphta a point d'ébullition bas — non spécifié  
[Résidu complexe de la distillation d'une charge de butane. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_6$ .]
- IT · residui (petrolio), frazioni di coda splitter butano · Nafta con basso punto di ebollizione — non specificata  
[Residuo complesso della distillazione di una corrente di butano. È costituito da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$  -  $C_6$ .]
- NL · residuen (aardolie), butaansplitterbodemb fracties , Nafta met laag kookpunt — niet gespecificeerd  
[Een complex residu, afkomstig uit de destillatie van een butaanstroom. Bestaat uit alifatische koolwaterstoffen, overwegend  $C_4$  tot en met  $C_6$ .]
- PT · residuos (petróleo), de cauda da coluna de separação de butano · Nafta de baixo ponto de ebulição — não especificada  
[Um residuo complexo da destilação de uma fracção de butano. É constituída por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_6$ .]

*Classification Klassificering Einstufung Ταξινόμηση Classification, Classification Classificazione Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Friktulado Etikettering Kennzeichnung Επισήμανση Labelling, Etiquetage, Etichettatura Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p> <hr style="width: 50px; margin: 5px auto;"/>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration Konzentration grenser Konzentrationsgrenzwerte Όρια συγκέντρωσης, Concentration limits, Limite de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentração*

$C \geq 10\%$	T R 45-65
$1\% \leq C < 10\%$	Γ R 45

NOTA 4

Cas No 68478-16-0

EEC No 270-795-9

No 649-355-00-3

NOTA H

NOTA P

- ES aceites residuales (petróleo), torre desisobutanizadora, Nafta de baja temperatura de inflamación, sin especificar  
[Residuo complejo de la destilación atmosférica de una corriente de butano-butileno. Compuesto de hidrocarburos alifáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_6$ .]
- DA restolier (råolie), deisobutanizertårn- Lavtkogende uspecifiseret nafta  
[En sammensat remanens fra den atmosfæriske destillation af butan-butylenstrømmen. Den består af aliphatiske carbonhydrier, overvejende  $C_4$  ul og med  $C_6$ .]
- DE Rückstände (Erdöl), Deisobutanisierer Turm Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexer Rückstand aus der offenen Destillation des Butan-Butylenlaufes. Besteht aus aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_6$ .]
- EL υπολειμματικά έλαια (πετρελαίου), στηλης αποισοδοτανιωτήρα· Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκο υπόλειμμα από την ατμοσφαιρική απόσταξη του ρευματος βουτανιου-δουτυλενιου. Συνίσταται από αλειφατικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή  $C_4$  ως και  $C_6$ .]
- EN Residual oils (petroleum), deisobutanizer tower Low boiling point naphtha — unspecified  
[A complex residuum from the atmospheric distillation of the butane-butylene stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_6$ .]
- FR huiles résiduelles de distillation (pétrole), déisobutaniseur, Naphta a point d'ébullition bas — non spécifié  
[Résidu complexe issu de la distillation atmosphérique du mélange butane-butylène. Se compose d'hydrocarbures aliphatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_6$ .]
- IT olii residui (petrolio), torre di deisobutanizzazione Nafta con basso punto di ebollizione — non specificata  
[Residuo complesso della distillazione atmosferica di una corrente butano-butilene. È costituito da idrocarburi alifatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_6$ .]
- NL residu-oliën (aardolie), deisobutanisator-toren- Nafta met laag kookpunt — niet gespecificeerd  
[Een complex residu, afkomstig uit de atmosferische destillatie van de butaan-butyleenstroom. Bestaat uit alifatische koolwaterstoffen, overwegend  $C_4$  tot en met  $C_6$ .]
- PT oleos residuais (petróleo), da coluna do desisobutanizador Nafta de baixo ponto de ebulição — não especificada  
[Um residuo complexo da destilação atmosférica da fracção butanos-butilenos. É constituído por hidrocarbonetos alifáticos com números de átomos de carbono predominantemente na gama de  $C_4$  ate  $C_6$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45	Xn , R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T ; R 45

NOTA 4

Cas No 68513-02 0

EEC No 270-991-4

No 649-366-00-9

NOTA H  
NOTA P

- ES nafta (petroleo), coquizador de serie completa Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un coquizador fluidificado. Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 43 °C a 250 °C]
- DA naphtha (råolie), full-range coker- Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrier fremstillet ved destillationen af produkter fra en væske-coker. Den består overvejende af umættede carbonhydrier, overvejende  $C_4$  til og med  $C_{11}$ , med kogesinterval omtrent fra 43 °C til 250 °C]
- DE Naphtha (Erdöl), gesamte Kokerei Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem Flüssigkoker. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich  $C_4$  bis  $C_{11}$ , und siedet im Bereich von etwa 43 °C bis 250 °C]
- EL ναφθα (πετρελαίου), πλήρους συνθέσης κοκερίας Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παράγεται από την απόσταξη προϊόντων από ρευστό κοκερίας. Συνίσταται κυρίως από ακόρεστους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή  $C_4$  ως και  $C_{11}$ , και με περιοχή βρασμού από 43 °C ως 250 °C περίπου]
- EN Naphtha (petroleum), full-range coker Low boiling point naphtha -- unspecified  
[A complex combination of hydrocarbons produced by the distillation of products from a fluid coker. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$ , and boiling in the range of approximately 43 °C to 250 °C (110 °F to 500 °F)]
- FR naphta de cokefaction (pétrole), large intervalle d'ébullition Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'une cokefaction fluide. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majeure partie dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 43 °C et 250 °C]
- IT nafta (petrolio), gamma completa di tagli da apparecchio di cokizzazione Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi prodotta per distillazione dei prodotti provenienti da un apparecchiatura di coking in letto fluidizzato. È costituita prevalentemente da idrocarburi insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ ,  $C_{11}$ , e punto di ebollizione nell'intervallo 43 °C-250 °C ca]
- NL nafta (aardolie), totaal bereik verkookser- Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen gevormd door de destillatie van producten uit een fluide verkookser. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 43 °C tot 250 °C]
- PT nafta (petroleo), carga do coker Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um coker de leito fluidizado. É constituída por hidrocarbonetos insaturados com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e destila no intervalo de aproximadamente 43 °C a 250 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	R : 45-65
	S : 53-45

*Limites de concentración, Konzentration grenzen, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçào*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68516-20-1

EEC No 271-138-9

No 649-367-00-4

NOTA H  
NOTA P

- ES** nafta (petróleo), fracción aromática intermedia craqueada a vapor, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo a vapor. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{12}$ , y con un intervalo de ebullición aproximado de 130°C a 220°C.]
- DA** naphtha (råolie), dampkrakket middeltung aromatisk, Lavkogende uspecifiseret nafta  
[En sammensæt blandning af carbonhydrier fremstillet ved destillationen af produkterne fra en dampkrakningsproces. Den består overvejende af aromatiske carbonhydrier, overvejende  $C_7$  til og med  $C_{12}$ , med kogesinterval omtrent fra 130 °C til 220 °C.]
- DE** Naphtha (Erdöl), Dampf-gecrackte mittlere aromatische, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Dampfcrackverfahren. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen vorherrschend im Bereich von  $C_7$  bis  $C_{12}$  und siedet im Bereich von etwa 130°C bis 220°C.]
- EL** νάφθα (πετρελαίου), μέση αρωματική ατμοπυρολυμένη, Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παραμένει μετά την απόσταξη ατμοπυρόλυσης. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  ως και  $C_{12}$ , και περιοχή βρασμού από 30° C ως 220° C περίπου.]
- EN** Naphtha (petroleum), steam-cracked middle arom., Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons produced by the distillation of products from a steam-cracking process. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{12}$  and boiling in the range of approximately 130 °C to 220 °C (266 °F to 428 °F)]
- FR** naphta moyen aromatique (pétrole), vapocraquage; Naphta à point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_7$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 130 °C et 220 °C.]
- IT** nafta (petrolio), tagli aromatici medi crackizzati con vapore, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking con vapore. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{12}$  e punto di ebollizione nell'intervallo 130°C - 220°C ca.]
- NL** nafta ( aardolie), stoomgekraakte middelste fracties aromatische, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, gevormd door de destillatie van produkten uit een stoomkraakproces. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 130 °C tot 220 °C.]
- PT** nafta (petróleo), aromática intermédia do steam-cracking, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de steam-cracking. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{12}$ , e destila no intervalo de aproximadamente 130°C a 220°C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

Xn; R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T; R 45

NOTA 4

Cas No 68527-21-9

FEC No 2/1-262-3

No 649-368-00-X

NOTA H

NOTA P

- ES** nafta (petroleo), serie completa de primera destilación tratada con arcilla. Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos resultante del tratamiento de la serie completa de nafta de primera destilación con arcilla natural o modificada, normalmente en un proceso de percolación para separar las trazas presentes de compuestos polares e impurezas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$  y con un intervalo de ebullición aproximado  $-20\text{ }^{\circ}\text{C}$  a  $220\text{ }^{\circ}\text{C}$ ]
- DA** naphtha (råolie), lerbehandlet full-range straight-run. Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydnder fremkommer ved behandling af full-range straight-run naphtha med naturligt eller modificeret ler, sædvanligvis i en perkoleringsproces til fjernelse af spormængderne af polære forbindelser og de tilstedeværende urenheder. Den består af carbonhydnder, overvejende  $C_4$  til og med  $C_{11}$ , med kogesinterval omtrent fra  $-20\text{ }^{\circ}\text{C}$  til  $220\text{ }^{\circ}\text{C}$ ]
- DE** Naphtha (Erdöl), Ton-behandelte gesamte straight-run. Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, entsteht durch Behandeln der gesamten straight-run Naphtha mit natürlichem oder modifiziertem Ton, gewöhnlich in einem Perkulationsverfahren zum Entfernen von Spuren polarer Verbindungen und von vorhandenen Verunreinigungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa  $-20\text{ }^{\circ}\text{C}$  bis  $220\text{ }^{\circ}\text{C}$ ]
- EL** ναφθα (πετρελαιο), πηλρους συστασης και απευθείας απόσταξης κατεργασμένη με άργιλλο. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που προκύπτει από την κατεργασία ναφθας απευθείας απόσταξης και πηλρους συστασης με φυσική ή τροποποιημένη άργιλλο, συνήθως με μέθοδο φιλτραρίσματος για την απομάκρυνση των ιχνών πολικών ενώσεων και ακαθαρσιών που ενυπάρχουν. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{11}$  και βράζει στην περιοχή από  $-20\text{ }^{\circ}\text{C}$  ως  $220\text{ }^{\circ}\text{C}$  περίπου]
- EN** Naphtha (petroleum), clay-treated full-range straight-run. Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons resulting from treatment of full range straight-run naphtha with natural or modified clay, usually in a percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$  and boiling in the range of approximately  $-20\text{ }^{\circ}\text{C}$  to  $220\text{ }^{\circ}\text{C}$  ( $-4\text{ }^{\circ}\text{F}$  to  $429\text{ }^{\circ}\text{F}$ )]
- FR** naphtha de distillation directe a large intervalle d'ébullition (petrole), traite a la terre. Naphtha a point d'ébullition bas — non specific  
[Combinaison complexe d'hydrocarbures resultant du traitement de naphtha de distillation directe a large intervalle d'ébullition avec de l'argile naturelle ou modifiée, généralement par percolation pour éliminer les traces de composés polaires et d'impuretés. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ ,  $C_{11}$  et dont le point d'ébullition est compris approximativement entre  $-20\text{ }^{\circ}\text{C}$  et  $220\text{ }^{\circ}\text{C}$ ]
- IT** nafta (petrolio), prima distillazione, gamma completa di frazioni, trattata con argilla. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi risultante dal trattamento con argilla naturale o modificata della gamma completa di frazioni di nafta di prima distillazione, solitamente in un processo di percolazione, per separare le tracce di composti polari ed impurezze presenti. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$  e con punto di ebollizione nell'intervallo da  $-20\text{ }^{\circ}\text{C}$  a  $220\text{ }^{\circ}\text{C}$  ca.]
- NL** nafta (aardolie), met klei behandelde totaal bereik van direct door fractionering verkregen, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit de behandeling van de totaal bereik van direct door fractionering verkregen nafta met natuurlijke of gemodificeerde klei in een contact- of een filtratieproces waarbij aanwezige sporen van polaire verbindingen en onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen, overwegende  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer  $-20\text{ }^{\circ}\text{C}$  tot  $220\text{ }^{\circ}\text{C}$ ]
- PT** nafta (petroleo), carga de destilação directa tratada com argila, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de nafta de destilação directa com argila natural ou modificada, normalmente por um processo de percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_4$  ate  $C_{11}$  e destila no intervalo de aproximadamente  $-20\text{ }^{\circ}\text{C}$  a  $220\text{ }^{\circ}\text{C}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentration, Koncentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0.1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68527-22-0

EEC No 271-263-9

No 649-369-00-5

NOTA H


NOTA P

- ES** nafta (petróleo), fracción ligera de primera destilación tratada con arcilla, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos resultante del tratamiento de nafta ligera de primera destilación con arcilla natural o modificada, normalmente en un proceso de percolación para separar las trazas presentes de compuestos polares e impurezas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{10}$  y con un intervalo de ebullición aproximado de 93 °C a 180 °C]
- DA** naphtha (råolie), lerbehandlet let straight-run, Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrier fremkommet ved behandling af let straight-run naphtha med naturligt eller modificeret ler, sædvanligvis i en perkoleringsproces til fjernelse af spormængderne af polære forbindelser og tilstedeværende urenheder. Den består af carbonhydrier, overvejende  $C_7$  til og med  $C_{10}$ , med kogesinterval omkring fra 93 °C til 180 °C.]
- DE** Naphtha (Erdöl), Ton-behandelte leichte straight-run, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, entsteht durch Behandeln leichter straight-run Naphtha mit natürlichem oder modifiziertem Ton, gewöhnlich in einem Perkulationsverfahren zum Entfernen von Spuren polarer Verbindungen und von vorhandenen Verunreinigungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{10}$  und siedet im Bereich von etwa 93 °C bis 180 °C.]
- EL** ναφθα (πετρελαίου), ελαφρά απευθείας απόσταξης κατεργασμένη με αργίλλο Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που προκύπτει από την κατεργασία ελαφράς ναφθας απευθείας απόσταξης με φυσική ή τροποποιημένη άργιλλο, συνήθως με μέθοδο φίλτραριματος για την απομακρυνση των ιχνών πολικών ενώσεων και ακαθαρσιών που ενυπάρχουν. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  ως και  $C_{10}$  και βράζει στην περιοχή από 93° C ως 180° C περίπου.]
- EN** Naphtha (petroleum), clay-treated light straight-run, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons resulting from treatment of light straight-run naphtha with a natural or modified clay, usually in a percolation process to remove the trace amounts of polar compounds and impurities, present. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{10}$  and boiling in the range of approximately 93 °C to 180 °C (200 °F to 356 °F)]
- FR** naphtha léger de distillation directe (pétrole), traité à la terre, Naphtha a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures résultant du traitement de naphtha léger de distillation directe avec de l'argile naturelle ou modifiée, généralement par percolation, pour éliminer les traces de composés polaires et d'impuretés. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_7$ - $C_{10}$  et dont le point d'ébullition est compris approximativement entre 93 °C et 180 °C]
- IT** nafta (petrolio), prima distillazione, frazione leggera trattata con argilla, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi risultante dal trattamento con argilla naturale o modificata di una frazione leggera di nafta di prima distillazione, solitamente in un processo di percolazione, per separare le tracce di idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{10}$  e punto di ebollizione nell'intervallo 93 °C - 180 °C ca.]
- NL** nafta (aardolie), met klei behandelde lichte direct door fractionering verkregen Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door de behandeling van lichte direct door fractionering verkregen nafta met een natuurlijke of gemodificeerde klei gewoonlijk in een filtratieproces waarbij sporen van aanwezige polaire verbindingen en onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{10}$ , met een kookpunt van ongeveer 93 °C tot 180 °C]
- PT** nafta (petróleo), leve de destilação directa tratada com argila, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de nafta leve de destilação directa com argila natural ou modificada, normalmente por um processo de percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{10}$  e destila no intervalo de aproximadamente 93 °C a 180 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T R 45

NOTA 4

Cas No 68527-23-1

EEC No 271-264-4

No 649-370-00-0

NOTA H

NOTA P

- ES nafta (petróleo), fracción aromática ligera craqueada a vapor Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos producida por desulación de productos de un proceso de craqueo a vapor. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos dentro del intervalo de C<sub>7</sub> a C<sub>9</sub>, y con un intervalo de ebullición aproximado de 110 °C a 165 °C]
- DA naphtha (råolie), let dampkrakket aromatisk, Lavtkogende uspecificeret nafta  
[En sammensæt blanding af carbonhydrier fremstillet ved destillation af produkterne fra en dampkrakningsproces. Den består overvejende af aromatiske carbonhydrier, overvejende C<sub>7</sub> til og med C<sub>9</sub>, med koginterval omtrent fra 110 °C til 165 °C.]
- DE Naphtha (Erdöl), leichte Dampf-gekrackte aromatische Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Dampfkrackverfahren. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>7</sub> bis C<sub>9</sub> und siedet im Bereich von etwa 110 °C bis 165 °C]
- EL ναφθα (πετρελαιο), ελαφρά ατμοπυρολυμένη αρωματική. Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παραγεται με απόσταξη προϊόντων ατμοπυρόλυσης. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή C<sub>7</sub> ως και C<sub>9</sub> και βράζει στην περιοχή από 110 °C ως 165 °C περίπου]
- EN Naphtha (petroleum), light steam-cracked arom Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons produced by disillation of products from a steam-cracking process. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C<sub>7</sub> through C<sub>9</sub> and boiling in the range of approximately 110 °C to 165 °C (230 °F to 329 °F)]
- FR naphtha aromatique léger de vapocraquage (petrole), Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par disillation des produits resultant d'un vapocraquage. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majeure dans la gamme C<sub>7</sub>-C<sub>9</sub>, et dont le point d'ébullition est compris approximativement entre 110 °C et 165 °C]
- IT nafta (petrolio), frazione aromatica leggera crackizzata con vapore d'acqua Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking con vapore d'acqua. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>7</sub>-C<sub>9</sub>, e con punto di ebollizione nell'intervallo 110 °C-165 °C ca.]
- NL nafta (aardolie), lichte stoomgekraakte aromatische Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, gevormd door destillatie van produkten uit een stoomkraakproces. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend C<sub>7</sub> tot en met C<sub>9</sub>, met een kooktraject van ongeveer 110 °C tot 165 °C]
- PT nafta (petróleo), aromática leve do steam-cracking, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos de um processo de steam-cracking. É constituída predominantemente por hidrocarbonetos aromaticos com numeros de atomos de carbono predominantemente na gama de C<sub>7</sub> ate C<sub>9</sub>, e destila no intervalo de aproximadamente 110 °C a 165 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≤ 10 %	T ; R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68527-26-4

EEC No 271-266-5

No 649-371-00-6

NOTA H

NOTA P

- FS nafta (petroleo), traccion ligera craqueda a vapor, sin benceno Nafta de baja temperatura de inflamacion, sin especificar  
[Combinacion compleja de hidrocarburos producida por destilacion de productos de un proceso de craqueo a vapor. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{12}$  y con un intervalo de ebullicion aproximado de  $80\text{ }^{\circ}\text{C}$  a  $218\text{ }^{\circ}\text{C}$ ]
- DA naphtha (råolie), let dampkrakket, afbenzeneret Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydnder fremskillet ved destillation af produkterne fra en dampkrækningsproces. Den består overvejende af carbonhydnder, overvejende  $C_4$  til og med  $C_{12}$ , med kogesinterval omtrent fra  $80\text{ }^{\circ}\text{C}$  til  $218\text{ }^{\circ}\text{C}$ ]
- DE Naphtha (Erdöl), leichte Dampf-gekrackte, von Benzol befreit Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Dampfkrackverfahren. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{12}$  und siedet im Bereich von etwa  $80\text{ }^{\circ}\text{C}$  bis  $218\text{ }^{\circ}\text{C}$ ]
- EL ναφθα (πετρελαίου), ελαφρα ατμοπυρολυμενη, αποβενζολιωμενη Ελαφρα ναφθα — μη προδιαγεγραμμενη  
[Πολύπλοκος συνδυασμός υδρογονανθρακων που παραγεται με απόσταξη προϊόντων ατμοπυρολυσης. Συνιστάται κυριως απο υδρογονανθρακες με αριθμό άνθρακα κυριως στην περιοχή από  $C_4$  ως και  $C_{12}$ , και βράζει στην περιοχή από  $80\text{ }^{\circ}\text{C}$  ως  $218\text{ }^{\circ}\text{C}$  περίπου]
- EN Naphtha (petroleum), light steam-cracked, debenzenized Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons produced by distillation of products from a steam cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{12}$  and boiling in the range of approximately  $80\text{ }^{\circ}\text{C}$  to  $218\text{ }^{\circ}\text{C}$  ( $176\text{ }^{\circ}\text{F}$  to  $424\text{ }^{\circ}\text{F}$ )]
- FR naphta léger de vapocraquage (pétrole), débenzenisé Naphta a point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$  à  $C_{12}$  et dont le point d'ébullition est compris approximativement entre  $80\text{ }^{\circ}\text{C}$  et  $218\text{ }^{\circ}\text{C}$ ]
- IT nafta (petrolio), frazione leggera crackizzata con vapore d'acqua, priva di benzene Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking con vapore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$  a  $C_{12}$  e con punto di ebollizione nell'intervallo  $80\text{ }^{\circ}\text{C}$  -  $218\text{ }^{\circ}\text{C}$  ca.]
- NL nafta (aardolie), lichte stoomgekraakte, van benzeen ontdaan Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, gevormd door destillatie van produkten uit een stoomkraakproces. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{12}$ , met een kooktraject van ongeveer  $80\text{ }^{\circ}\text{C}$  tot  $218\text{ }^{\circ}\text{C}$ ]
- PT nafta (petróleo), leve do steam-cracking, sem benzeno Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos de um processo de steam cracking. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_4$  ate  $C_{12}$  e destila no intervalo de aproximadamente  $80\text{ }^{\circ}\text{C}$  a  $218\text{ }^{\circ}\text{C}$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentración, Koncentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Gas No 68603-08-7

EEC No 271-635-0

No 649-372-00-1

NOTA H  
NOTA P

- ES nafta (petróleo), con aromáticos , Nafta de baja temperatura de inflamación, sin especificar
- DA nafta (råolie), aromatholdigt Lavtkogende uspecificeret nafta
- DE Naphtha (Erdöl), aromatenhaltig , Naphtha, niedrig siedend, nicht spezifiziert
- EL ναφθα πετρελαίου, περιέχουσα αρωματικά Ελαφρά ναφθα — μη προδιαγεγραμμένη
- EN Naphtha (petroleum), arom -contg , Low boiling point naphtha — unspecified
- FR naphtha (pétrole), renfermant des aromatiques Naphtha a point d'ébullition bas — non spécifique
- IT nafta (petrolio), contenente aromatici , Nafta con basso punto di ebollizione — non specificata
- NL nafta (aardolie), aromaathoudend Nafta met laag kookpunt — niet gespecificeerd
- PT nafta (petróleo), contendo aromáticos Nafta de baixo ponto de ebulição — não especificada

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68606-10-0

EEC No 271-726-5

No 649-373-00-7

NOTA H

NOTA P

- FS gasolina, pirolisis, residuos del fondo del desbutanizador. Nafta de baja temperatura de inflamacion, sin especificar. Combinacion compleja de hidrocarburos obtenida del fraccionamiento de residuos del fondo del despropanizador. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte superior a C<sub>4</sub>.
- DA benzin, pyrolyse-, debutanizer-bundfraktioner. Lavtkogende uspeciticeret nafta. En sammensat blanding af carbonhydroer opnaet ved fraktioneringen af depropanizer-bundfraktioner. Den består af carbonhydroer overvejende større end C<sub>4</sub>.
- DE Benzin, Pyrolyse, Entbutanisierer Boden. Naphtha, niedrig siedend, nicht spezifiziert. [Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung der Bodenprodukte des Entpropanisierers. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als C<sub>4</sub>.]
- EL βενζίνα, πυρολυσης, προϊόντων πυθμένα αποδουτανιωτήρα. Ελαφρά ναφθα — μη προδιαγεγραμμένη. Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από την κλασμάτωση προϊόντων πυθμένα αποδουτανιωτήρα. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από C<sub>4</sub>.
- EN Gasoline pyrolysis, debutanizer bottoms. Low boiling point naphtha — unspecified. [A complex combination of hydrocarbons obtained from the fractionation of depropanizer bottoms. It consists of hydrocarbons having carbon numbers predominantly greater than C<sub>4</sub>.]
- FR essence de pyrolyse, residus de depropaniseur. Naphta a point d'ébullition bas — non spécifié. [Combinaison complexe d'hydrocarbures obtenue par fractionnement des résidus du depropaniseur. Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur a C<sub>4</sub>.]
- IT benzina pirolisi, frazioni residue del debutanizzatore. Nafta con basso punto di ebollizione — non specificata. [Combinazione complessa di idrocarburi ottenuta dal frazionamento di residui del depropanizzatore. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente superiore a C<sub>4</sub>.]
- NL gasolie, pyrolyse, debutanisator-bodemfracties. Nafta met laag kookpunt — niet gespecificeerd. [Een complexe verzameling koolwaterstoffen die wordt verkregen uit de fractionering van depropanisator-bodemfracties. Bestaat uit koolwaterstoffen overwegend groter dan C<sub>4</sub>.]
- PT gasolina, de pirolise, produtos de cauda do desbutanizador. Nafta de baixo ponto de ebulição — não especificada. [Uma combinação complexa de hidrocarbonetos obtida pelo fracionamento dos produtos de cauda do despropanizador. É constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente superiores a C<sub>4</sub>.]

Classification Aka : ering Ein turun? Ταξινόηση Classification, Classification Classificazione Indeling, Classificação

Carc Cat 2, R 45	Xn, R 65
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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Limites de concentration Koncentration grænser Konzentrationsgrenzwerte Όρια συγκέντρωσης Concentration limits, Limites de concentration, Limiti di concentrazione Concentratiegrenzen, Limites de concentraçao

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 68783 66 4

EEC No 274-206-6

No 649 374-00-2

NOTA H

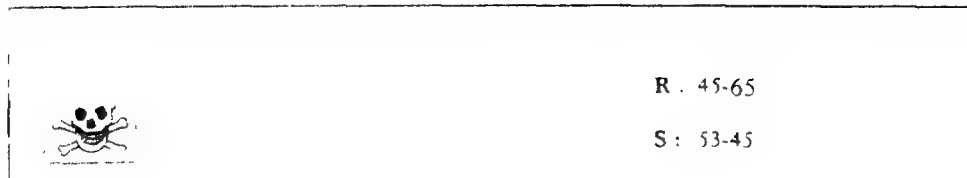
NOTA I

- ES nafta (petróleo), ligera, desazufrada Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida sometiendo un destilado de petróleo a un proceso de desazufrado para transformar mercaptanos o separar impurezas ácidas. Compuesta fundamentalmente de hidrocarburos saturados e insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_1$  a  $C_6$  y con un intervalo de ebullición aproximado de  $-20\text{ }^{\circ}\text{C}$  a  $100\text{ }^{\circ}\text{C}$ ]
- DA naphtha (råolie), let sweetenet lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider opnaet ved at underkaste et råoliedestillat en sweeteningsproces for at fjerne mercaptaner eller fjerne sure urenheder. Den består overvejende af mættede og umættede carbonhydrider, overvejende  $C_1$  til og med  $C_6$ , med koginterval omfrent fra  $-20\text{ }^{\circ}\text{C}$  til  $100\text{ }^{\circ}\text{C}$ ]
- DE Naphtha (Erdöl) leicht gesußt Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Aussetzen eines Erdöldestillates einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verunreinigungen. Besteht vorherrschend aus gesättigten und ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_1$  bis  $C_6$  und siedet im Bereich von etwa  $-20\text{ }^{\circ}\text{C}$  bis  $100\text{ }^{\circ}\text{C}$ ]
- EL ναφθα (πετρελαιο), ελαφρά, γλυκασμένη Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται όταν αποσταγματίζεται πετρελαιο υποβάλλεται σε κατεργασία γλυκανσης, για να μετατραπούν μερκαπτανες ή για να απομακρυνθούν οξιδικές ρυπανσεις. Συνίσταται κυρίως από κορεσμένους και ακόρεστους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_6$  και βράζει στην περιοχή από  $-20\text{ }^{\circ}\text{C}$  ως  $100\text{ }^{\circ}\text{C}$  περίπου.]
- EN Naphtha (petroleum), light, sweetened Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$  and boiling in the range of approximately  $-20\text{ }^{\circ}\text{C}$  to  $100\text{ }^{\circ}\text{C}$  ( $-4\text{ }^{\circ}\text{F}$  to  $212\text{ }^{\circ}\text{F}$ )]
- FR naphtha léger adouci (pétrole) Naphtha a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par adoucissement d'un distillat pétrolier, afin de convertir les mercaptans ou d'éliminer les impuretés acides. Se compose principalement d'hydrocarbures saturés et insaturés dont le nombre de carbones se situe en majorité dans la gamme  $C_1$ ,  $C_6$  et dont le point d'ébullition est compris approximativement entre  $-20\text{ }^{\circ}\text{C}$  et  $100\text{ }^{\circ}\text{C}$ ]
- IT nafta (petrolio), frazione leggera, addolcita Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta sottoponendo un disillato di petrolio ad un processo di addolcimento per convertire i mercaptani o eliminare impurezze acide. È costituita prevalentemente da idrocarburi saturi e insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_1$ - $C_6$  e punto di ebollizione nell'intervallo da  $-20\text{ }^{\circ}\text{C}$  a  $100\text{ }^{\circ}\text{C}$  ca.]
- NL nafta (aardolie), licht, stankvrij gemaakt Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door het onderwerpen van een aardoliedestillaat aan een stankverwijderend proces, waarbij mercaptanen worden omgezet of zure onzuiverheden worden verwijderd. Bestaat voornamelijk uit verzadigde en onverzadigde koolwaterstoffen, overwegend  $C_1$  tot en met  $C_6$ , met een kooktraject van ongeveer  $-20\text{ }^{\circ}\text{C}$  tot  $100\text{ }^{\circ}\text{C}$ ]
- PT nafta (petróleo), leve, tratada (sweetened) Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera por um processo de sweetening para conversão de mercaptanos ou remoção de impurezas ácidas. É constituída predominantemente por hidrocarbonetos saturados e insaturados com números de átomos de carbono predominantemente na gama de  $C_1$  até  $C_6$  e destila no intervalo de aproximadamente  $-20\text{ }^{\circ}\text{C}$  a  $100\text{ }^{\circ}\text{C}$ ]

Classification, Klassifizierung, Benützung, Tätigkeitsbereich, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2 R 45	Xn R 65
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Etiquetado, etikettering, Kennzeichnung, בארעקווארט, Labelung, Etiquetage, Etichettatura, Kenmerken, Rotulagem



Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

CAS 500914-9

EEC No 272-896

No 649-175-00-8

NOTA J

NOTA H

- ES Condensados de gas natural. Nafta de baja temperatura de inflamación sin especificar  
[Combinación compleja de hidrocarburos separada y/o condensada del gas natural durante el transporte y recogida en la cabeza del pozo y/o de los gasoductos de producción, acumulación, transmisión y distribución en pozos profundos, depuradores, etc. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>1</sub> a C<sub>4</sub>.]
- DA naturgaskondensater. Lavtkogende uspecificeret nafta  
[En sammensat branding af carbonhydnder separeret og/eller kondenseret fra naturgas under transport og optagning ved borehullet og/eller fra produktionen, opsamlings-, transmissions- og distributionspipelines i undergrunden, skrubbere etc. Den består overvejende af carbonhydnder, overvejende C<sub>1</sub> og med C<sub>2</sub>.]
- DE Erdgaskondensate. Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, abgetrennt und/oder kondensiert aus Erdgas während des Transportes und am Schachtkopf und/oder während der Produktion, beim Zusammenfügen, beim Übertragen und in Schächten, Waschern von Verteilungspipelines usw. gesammelt. Besteht vornehmlich aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>1</sub> bis C<sub>4</sub>.]
- EL φυσικού αερίου συμπυκνώματα. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πυκνός συνδυασμός υδρογονανθράκων που διαχωρίζεται ή/και συμπυκνώνεται από φυσικό αέριο κατά τη μεταφορά και που συλλέγεται στη φρεατοπαγίδα ή/και από την παραγωγή, συλλογή, μεταφορά και σωληνογραμμές διανομής σε φρέατα, καταστάσεις κτλ. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή C<sub>1</sub> ως και C<sub>4</sub>.]
- EN Natural gas condensates. Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons separated and/or condensed from natural gas during transportation and collected at the wellhead and/or from the production, gathering, transmission, and distribution pipelines in deeps, scrubbers, etc. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through C<sub>4</sub>.]
- FR gaz naturel, condensats. Naphta a point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures séparés et/ou condensés a partir de gaz naturel pendant son transport, et recueillis a la tête de puits et/ou dans les conduites de production, collecte, transmission et distribution, dans les zones basses, decanteurs, etc. Se compose principalement d'hydrocarbures dont le nombre de carbonos se situe en majorite dans la gamme C<sub>1</sub>-C<sub>4</sub>.]
- IT gas naturale, condensati. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi separata e/o condensata da gas naturale durante il trasporto e raccolta alla sommità del pozzo e/o dalle fasi operative di produzione, prelievo, trasmissione, e lungo le condotte di distribuzione, negli scrubbers, ecc. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>1</sub>-C<sub>4</sub>.]
- NL aardgascondensaten. Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt afgescheiden en/of gecondenseerd uit aardgas tijdens transport en verzameld bij de putrand en/of de productie-, verzamel-, transmissie- en distributiepípijnen in putten, gaszuiveraars, enz. Bestaat voornamelijk uit C<sub>1</sub>- tot en met C<sub>4</sub>-koolwaterstoffen.]
- PT condesados de gas natural, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos separada e/ou condensada do gas natural durante o transporte e recolhida na cabeça do poço e/ou da produção, recolha, transmissão, e condutas de distribuição em deeps, separadores, etc. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de C<sub>1</sub> ate C<sub>4</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentraçesgrenzen, Limites de concentraçãõ*

C ≥ 10 %	T ; R 45-65
0.1 % ≤ C < 10 %	T ; R 45

NOTA 4



Cas No 68921-09-5

FEC No 272 932 8

No 649-376 00-3

NOTA H

NOTA P

- ES : destilados (petróleo), extractor de la unidad de retino de nafta. Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos producida por extracción de los productos de la unidad de retino de nafta. Compuesta de hidrocarburos alifáticos saturados con un número de carbonos en su mayor parte dentro del intervalo de C<sub>7</sub> a C<sub>8</sub>.]
- DA : destillater (råolie), naphthaunifiner stripper- : Lavkøgende uspecifiseret nafta  
[En sammensat blanding af carbonhydrider fremstillet ved stripping af produkterne fra naphthaunifineren. Den består af metanede aliphatiske carbonhydrider, overvejende fra C<sub>7</sub> til og med C<sub>8</sub>.]
- DE : Destillate (Erdöl), Naphtha Unifiner Stripper. Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Strippen der Produkte aus dem Naphtha-Unifiner. Besteht aus gesättigten aliphatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>7</sub> bis C<sub>8</sub>.]
- EL : αποσταγμάτα (πετρελαίου), απογυμνωτήρα ενοποιητήρα ναφθας. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται με απογύμνωση των προϊόντων από τον ενοποιητήρα ναφθας. Συνίσταται από κορεσμένους αλειφατικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>7</sub> έως και C<sub>8</sub>.]
- EN : Distillates (petroleum), naphtha unifiner stripper. Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons produced by stripping the products from the naphtha unifiner. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C<sub>7</sub> through C<sub>8</sub>.]
- FR : distillats (pétrole), rectifiés, traitement Unifining du naphta. naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par rectification des produits résultant du traitement Unifining du naphta. Se compose d'hydrocarbures saturés dont le nombre de carbones se situe principalement dans la gamme C<sub>7</sub>-C<sub>8</sub>.]
- IT : distillati (petrolio), da stripper di impianto. unifining di nafta. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per stripping di prodotti provenienti dall'apparecchiatura di unifining della nafta. È costituita da idrocarburi alifatici saturi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>7</sub>-C<sub>8</sub>.]
- NL : destillaten (aardolie), nafta-unifiner-stripper. Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door het strippen van de produkten uit de nafta-unifiner. Bestaat uit verzadigde alifatische koolwaterstoffen, overwegend C<sub>7</sub> tot en met C<sub>8</sub>.]
- PT : destilados (petróleo), do stripper da unidade unifiner da nafta. Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos produzida por fracionamento dos produtos de uma unidade unifiner de nafta. É constituída por hidrocarbonetos alifáticos saturados com números de átomos de carbono predominantemente na gama de C<sub>7</sub> até C<sub>8</sub>.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≤ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 85116-59-2

FEC No 285 510-3

No 649 377-00-9

NOTA H

NOTA P

- ES nafta (petroleo), fracción ligera reformada catalíticamente, tracción libre de aromáticos. Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos que queda después de separar los compuestos aromáticos de nafta ligera reformada catalíticamente en un proceso de absorción selectiva. Compuesta fundamentalmente de compuestos parafínicos y cíclicos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 66 °C a 121 °C]
- DA naphtha (råolie), katalytisk reformeret let, aromattfri fraktion. Lavkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrogener tilbageblever efter fjernelse af aromatiske forbindelser fra katalytisk reformeret let naphtha i en selektiv absorptionsproces. Den består overvejende af paraffinske og cykliske forbindelser, overvejende  $C_6$  til  $C_{12}$ , med kogesinterval omtrent fra 66 °C til 121 °C]
- DE Naphtha (Erdöl), katalytisch reformierte leichte, Aromaten-freie Fraktion. Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die nach Entfernen der aromatischen Verbindungen aus katalytisch reformierter leichter Naphtha in einem selektiven Absorptionsverfahren zurückbleibt. Besteht vorherrschend aus paraffinhaltigen und cyclischen Verbindungen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 66 °C bis 121 °C]
- EL ναφθα (πετρέλαιο), ελαφρά, καταλυτικά αναμορφωμένη, κλάσμα απαλλαγμένο αρωματικών. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραμένει μετά την απομάκρυνση των αρωματικών ενώσεων από ελαφρή ναφθα που έχει υποστεί καταλυτική αναμόρφωση με μέθοδο εκλεκτικής απορρόφησης. Συνίσταται κυρίως από παραφινικές και κυκλικές ενώσεις με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  ως  $C_{12}$  και βράζει στην περιοχή από 66° C ως 121° C περίπου]
- EN Naphtha (petroleum), catalytic reformed light, arom-free fraction. Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons remaining after removal of aromatic compounds from catalytic reformed light naphtha in a selective absorption process. It consists predominantly of paraffinic and cyclic compounds having carbon numbers predominantly in the range of  $C_6$  to  $C_{12}$  and boiling in the range of approximately 66 °C to 121 °C (151 °F to 250 °F)]
- FR naphtha léger (pétrole), reformage catalytique, fraction sans aromatiques. Naphtha a point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures subsistant après l'élimination, par absorption sélective, des composés aromatiques d'un naphtha léger de reformage catalytique. Se compose principalement de composés paraffiniques et cycliques dont le nombre de carbones se situe en majorité dans la gamme  $C_6$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 66 °C et 121 °C]
- IT nafta (petrolio), leggera da reforming catalitico, frazione priva di aromatici. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi rimanente dopo l'eliminazione di composti aromatici da nafta leggera riformata cataliticamente in un processo di assorbimento selettivo. È costituita prevalentemente da composti paraffinici e ciclici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ ,  $C_{12}$  e punto di ebollizione nell'intervallo 66 °C - 121 °C ca.]
- NL nafta (aardolie), katalytisch gereformeerde lichte fractie, aromaat-vrije fractie, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, overblijvend na verwijdering van aromatische verbindingen in een selectief absorptieproces uit katalytisch omgevormde lichte nafta. Het bestaat voornamelijk uit paraffinische en cyclische verbindingen, overwegend  $C_6$  tot  $C_{12}$ , met een kooktraject ongeveer 66 °C tot 121 °C]
- PT nafta (petroleo), leve do reforming catalítico, fracção sem aromáticos. Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida após remoção de compostos aromáticos da nafta leve do reforming catalítico por um processo de absorção seletiva. É constituída predominantemente por compostos parafínicos e cíclicos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{12}$  e destila no intervalo de aproximadamente 66 °C a 121 °C]

*Classification Klassificering Einstufung Ταξινόμηση Classification, Classification, Classificazione Indeling Classificacao*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration, Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T R 45

NOTA 4

Cas No 86290 81 5

I EC No 289 220-5

No 649 378 00 4

NOTA H


NOTA P

- ES gasolina Nafta de baja temperatura de inflamacion, sin especificar  
[Combinacion compleja de hidrocarburos compuesta principalmente de parafinas, cicloparafinas, hidrocarburos aromaticos y olefinicos con un numero de carbonos en su mayor parte superiores a C<sub>7</sub> y con un intervalo de ebullicion de 30 °C a 260 °C]
- DA benzin Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrier bestaende primært af paraffiner, cycloparaffiner, aromatiske og olefiniske carbonhydrier, overvejende større end C<sub>7</sub>, og koger i området fra 30 °C til 260 °C]
- DE Benzin Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, besteht in erster Linie aus Paraffinen, Cycloparaffinen, aromatischen und olefinhaltigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als C<sub>7</sub> und siedet im Bereich von 30 °C bis 260 °C]
- EL βενζίνα Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που αποτελείται κυρίως από παραφίνες, κυκλοπαραφίνες, αρωματικούς και ολεφινικούς υδρογονάνθρακες, με αριθμό ατόμων άνθρακα κυρίως μεγαλύτερο από C<sub>7</sub>, και με περιοχή βρασμού από 30° C ως 260° C]
- EN Gasoline Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons consisting primarily of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons having carbon numbers predominantly greater than C<sub>7</sub>, and boiling in the range of 30 °C to 260 °C (86 °F to 500 °F)]
- FR essence Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures composée principalement de paraffines, de cycloparaffines, et d'hydrocarbures aromatiques et olefiniques dont la majeure partie possède un nombre de carbones supérieur a C<sub>7</sub> et dont le point d'ébullition se situe approximativement entre 30 °C et 260 °C]
- IT benzina Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi costituita prevalentemente da paraffine, cicloparaffine, idrocarburi aromatici ed olefinici con numero di atomi di carbonio prevalentemente più grande di C<sub>7</sub>, e punto di ebollizione nell'intervallo 30 °C - 260 °C]
- NL benzine, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die voornamelijk is samengesteld uit paraffinen, cycloparaffinen, aromaat- en olefine-houdende koolwaterstoffen, overwegend groter dan C<sub>7</sub>, en kokend in het traject van 30 °C tot 260 °C]
- PT gasolina Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos constituída principalmente por parafinas, cicloparafinas, hidrocarbonetos aromaticos e olefinicos com numeros de atomos de carbono predominantemente superiores a C<sub>7</sub>, e destilla no intervalo de 30 °C a 260 °C]

Classification, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung

Carc. Cat. 2, R 45	Xn R 65
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45-65 S : 53-45

Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao

$C \geq 10 \%$	T : R 45-65
$0,1 \% \leq C < 10 \%$	T : R 45

NOTA 4

Cas No 90585 42 -

FEC No 292-698-0

No 649-379-00-X

NOTA H

NOTA P

- ES hidrocarburos aromaticos C<sub>10</sub>, productos de dealquilación, residuos de destilación Nafta de baja temperatura de inflamación, sin especificar
- DA aromatiske carbonhydrider, C<sub>10</sub>- dealkyleringsprodukter, destillationsrester Lavtkogende uspecificeret nafta
- DE Aromatische Kohlenwasserstoffe, C<sub>10</sub>, Dealkylierungsprodukte, Destillationsrückstände Naphtha, niedrig siedend, nicht spezifiziert
- EL αρωματικών υδρογονανθράκων, C<sub>10</sub>, προϊόντων απαλκυλίωσης, υπολείμματα αποσταξης Ελαφρά ναφθα — μη προδιαγεγραμμένη
- EN Aromatic hydrocarbons, C<sub>10</sub>, dealkylation products, distn. residues Low boiling point naphtha — unspecified
- FR hydrocarbures aromatiques en C<sub>10</sub>, produits de désalkylation, résidus de distillation Naphta a point d'ébullition bas — non spécifique
- IT idrocarburi aromatici, C<sub>10</sub>, prodotti di dealchilazione, residui di distillazione Nafta con basso punto di ebollizione — non specificata
- NL aromatische koolwaterstoffen, C<sub>10</sub>, dealkyleringsprodukten, destillatieresiduen Nafta met laag kookpunt — niet gespecificeerd
- PT hidrocarbonetos aromaticos, C<sub>10</sub>, produtos de desalquilação, resíduos da destilação, Nafta de baixo ponto de ebulição — não especificada

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc Cat. 2, R 45 Xn, R 65

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits,  
 Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 91995-38-9

EEC No 245-29b-4

No 649-380-00-5

NOTA H

NOTA P

- En hidrocarburos,  $C_{4,6}$ , productos ligeros del despentanizador, aparato para el tratamiento con hidrogeno de productos aromaticos. Nafta de baja temperatura de inflamacion, sin especificar  
[Combinacion compleja de hidrocarburos obtenida como primeros productos de la columna del despentanizador antes del tratamiento con hidrogeno de las cargas aromaticas. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_6$ , predominantemente pentanos y pentenos y con un intervalo de ebullición aproximado de 25 °C a 40 °C.]
- DA carbonhydrider,  $C_{4,6}$ , depentanizer lette, aromatisk hydrogenbehandleder. Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider opnaet som det første gennemløb fra depentanizerkolonnen før hydrogenbehandling af de aromatiske charger. Den består overvejende af carbonhydrider, overvejende  $C_4$  til og med  $C_6$ , overvejende pentaner og pentener, med koginterval omfrent fra 25 °C til 40 °C.]
- DE Kohlenwasserstoffe,  $C_{4,6}$ , Depentanisiert leichte, aromatisch mit Wasserstoff behandelt, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man als erste Läufe aus der Depentanisiertkolonne vor der Wasserstoffbehandlung der aromatischen Chargen erhält. Besteht vornehmlich aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_6$ , vorherrschend Pentanen und Pentenen, und siedet im Bereich von etwa 25 °C bis 40 °C.]
- EL υδρογονάνθρακες,  $C_{4,6}$ , ελαφρά αποπεντανιωτήρα, αρωματικά μονάδας κατεργασίας με υδρογόνο· Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν πρώτα αποστάγματα από τη στήλη αποπεντανιωτήρα προς της υδροκατεργασίας αρωματικών φορτίων. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_6$  κυρίως πεντάνια και πέντενια και με περιοχή βρασμού από 25° C ως 40° C περίπου.]
- EN Hydrocarbons,  $C_{4,6}$ , depentanizer lights, arom. hydrotreater. Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained as first runnings from the depentanizer column before hydrotreatment of the aromatic charges. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_6$ , predominantly pentanes and pentenes, and boiling in the range of approximately 25 °C to 40 °C (77 °F to 104 °F).]
- FR hydrocarbures en  $C_{4,6}$ , fraction légère de depentanisation, hydrotreatment des aromatiques. Naphta a point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue comme première fraction dans la colonne de depentanisation précédant l'hydrotreatment des charges aromatiques. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_4$ - $C_6$ , principalement des pentanes et des pentenes, et dont le point d'ébullition est compris approximativement entre 25 °C et 40 °C.]
- IT idrocarburi  $C_{4,6}$ , leggeri da depentanizzatore, hydrotreating aromatico, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta come prime distillazioni dalla colonna del depentanizzatore prima dell'idrotattamento delle cariche aromatiche. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_6$ , prevalentemente pentani e penteni, e con punto di ebollizione nell'intervallo 25 °C -40°C ca.]
- NL koolwaterstoffen,  $C_{4,6}$ , lichte fracties uit depentanisorator, aromatische waterstofbehandelaar, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als de eerste fracties uit de depentanisoratorkolom voorafgaand aan de waterstofbehandeling van de aromatische vullingen. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_4$  tot en met  $C_6$ , hoofdzakelijk pentanen en pentenen, met een kooktraject van ongeveer 25 °C tot 40 °C.]
- PT hidrocarbonetos,  $C_{4,6}$ , fracções leves do despentanizador, da unidade de tratamento com hidrogénio de aromaticos. Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida como as fracções iniciais da coluna do despentanizador antes do tratamento com hidrogenio das cargas aromaticas. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_4$  ate  $C_6$ , predominantemente pentanos e pentenos, e destila no intervalo de aproximadamente 25 °C a 40°C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn; R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T : R 45

NOTA 4

Cis No 9(1995 4)-4

EEC No 295 302 4

No 649-381-00-0

NOTA H

NOTA P

- ES destilados (petroleo), nafta craqueada a vapor impregnada con calor, rica en  $C_4$ . Nafta de baja temperatura de inflamacion, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por destilacion de nafta craqueada a vapor impregnada con calor. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos dentro del intervalo de  $C_4$  a  $C_{10}$ , en su mayor parte de  $C_4$ .]
- DA destillater (råolie) varmeudblødt dampkrakket naphtha,  $C_4$ -rige, Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrier opnået ved destillation af varmeudblødt dampkrakket naphtha. Den består overvejende af carbonhydrier  $C_4$  til og med  $C_{10}$ , overvejende  $C_4$ .]
- DE Destillate (Erdöl), Warme Soaker dampfgekrackte Naphtha,  $C_4$ -reich, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von dampfgekrackter Naphtha aus dem Warme Soaker erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_4$  bis  $C_{10}$ , vorherrschend  $C_4$ .]
- EL αποσταγμένα (πετρελαιο), νάφθα ατμοπυρολυμένης με παρατεταμένη θέρμανση, πλούσια σε  $C_4$ . Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη ατμοπυρολυμένης με παρατεταμένη θέρμανση νάφθας. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{10}$ , κυρίως  $C_4$ .]
- EN Distillates (petroleum), heat-soaked steam-cracked naphtha,  $C_4$ -rich, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by distillation of heat-soaked steam-cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of  $C_4$  through  $C_{10}$ , predominantly  $C_4$ .]
- FR distillats (petrole), vapocraquage et maturation de naphtha, riches en  $C_4$ , Naphtha à point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par distillation de naphtha ayant subi vapocraquage et maturation. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_4$ - $C_{10}$ , surtout en  $C_4$ .]
- IT distillati (petrolio), nafta crackizzata a vapore a bagno di calore, ricchi di  $C_4$ , Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi prodotta per distillazione di nafta crackizzata a vapore a bagno di calore. È costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{10}$ , soprattutto  $C_4$ .]
- NL destillaten (aardolie) door en door verhitte stoomgekraakte nafta, rijk aan  $C_4$ , Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van door en door verhitte stoomgekraakte nafta. Bestaat voornamelijk uit koolwaterstoffen,  $C_4$  tot en met  $C_{10}$ , overwegend  $C_4$ .]
- PT destilados (petroleo), aquecidos do steam-cracking da nafta, ricos em  $C_4$ , Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida por destilação dos produtos aquecidos do steam-cracking da nafta. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono na gama de  $C_4$  ate  $C_{10}$ , predominantemente  $C_4$ .]

Classification, Klassifizierung, Einordnung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung, Klassifizierung

Cat. Cat. 45	Xn, R 65
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Etiquetado, Etikettering, Kennzeichnung, Etiketovanje, Etikettering, Etiquetage, Etichettatura, Kenmerken, Rotulagem



Limites de concentration, Konzentrationsgrenzen, Konzentrationsbegrenzungen, Определяющая, Concentration limit, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limite de concentração

C = 10 %	T R 45-65
1 % ≤ C < 10 %	T R 45

NOTA 4

Cas No 91995-68-5

EEC No 295-331-2

No 649-182-00-6

NOTA H

NOTA P

- ES. extractos (petróleo), disolvente de nafta ligera reformada catalíticamente, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida como un extracto de la extracción con disolventes de una fracción de petróleo reformado catalíticamente. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 100 °C a 200 °C]
- DA. ekstrakter (råolie), katalytisk reformeret let naphtha solvent-, Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrier opnået som ekstraktet fra solventekstraktionen af en katalytisk reformeret råoliefraktion. Den består overvejende af aromatiske carbonhydrier, overvejende  $C_7$ , til og med  $C_{12}$ , med koginterval omtrent fra 100 °C til 200 °C]
- DE. Extrakte (Erdöl), katalytisch reformierte leichte Naphthalosungsmittel, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Extrakt aus der Lösungsmittelextraktion eines katalytisch reformierten Erdölschnittes erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{12}$  und siedet im Bereich von etwa 100 °C bis 200 °C]
- EL. εκχυλίσματα (πετρελαίου), καταλυτικά αναμορφωμένου ελαφρού διαλύτη νάφθα. Ελαφρα νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν εκχύλισμα από εκχύλιση με διαλυτή καταλυτικά αναμορφωμένου κλάσματος πετρελαίου. Συνίσταται κυρίως από αρωματικούς υδρογονανθρακες με αριθμο ατομων ανθρακα κυρίως  $C_7$  ως και  $C_{12}$  και με περιοχή βρασμού από 100° C ως 200° C περίπου]
- EN. Extracts (petroleum), catalytic reformed light naphtha solvent, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained as the extract from the solvent extraction of a catalytically reformed petroleum cut. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{12}$  and boiling in the range of approximately 100 °C to 200 °C (212 °F to 392 °F)]
- FR. extraits au solvant (pétrole), naphtha léger de reformage catalytique, Naphtha à point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue comme extrait lors de l'extraction au solvant d'une coupe pétrolière de reformage catalytique. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majeure dans la gamme  $C_7$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 100 °C et 200 °C]
- IT. estratti (petrolio), nafta solvente leggera da reforming catalitico, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta come estratto dall'estrazione con solvente di un taglio di petrolio da reforming catalitico. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ ,  $C_{12}$  e con punto di ebollizione nell'intervallo 100 °C - 200 °C ca.]
- NL. extracten (aardolie), katalytisch gereformeerde lichte nafta solvent-, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt als het extract uit de solventextractie van een katalytisch gereformeerde aardoliefractie. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_7$  en  $C_{12}$ , met een kooktraject van ongeveer 100 °C tot 200 °C.]
- PT. extractos (petróleo), de solvente de nafta leve do reforming catalítico, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida como o extracto da extracção com solvente dos produtos de reforming catalítico de uma fracção petrolífera. É constituída predominantemente por hidrocarbonetos aromáticos com numeros de átomos de carbono predominantemente na gama de  $C_7$ , até  $C_{12}$  e destila no intervalo de aproximadamente 100 °C a 200 °C]

Classification Klassificering Einstufung Ταξινόγηση Classification Classification Classificazione Indeling, Classificação

Carc. Cat 2 R 45	Xn, R 65
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Etiquetado, Etikettering Kennzeichnung, Επισήμανση Labelling, Etiquetage Etichettatura Kenmerken, Rotulagem

T	
	R : 45-65 S : 53-45

Limites de concentración Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

is No 92045 33 2

EEC No 295 434-2

No 649 383-00 1

NOTA H

NOTA P

nafta (petroleo) fracción ligera hidrodesulfurada, desaromatizada. Nafta de baja temperatura de inflamación, sin especificar

{Combinación compleja de hidrocarburos obtenida por destilación de fracciones ligeras de petróleo desaromatizadas e hidrodesulfuradas. Compuesta en su mayor parte de parafinas y cicloparafinas de C con un intervalo de ebullición aproximado de 90 °C a 100 °C }

- naphtha (fraktion) let hydrodesulfureret, dearomatiseret, lavkøgende uspecifiseret nafta

{En sammensætning af carbonhydrider opnået ved destillation af hydrodesulfureret og dearomatiseret lette raaffraktioner. Den består hovedsageligt af C paraffiner og cycloparaffiner med et kogepunktsinterval omkring fra 90 °C til 100 °C }

DE Naphtha (Erdöl) hydrodesulfuriert, leicht, dearomatisiert. Naphtha, niedrig siedend, nicht spezifiziert

{Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von hydrodesulfurierten und dearomatisierten leichten Erdölfraktionen erhält. Besteht vorherrschend aus C Paraffinen und Cycloparaffinen und siedet im Bereich von etwa 90 °C bis 100 °C }

EL ναφθα (πετρέλαιο) υδρογονοαποδεδειγμένη, ελαφρά, αποαρωματισμένη. Ελαφρά ναφθα — μη προδιαγεγραμμένη. Πολύπλοκη συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη υδρογονοαποδεδειγμένων και αποαρωματισμένων ελαφρών κλάσματος πετρελαίου. Συνίσταται κυρίως από παραφίνες και κυκλοπαραφίνες C, και έχει τριτοξή βρασμού από 90 °C ως 100 °C περίπου }

EN Naphtha (petroleum), hydrodesulfurized, light, dearomatized, Low boiling point naphtha — unspecified

A complex combination of hydrocarbons obtained by distillation of hydrodesulfurized and dearomatized light petroleum fractions. It consists predominantly of C paraffins and cycloparaffins boiling in a range of approximately 90 °C to 100 °C (194 °F to 212 °F) }

FR naphtha léger (pétrole), hydrodesulfurée et desaromatisée. Naphta a point d'ébullition bas — non spécifique

Combinaison complexe d'hydrocarbures obtenue par distillation de fractions pétrolières légères hydrodesulfurées et desaromatisées. Se compose principalement de paraffines et de cycloparaffines en C, dont le point d'ébullition est compris approximativement entre 90 °C et 100 °C }

IT nafta (petrolio), leggera idrodesolfiorata, dearomatizzata. Nafta con basso punto di ebollizione — non specificata

{Combinazione complessa di idrocarburi ottenuta per distillazione di frazioni di petrolio leggere idrodesolfiorate e dearomatizzate. E costituita prevalentemente da C paraffine e cicloparaffine con punto di ebollizione nell'intervallo 90 °C-100 °C ca }

NL nafta (aardolie), met waterstof ontzwavelde, lichte, gedeaformiseerd. Nafta met laag kookpunt — niet gespecificeerd

{Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van waterstofontzwavelde en gedeaformiseerde lichte aardoliefracties. Bestaat voornamelijk uit C paraffinen en cycloparaffinen en heeft een kooktraject van ongeveer 90 °C tot 100 °C }

PT nafta (petróleo) leve hidrogenodessulfurizada, desaromatizada. Nafta de baixo ponto de ebulição — não especificada

{Uma combinação complexa de hidrocarbonetos obtida por destilação de frações petrolíferas leves hidrogenodessulfurizadas e desaromatizadas. É constituída predominantemente por parafinas e cicloparafinas em C, e destila no intervalo de aproximadamente 90 °C a 100 °C }

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45-65 S : 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*

$C \geq 10 \%$	T : R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

a No 97045-50 5

I FC No 295-442 6

No 649-384-00-7

NOTA H

NOTA P

nafta (petroleo) tracción ligera, rica en  $C_{10}$ , desazufrada. Nafta de baja temperatura de inflamación, sin especificar. Combinación compleja de hidrocarburos obtenida sometiendo nafta de petróleo a un proceso de desazufrado para transformar mercaptanos o separar impurezas ácidas. Compuesta de hidrocarburos con un número de carbonos fundamentalmente dentro del intervalo de  $C_4$  a  $C_{10}$  en su mayor parte de  $C_4$  y con un intervalo de ebullición aproximado de menos 10 °C a 35 °C.]

naphtha (frantiz. let.  $C_{10}$  rig. sweetenet. Lavtkogende uspeciticeret nafta

En sammensæt blanding af carbonhydnder opnæt ved at underkaste en råolienaphtha en sweetening-proces for at omdanne mercaptaner eller fjerne sure urenheder. Den består overvejende af carbonhydnder, overvejende  $C_{10}$  til og med  $C_{10}$  overvejende  $C_{10}$  med kogeinterval omtrent fra minus 10 °C til 35 °C.]

1. Naphtha (Erdöl), leicht,  $C_{10}$ -reich, gesußt. Naphtha, niedrig siedend, nicht spezifiziert

komplexe Kombination von Kohlenwasserstoffen, die man erhält, wenn man Erdölnaphtha einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verunreinigungen aussetzt. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorwiegend im Bereich von  $C_4$  bis  $C_{10}$  und siedet im Bereich von etwa minus 10 °C bis 35 °C.]

2. ναφθα (πετρέλαιου), ελαφρά, πλούσια σε  $C_{10}$ , γλυκασμένη. Ελαφρά ναφθα — μη προδιαγεγραμμένη

[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται όταν ναφθα πετρελαιοι υποβάλλεται σε γλυκανση για να μετατραπούν οι μερκαπτανες ή να απομακρυνθούν οι οξίνες προσμίξεις. Συνίσταται από υδρογονανθρακες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_4$  ως  $C_{10}$ , κυρίως  $C_{10}$ , και βράζει στην περιοχή από μείον 10 °C ως 35 °C περίπου.]

3. Naphtha (petroleum), light,  $C_{10}$ -rich, sweetened, Low boiling point naphtha — unspecified

A complex combination of hydrocarbons obtained by subjecting a petroleum naphtha to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{10}$ , predominantly  $C_{10}$ , and boiling in the range of approximately minus 10 °C to 35 °C (14 °F to 95 °F).]

4. naphta léger (petrole), riche en  $C_{10}$ , adouci. Naphta a point d'ébullition bas — non spécifié

Combinaison complexe d'hydrocarbures obtenue en soumettant un naphta pétrolier à un procédé d'adoucissement destiné à convertir les mercaptans ou à éliminer les impuretés acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_4$ - $C_{10}$ , surtout en  $C_{10}$ , et dont le point d'ébullition est compris approximativement entre -10 °C et 35 °C.]

5. nafta (petrolio), leggera, ricca di  $C_{10}$ , addolcita. Nafta con basso punto di ebollizione — non specificata

Combinazione complessa di idrocarburi ottenuta sottoponendo una nafta di petrolio ad un processo di addolcimento per trasformare i mercaptani o per eliminare le impurezze acide. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{10}$ , prevalentemente  $C_{10}$  e con punto di ebollizione nell'intervallo -10 °C-35 °C ca.]

6. nafta (aardolie), licht,  $C_{10}$ -rijk, stankvrij gemaakt. Nafta met laag kookpunt — niet gespecificeerd

Een complexe verzameling koolwaterstoffen die wordt verkregen door het onderwerpen van een nafta uit aardolie aan een stank-erwijderingsproces waarbij mercaptanen worden omgezet of zure onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{10}$ , hoofdzakelijk  $C_{10}$ , met een kooktraject van ongeveer -10 °C tot 35 °C.]

7. nafta (petroleo), leve, rica em  $C_{10}$ , tratada (sweetened). Nafta de baixo ponto de ebulição — não especificada

Uma combinação complexa de hidrocarbonetos obtida submetendo uma nafta petrolífera a um processo de sweetening para converter mercaptans ou para remover impurezas ácidas. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama  $C_4$  até  $C_{10}$ , predominantemente  $C_{10}$ , e destila no intervalo de aproximadamente menos 10 °C a 35 °C.]



*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 R 45	Xn, R65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>Γ</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Limits de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0.1 % ≤ C < 10 %	T, R 45

NOTA 4

No 2045 62-0

EEC No 295 444-7

No 649-385-00-2

NOTA H

NOTA P

- idrocarburos  $C_8$  a  $C_{11}$ , craqueo de nafta, fracción de tolueno. Nafta de baja temperatura de inflamación, sin especificar.  
Combinación compleja de hidrocarburos obtenida por destilación de nafta craqueada y prehidrogenada. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 130 °C a 205 °C.]
- Carbonhydrider,  $C_8$  a  $C_{11}$ , naphtha-krakning, toluenfraktion, Lavtkogende uspecificeret nafta.  
En sammensat blanding af carbonhydrider opnået ved destillation fra præhydrogeneret, krakket naphtha. Den består overvejende af carbonhydrider overvejende  $C_8$  til og med  $C_{11}$ , med kogetemperatur omtrent fra 130 °C til 205 °C.]
- Kohlenwasserstoffe,  $C_8$  a  $C_{11}$ , Naphthakracken, Toluolschnitt, Naphtha, niedrig siedend, nicht spezifiziert.  
Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation aus prehydrierter Naphtha erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{11}$  und siedet im Bereich von etwa 130 °C bis 205 °C.]
- υδρογονάνθρακες,  $C_8$  a  $C_{11}$ , πυρόλυσης ναφθα, κλάσμα τολουολίου. Ελαφρά ναφθα — μη προδιαγεγραμμένη.  
Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη προ-υδρογονωθείσα πυρολυμένη νάφθα. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμο ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  ως και  $C_{11}$ , και βράζει στην περιοχή από 130 °C ως 205 °C περίπου.]
- Hydrocarbons,  $C_8$  a  $C_{11}$ , naphtha-cracking, toluene cut, Low boiling point naphtha — unspecified.  
A complex combination of hydrocarbons obtained by distillation from prehydrogenated cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{11}$  and boiling in the range of approximately 130 °C to 205 °C (266 °F to 401 °F).]
- hydrocarbures en  $C_8$  a  $C_{11}$ , craquage de naphtha, coupe toluene, Naphtha à point d'ébullition bas — non spécifié.  
[Combinaison complexe d'hydrocarbures obtenue par distillation à partir de naphtha de craquage préalablement hydrogéné. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 130 °C et 205 °C.]
- idrocarburi,  $C_8$  a  $C_{11}$ , cracking di nafta, taglio toluene, Nafta con basso punto di ebollizione — non specificata.  
[Combinazione complessa di idrocarburi ottenuta per distillazione da nafta crackizzata preidrogenata. È costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{11}$ , e con punto di ebollizione nell'intervallo 130 °C-205 °C ca.]
- koolwaterstoffen,  $C_8$  a  $C_{11}$ , naftakraken, toluenfractie, Nafta met laag kookpunt — niet gespecificeerd.  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie uit voorgehydrogeneerde gekraakte nafta. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 130 °C tot 205 °C.]
- hidrocarbonetos,  $C_8$  a  $C_{11}$ , do cracking da nafta, corte de tolueno, Nafta de baixo ponto de ebulição — não especificada.  
Uma combinação complexa de hidrocarbonetos obtida por destilação de nafta do steam-cracking pre-hidrogenada. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_8$  ate  $C_{11}$ , e destila no intervalo de aproximadamente 130 °C a 205 °C.]

*Clasificación Klassificering, Einstufung, Ταξινόμηση Classification Classification, Classificazione Indeling Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling, Etiquetage, Etichettatura, Kenmerken Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration, Konzentrationsgrensen Konzentrationsgrenzuerte Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T R 45

NOTA 4

No 92045-63-1

EEC No 295-445-2

No 649-386-00-8

NOTA H

NOTA P

- 5 hidrocarburos,  $C_{4-11}$ , craqueo de nafta, libre de aromaticos, Nafta de baja temperatura de inflamacion, sin especificar  
[Combinacion compleja de hidrocarburos obtenida de nafta craqueda y prehidrogenada despues de la separacion por destilacion de fracciones de hidrocarburos que contienen benceno y tolueno y una fracción de elevado punto de ebullicion. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$  y con un intervalo de ebullición aproximado de 30 °C a 205 °C]
- carbonhydrider,  $C_{4-11}$ , naphtha-krakning, aromatfrie, Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider opnået fra præhydrogeneret, krakket naphtha efter destillativ separation af benzen- og toluenholdige carbonhydriderfraktioner og en højerekogende fraktion. Den består overvejende af carbonhydrider, overvejende  $C_4$  til og med  $C_{11}$ , med kogesinterval omtrent fra 30 °C til 205 °C]
- Kohlenwasserstoffe,  $C_{4-11}$ , Naphthakracken, Aromaten-frei, Naphtha, niedrig siedend, nicht spezifiziert.  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus præhydrierter gekrackter Naphtha nach destillativer Abtrennung von Benzol- und Toluolhaltigen Kohlenwasserstofffraktionen und einer höheren Siedefraktion erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa 30 °C bis 205 °C]
- υδρογονάνθρακες,  $C_{4-11}$ , πυρολύσης ναφθας, απαλλαγμένοι αρωματικών. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πόλυπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από προ-υδρογονωθείσα πυρολυμένη ναφθα μετά από διαχωρισμό με αποστείξη, των υδρογονανθρακικών κλάσμάτων που περιέχουν βενζόλιο και τολουόλιο καθώς και ενός κλάσματος υψηλότερης περιοχής βρασμού. Συνίσταται κυρίως από υδρογονανθρακες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{11}$ , και βράζει στην περιοχή από 30° C ως 205° C περίπου]
- Hydrocarbons,  $C_{4-11}$ , naphtha-cracking, arom-free, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained from prehydrogenated cracked naphtha after distillative separation of benzene- and toluene-containing hydrocarbon cuts and a higher boiling fraction. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range  $C_4$  through  $C_{11}$  and boiling in the range of approximately 30 °C to 205 °C (86 °F to 401 °F).]
- hydrocarbures en  $C_{4-11}$ , craquage de naphtha, désaromatisés, Naphta à point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue à partir de naphtha de craquage préalablement hydrogène, après séparation par distillation de coupes d'hydrocarbures contenant du benzène et du toluène et d'une coupe à point d'ébullition supérieur. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_{11}$  et dont le point d'ébullition est compris approximativement entre 30 °C et 205 °C]
- idrocarburi,  $C_{4-11}$ , cracking di nafta, privi di aromatici, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta da nafta crackizzata preidrogenata dopo la separazione mediante distillazione dei tagli idrocarburi contenenti benzene e toluene ed una frazione a più alto punto di ebollizione. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{4-11}$  e con punto di ebollizione nell'intervallo 30 °C — 205 °C ca.]
- koolwaterstoffen,  $C_{4-11}$ , naftakracken, aromaatvrij; Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit voorgehydrogeneerde gekraakte nafta na destillatieve scheiding van benzeen- en toluenhoudende koolwaterstoffracties en een bij hogere temperaturen kokende fractie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 30 °C tot 205 °C]
- hidrocarbonetos,  $C_{4-11}$ , do cracking da nafta, sem aromaticos, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida de nafta do steam-cracking pre-hidrogenada após separação por destilação dos cortes de hidrocarbonetos contendo benzeno e tolueno e uma fração de ponto de ebulição superior. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_4$  ate  $C_{11}$  e destila no intervalo de aproximadamente 30 °C a 205 °C]

*Classification Klassifisering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação*

Carc. Cat. 2 R 45	Xn R 65
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*Etiquetado, Etikettering Kennzeichnung Επισήμανση Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Limites de concentration Konzentrationsgrenzen Konzentration grenzuerte Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentração*

C ≥ 10 %	T R 45-65
0,1 % ≤ C < 10 %	T R 45

NOTA 4

0 42204-97-1

REC No 296-023-8

No 649-387-00-1

NOTA H

NOTA P

- nafta (petroleo), traccion ligera saturada, sin caña, craqueada a vapor. Nafta de baja temperatura de inflamacion, sin especificar  
Combinacion compleja de hidrocarburos obtenida por el fraccionamiento de nafta craqueada a vapor despues de la recuperacion por un proceso de saturacion con calor. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{12}$  con un intervalo de ebullicion aproximado de 0 °C a 80 °C.]
- naftna (rauhel) iet varmeudblødd, dampkrakket. Lavkogerende uspecificeret nafta  
[En sammensat blandning af carbonvasserstoffer, som man durch Fraktionieren af dampkrakket naftna efter genindvindelse efter en varmeudblødningsproces. Den består hovedsagende af carbonvasserstoffer, overvejende  $C_4$  til og med  $C_{12}$  med kogeinterval omfattet fra 0 °C til 80 °C.]
- Naphtha (Erdöl, leichte aus dem Wärme-Soaker, dampgecrackt). Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Fraktionieren von dampgecrackter Naphtha nach Wiedergewinnung aus einem Wärme-Soakverfahren erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{12}$  und siedet im Bereich von etwa 0 °C bis 80 °C.]
- ναφθα (πετρελαιο), ελαφρά από παρατεταμένη υερμάνση, ατμοπυρολυμένη. Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πομπλεπικός συνδυασμός υδρογονανθράκων που λαμβάνεται από την καυματοποίηση ναφθας αφού ανακτηθεί από διεργασία παρατεταμένης υερμάνσης. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{12}$  και βράζει στην περιοχή από 0 °C ως 80 °C, περίπου.]
- Naphtha (petroleum), light heat-soaked, steam-cracked. Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by the fractionation of steam cracked naphtha after recovery from a heat soaking process. It consists predominantly of hydrocarbons having 4 carbon numbers predominantly in the range of  $C_4$  through  $C_{12}$  and boiling in the range of approximately 0 °C to 80 °C (32 °F to 176 °F).]
- naftna leger (petrolej), maturation, vapocraquage. Naphta a point d'ébullition bas — non spécifique  
[Unmoinaison complexe d'hydrocarbures obtenue par fractionnement du naphta de vapocraquage recupere apres une maturation se compose principalement d'hydrocarbures dont le nombre de carbonnes se situe en majorité dans la gamme  $C_4$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 0 °C et 80 °C.]
- nafta (petrolio), leggera da bagno di calore (+ heat-soaked +), da cracking con vapore. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta dal frazionamento di nafta da cracking con vapore dopo ricupero da un processo a bagno di calore (+ heat soaking +). È costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{12}$  e punto di ebollizione nell'intervallo 0 °C-80 °C ca.]
- nafta (aardolie), lichte fracties door en door verhit, stoomgekraakt. Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door fractionering van stoomgekraakte nafta na herwinning uit een warmte-doordrenkingsproces. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 0 °C tot 80 °C.]
- nafta (petroleo), leve aquecida, do steam-cracking. Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida pelo fracionamento de nafta do steam-cracking após recuperação de um processo de aquecimento. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{12}$  e destina-se intervalo de aproximadamente 0 °C a 80 °C.]

Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione indeling Classificação

Carc Cat 2, R 45	Xn, R 65
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45-65 S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

L 26 No 23165-19-6

EEC No 296-903-4

No 649-388-00-9

NOTA H

NOTA P

- Ν Destilados (petróleo), ricos en  $C_{10}$ . Nafta de baja temperatura de inflamación, sin especificar  
Combinación compleja de hidrocarburos obtenida de la destilación de una reserva de petróleo. Compuesta en su mayor parte de hidrocarburos con un número de carbonos de  $C_7$  a  $C_{10}$ , ricos en  $C_{10}$ , y con un intervalo de ebullición aproximado de 60 °C a 70 °C.
- ΝΑ Destillater (råolie),  $C_{10}$ -rige, Lavtkogende uspecificeret nafta  
En sammensat blanding af carbonhydrider opnået ved destillation af rå råolie. Den består overvejende af carbonhydrider, overvejende  $C_7$  til og med  $C_{10}$ , rige på  $C_{10}$ , og kogesinterval omtrent fra 60 °C til 70 °C.
- ΝΕ Destillate (Erdöl),  $C_{10}$ -reich; Naphtha, niedrig siedend, nicht spezifiziert  
Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation aus Erdöl ausgangsstoffen erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen von  $C_7$  bis  $C_{10}$ , reich an  $C_{10}$ , und siedet im Bereich von etwa 60 °C bis 70 °C.
- ΕΛΛΗΝΙΚΗ ΓΛΩΣΣΑ (πετρέλαιου), πλούσια σε  $C_{10}$  Ελαφρά νάφθα — μη προδιαγεγραμμένη  
Πολυσυμπλοκή συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσπαση πρώτης ύλης από πετρέλαιο. Αποτελείται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα από  $C_7$  ως και  $C_{10}$ , είναι πλούσια σε  $C_{10}$  και δράζει στην περιοχή από 60 °C ως 70 °C περίπου.
- Ν Distillates (petroleum),  $C_{10}$ -rich, Low boiling point naphtha — unspecified  
Complex combination of hydrocarbons obtained from the distillation of a petroleum feedstock. It consists predominantly of hydrocarbons having carbon numbers of  $C_7$  through  $C_{10}$ , rich in  $C_{10}$ , and boiling in the range of approximately 60 °C to 70 °C [EN 296-90: (SR 96)].
- ΝΚ Distillats (petrole), riches en  $C_{10}$ , Naphta a point d'ébullition bas — non spécifiée  
Combinaison d'hydrocarbures complexe obtenue par distillation d'une charge de pétrole. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_7$ - $C_{10}$ , riches en  $C_{10}$ , et dont le point d'ébullition varie approximativement entre 60 °C et 70 °C.
- Ι Distillati (petrolio), ricchi di  $C_{10}$ . Nafta con basso punto di ebollizione — non specificata  
Combinazione complessa di idrocarburi ottenuta dalla distillazione di un risormimento di petrolio. È costituita prevalentemente da idrocarburi con un numero di atomi di carbonio da  $C_7$  a  $C_{10}$ , ricchi di  $C_{10}$ , e punto di ebollizione nell'intervallo 60 °C-70 °C ca.].
- ΝΛ destillaten (aardolie),  $C_{10}$ -rijk, Nafta met laag kookpunt — niet gespecificeerd  
Een complexe verzameling koolwaterstoffen die wordt verkregen uit de destillatie van een aardoliegrondstof. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{10}$ , rijk aan  $C_{10}$ , met een kooktraject van ongeveer 60 °C tot 70 °C.
- ΝΤ Destilados (petróleo), ricos em  $C_{10}$ . Nafta de baixo ponto de ebulição — não especificada  
Uma combinação complexa de hidrocarbonetos obtida da destilação de uma fração petrolífera. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono de  $C_7$  até  $C_{10}$ , ricos em  $C_{10}$ , e destila no intervalo de aproximadamente 60 °C a 70 °C.



*Classification Klassifizierung Ertuifung Ταξινόμηση Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2 R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T -</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

No 94114 03-1

EEC No 302-639-3

No 649-389-00-4

NOTA H

NOTA P

gasolina, pirolisis, hidrogenada Natta de baja temperatura de inflamacion, sin especificar  
Fraccion de destilacion de la hidrogenacion de gasolina de pirolisis con un intervalo de ebullicion aproximado de 20 °C a 200 °C ]

benzin, pyrolyse-, hydrogeneret, Lavtkogende uspecificeret nafta  
En destillationstraktion fra hydrogenningen af pyrolysebenzin med koginterval omtrent fra 20 °C til 200 °C ]

Benzin, Pyrolyse, hydriert, Naphtha niedrig siedend, nicht spezifiziert  
Destillations Fraktion aus der Hydrierung von Pyrolysebenzin das im Bereich von etwa 20 °C bis 200 °C siedet ]

ελαιόνα, πυρόλυσης, αhydroγονωμενη Ελαφρα ναφθα — μη προδιαγεγραμμενη  
Ναφθα αποστακτης απο υδρογονωση ελαιο πυρόλυσης του βραζει στην περιοχή απο 20 °C ως 200 °C περιπου ]

Gasoline pyrolysis, hydrogenated Low boiling point naphtha-unspecified  
A distillation fraction from the hydrogenation of pyrolysis gasoline boiling in the range of approximately 20 °C to 200 °C (68 °F to 392 °F) ]

essence de pyrolyse, hydrogenee Naphta a point d'ebullition bas — non specifique  
Fraction de distillation issue de l'hydrogenation d'essence de pyrolyse dont le point d'ebullition est approximativement compris entre 20 °C et 200 °C ]

benzina, pirolisi, idrogenata, Natta con basso punto di ebollizione — non specificata  
Frazione di distillazione dall'idrogenazione di benzina di pirolisi con punto di ebollizione nell'intervallo 20 °C 200 °C ]

gasolie, pyrolyse, gehydrogeneerd Nafta met laag kookpunt — niet gespecificeerd  
Een destillatiefraction verkregen na de hydrogenering van pyrolyse gasolie met een kooktraject van ongeveer 20 °C tot 200 °C ]

gasolina, de pirolise, hidrogenada Natta de baixo ponto de ebulição — não especificada  
Uma fracção de destilação da hidrogenação da gasolina de pirolise que destila no intervalo de aproximadamente 20 °C a 200 °C ]

Classification Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2, R 45	Xn, R 65
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Etiquetado Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

	R : 45-65 S : 53-45
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Limites de concentration Konzentration grenser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentrações

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 95009-23-7

EEC No 305-750-5

No 649-390-00-X

NOTA H

NOTA P

- ES: destilados (petróleo), craqueados a vapor, fracción de  $C_{8-12}$ , polimerizada, fracciones ligeras de destilación; Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida por destilación de la fracción de  $C_8$  a  $C_{12}$  polimerizada de los destilados de petróleo craqueados a vapor. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{12}$ ]
- DA: destillater (råolie), dampkrakkede,  $C_{8-12}$ -fraktion, polymeriserede, lette destillationsfraktioner; Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrier opnået ved destillation af den polymerserede  $C_8$  til og med  $C_{12}$ -fraktion fra dampkrakkede råoliedestillater. De består overvejende af aromatiske carbonhydrier, overvejende  $C_8$  til og med  $C_{12}$ ]
- DE: Destillate (Erdöl), dampfgekrackt,  $C_{8-12}$ -Fraktion, polymerisiert, leichte Destillate, Naphta, niedrig siedend nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation der polymerisierten  $C_8$ - bis  $C_{12}$ -Fraktion aus dampfgekrackten Erdölestillaten erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{12}$ ]
- EL: αποσταγμάτων (πετρελαίου), ατμοπυρολυμένων, κλάσματος  $C_{8-12}$ , πολυμερισμένου, ελαφρά προϊόντα απόσταξης  
Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη του πολυμερισμένου κλάσματος από  $C_8$  έως και  $C_{12}$  από αποσταγμάτα πετρελαίου πυρολυμένα με ατμό. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  έως και  $C_{12}$ ]
- EN: Distillates (petroleum), steam-cracked,  $C_{8-12}$  fraction, polymers, distn. lights; Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by distillation of the polymerized  $C_8$  through  $C_{12}$  fraction from steam-cracked petroleum distillates. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{12}$ ]
- FR: distillats de vapocraquage (pétrole), fraction en  $C_{8-12}$  polymérisée, produits légers de distillation, Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation de la fraction en  $C_8$ - $C_{12}$  polymérisée issue du vapocraquage de distillats pétroliers. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ - $C_{12}$ ]
- IT: distillati (petrolio), crackizzati con vapore, frazione  $C_{8-12}$ , polimerizzati, frazioni leggere della distillazione; Nafta con basso punto di ebollizione — non specificata  
[Una combinazione complessa di idrocarburi ottenuta per distillazione della frazione polimerizzata  $C_8$ - $C_{12}$  da distillati di petrolio crackizzati con vapore. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{12}$ ]
- NL: destillaten (aardolie), stoomgekraakt,  $C_{8-12}$ -fractie, gepolymeriseerd, lichte destillatiefracties; Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van de gepolymeriseerde  $C_{8-12}$ -fractie van stoomgekraakte aardoliedestillaten. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{12}$ ]
- PT: destilados (petróleo), do steam-cracking, fracção  $C_{8-12}$ , polimerizados, fracções leves da destilação; Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida por destilação de fracção polimerizada de  $C_8$  até  $C_{12}$  de destilado do petróleo do steam-cracking. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_8$  até  $C_{12}$ ]

[illegible]

re Cal 2, P 45 | An P 65

Etiquetado, Etichetta, Kennzeichnung, Etichetta, Labeling, Etiquetare, Etichettare, Kenmerken, Rotulagem



1. Concentration, Konzentrationsgrenze, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrazionsgrenzen, Límites de concentración

U.S. 100	T. R 45-65
1000 1000	T. R 45

NOTA 4

Cas No 2726 43-7

EFC No 308-261-5

No 649-391 00-5

NOTA H


NOTA P

- ES extractos (petroleo) disolvente de nafta pesado, tratados con arcilla, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de extracto de petróleo disolvente nafténico pesado con tierra decolorada. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{16}$  y con un intervalo de ebullición aproximado de 80 °C a 180 °C]
- DA ekstrakter (råolie), tunge naphthasolvent-, lerbehandlede, Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrier opnået ved behandlingen af tung naphthasolventråolieekstrakt med blegjord. Består overvejende af carbonhydrier overvejende  $C_8$  til og med  $C_{16}$  med koginterval omtrent fra 80 °C til 180 °C]
- DE Extrakte (Erdöl), schwere Naphthalösungsmittel, mit Ton behandelt, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln eines schweren naphthahaltigen Lösungsmittel-Erdölextraktes mit Bleicherde erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{16}$  und siedet im Bereich von etwa 80 °C bis 180 °C]
- EL εκχυλισματα (πετρελαίου), από βαρύ διαλυτή ναφθα, κατεργασμένο με άργιλλο. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία βαρέος ναφθικού διαλυτή εκχυλίσματος πετρελαίου με λευκαντική γη. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_8$  ως και  $C_{16}$  και με περιοχή βρασμού από 80 °C ως 180 °C περίπου]
- EN Extracts (petroleum), heavy naphtha solvent, clay-treated, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by the treatment of heavy naphthic solvent petroleum extract with bleaching earth. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{16}$  and boiling in the range of approximately 80 °C to 180 °C (175 °F to 356 °F)]
- FR extraits au solvant (pétrole), naphtha lourd, traités à la terre, Naphtha à point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'un extrait pétrolier au solvant de naphtha lourd avec de la terre décolorante. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 80 °C et 180 °C]
- IT estratti (petrolio), solvente nafta pesante, trattata con argilla, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di estratto di petrolio di nafta solvente pesante con terra sbiancante. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{16}$  e punto di ebollizione nell'intervallo 80 °C-180 °C ca.]
- NL extracten (aardolie), zwaar nafta solvent-, behandeld met klei, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een zwaar naftenisch aardolie solvent-extract met bleekarde. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 80 °C tot 180 °C]
- PT extractos (petróleo), de solvente da nafta pesada, tratados com argila, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de um extracto de solvente petrolífero tipo nafta pesada com argila decorante. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_8$  até  $C_{16}$  e destila no intervalo de aproximadamente 80 °C a 180 °C]

Κατηγορία Κλάσση, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc Cat 2, R 45	Xn, R 65
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Επισήμανση, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao

C ≤ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 48219-46-6

EFC No 308-715

No 649-392-00-0

NOTA H

NOTA P

- ES *nafta* (petroleo), fracción ligera craqueada a vapor, sin bencenos tratada termicamente, *Nafta de baja temperatura de inflamación, sin especificar*  
[Combinación compleja de hidrocarburos obtenida por el tratamiento y destilación de nafta ligera de petróleo craqueada a vapor sin bencenos. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>6</sub> a C<sub>12</sub> y con un intervalo de ebullición aproximado de 95 °C a 200 °C]
- DA *naphtha* (råolie), let, dampkrakket, afbenzeniseret, termisk behandlet, Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrider opnået ved behandling og destillation af debenzeniseret, let dampkrakket råolienaphtha. Den består af carbonhydrider overvejende C<sub>6</sub> til og med C<sub>12</sub>, med koginterval omtrent fra 95 °C til 200 °C]
- DE *Naphtha* (Erdöl), leichte dampgekrackte, von Benzol befreit, thermisch behandelt, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln und Destillation von Benzol befreiter leichter dampgekrackter Erdöl-Naphtha erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>6</sub> bis C<sub>12</sub>, und siedet im Bereich von etwa 95 °C bis 200 °C]
- EL *νάφθα* (πετρελαιο), ελαφρά ατμοπυρολυμένη, απαλλανμένη δενζολίου, θερμικώς κατεργασμένη. Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με την κατεργασία και αποσταξή ελαφράς ατμοπυρολυμένης απαλλανμένης από δενζόλιο νάφθας πετρελαιο. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από C<sub>6</sub> ως και C<sub>12</sub> και με περιοχή βρασμού από 95° C ως 200° C περίπου]
- EN *Naphtha* (petroleum), light steam-cracked, debenzenized, thermally treated, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by the treatment and distillation of debenzenized light steam-cracked petroleum naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C<sub>6</sub> through C<sub>12</sub>, and boiling in the range of approximately 95 °C to 200 °C (203 °F to 392 °F)]
- FR *naphta léger* (pétrole), vapocraquage, debenzenisation, traitement thermique, Naphta a point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures produite par traitement et distillation de naphta léger de vapocraquage debenzenisé. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme C<sub>6</sub>-C<sub>12</sub>, et dont le point d'ébullition est compris approximativement entre 95 °C et 200 °C]
- IT *nafta* (petrolio), da cracking leggero con vapore, debenzenata, trattata termicamente, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per trattamento e distillazione di nafta di petrolio debenzenata sottoposta a cracking leggero con vapore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo C<sub>6</sub>-C<sub>12</sub>, e punto di ebollizione nell'intervallo 95 °C-200 °C ca.]
- NL *nafta* (aardolie), lichte stoomgekraakte, van benzeen ontdaan, thermisch behandeld, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen verkregen uit de behandeling en destillatie van gedebenzeneerde lichte stoomgekraakte nafta uit aardolie. Bestaat voornamelijk uit koolwaterstoffen overwegend C<sub>6</sub> tot en met C<sub>12</sub>, met een kooktraject van ongeveer 95 °C tot 200 °C]
- PT *nafta* (petroleo), leve do steam-cracking, sem benzeno, tratada termicamente, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento e destilação de nafta leve do steam-cracking sem benzeno. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de C<sub>6</sub> ate C<sub>12</sub> e destila no intervalo de aproximadamente 95 °C a 200 °C]

Classification, Klassifizierung, Kategorisierung, Taksonomia, Classifikation, Classificação, Classificazione, Indeling, Classificação

Cat. Cat. 2, R 45 Xn. R 65

Etikettierung, Kennzeichnung, Etiketado, Labeling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

<p>I</p> 	<p>R : 45-65</p> <p>S : 13-45</p>
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Concentrazione, Konzentration, Konzentration, Konzentration, Ορια συγκεντρώσεως, Concentration limits, Limite de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4



Cas No 98219 47 7

EEC No 308-714 7

No 649-393-00 6

NOTA H

NOTA P

- ES nafta (petroleo), fraccion ligera craqueada a vapor tratada termicamente, Nafta de baja temperatura de inflamacion, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por el tratamiento y destilacion de nafta ligera de petroleo craqueada a vapor. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{10}$  y con un intervalo de ebullicion aproximado de 35 °C a 80 °C.]
- DA naphtha (råolie), let, dampkrakket, termisk behandlet, Lavtkogende uspecidiceret nafta  
[En sammensat blanding af carbonhydrier opnået ved behandlingen og destillationen af let, dampkrakket råolienaphtha. Den består overvejende af carbonhydrier, overvejende  $C_4$  til og med  $C_{10}$  med kogesinterval omtrent fra 35 °C til 80 °C.]
- DE Naphtha (Erdöl), leichte dampfgecrackte, thermisch behandelt, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln und Destillation von leichter dampfgecrackter Erdöl-Naphtha erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{10}$  und siedet im Bereich von etwa 35 °C bis 80 °C.]
- EL ναφθα (πετρελαιο), ελαφρά ατμοπυρολυμένη, θερμικώς κατεργασμένη. Ελαφρά ναφθα — η προδιαγεγραμμένη Πολυπυκνός συνδυασμός υδρογονανθράκων που λαμβάνεται με την κατεργασία και αποστάξη ελαφράς ατμοπυρολυμένης ναφθας πετρελαιο. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{10}$  και με περιοχή βρασμού από 35 °C ως 80 °C.]
- EN Naphtha (petroleum), light steam-cracked, thermally treated, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by the treatment and distillation of light steam cracked petroleum naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{10}$  and boiling in the range of approximately 35 °C to 80 °C (95 °F to 176 °F).]
- FR naphta léger (pétrole), vapocraquage, traitement thermique, Naphta a point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures produite par traitement et distillation de naphta léger de vapocraquage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$  a  $C_{10}$  et dont le point d'ébullition est compris approximativement entre 35 °C et 80 °C.]
- IT nafta (petrolio) da cracking leggero con vapore, trattata termicamente, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per trattamento e distillazione di nafta di petrolio sottoposta a cracking leggero con vapore. E costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$  a  $C_{10}$  e punto di ebollizione nell'intervallo 35 °C - 80 °C ca.]
- NL nafta (aardolie), lichte stoomgekraakte, thermisch behandeld, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen verkregen uit de behandeling en destillatie van lichte stoomgekraakte nafta uit aardolie. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_4$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 35 °C tot 80 °C.]
- PT nafta (petroleo) leve do steam-cracking, tratada termicamente, Nafta de baixo ponto de ebulição — não específica  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento e destilação de nafta leve do steam-cracking. E constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_4$  ate  $C_{10}$  e destila no intervalo de aproximadamente 35 °C a 80 °C.]

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>Γ</p> 	<p>R : 45- 65</p> <p>S : 53-45</p>
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*limites de concentration, Konzentration grenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limite de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

$C \geq 10\%$	T R45 65
$0.1\% \leq C < 10\%$	T R 45

NOTA 4

Cas No 101316-56-7

EEC No 309-862-5

No 649-394-00-1

NOTA H

NOTA P

- ES destilados (petróleo),  $C_{7-9}$ , ricos en  $C_8$ , hidrodesulfurados desaromatizados, Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida por la destilación de la fracción ligera de petróleo, hidrodesulfurada y desaromatizada. Compuesta fundamentalmente de hidrocarburos con un número de carbonos dentro del intervalo de  $C_7$  a  $C_9$ , en su mayor parte de parafinas y cicloparafinas de  $C_8$ , con un intervalo de ebullición aproximado de 120 °C a 130 °C]
- DA destillater (råolie),  $C_{7-9}$ ,  $C_8$ -rige, hydroafsvovlede afaromatiserede; Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrier opnået ved destillationen af en let råoliefraktion, hydroafsvovlet og afaromatiseret. Den består overvejende af carbonhydrier, overvejende  $C_{7-9}$ , til og med  $C_9$ , overvejende  $C_8$  paraffiner og cycloparaffiner, med kogesinterval omtrent fra 120 °C til 130 °C]
- DE Destillate (Erdöl),  $C_{7-9}$ ,  $C_8$ -reich, hydrodesulfuriert dearomatisiert, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation einer Erdöl-leichten Fraktion erhält, hydrodesulfuriert und dearomatisiert. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_7$  bis  $C_9$ , vorherrschend  $C_8$ -Paraffinen und Cycloparaffinen, und siedet im Bereich von etwa 120 °C bis 130 °C.]
- EL αποσταγμα (πετρελαιο),  $C_{7-9}$ , πλούσια σε  $C_8$ , αποθειωμένα με υδρογόνο απαλλαγμένα από αρωματικά. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη ελαφρού κλάσματος πετρελαιο, αποθειωμένου με υδρογόνο και απαλλαγμένου από αρωματικά. Συνίσταται κυρίως από υδρογονανθράκες με αριθμο ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  ως και  $C_9$ , κυρίως  $C_8$  παραφίνες και κυκλοπαραφίνες με περιοχή βρασμού από 120 °C ως 130 °C περίπου]
- EN Distillates (petroleum),  $C_{7-9}$ ,  $C_8$ -rich, hydrodesulfurized dearomatized, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by the distillation of petroleum light fraction, hydrodesulfurized and dearomatized. It consists predominantly of hydrocarbons having carbon numbers in the range of  $C_7$  through  $C_9$ , predominantly  $C_8$  paraffins and cycloparaffins, boiling in the range of approximately 120 °C to 130 °C (248 °F to 266 °F).]
- FR distillats en  $C_{7-9}$ , riches en  $C_8$  (pétrole), hydrodésulfurés et désaromatisés; Naphta à point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation d'une fraction pétrolière légère, hydrodésulfurée et désaromatisée. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_7$ - $C_9$ , en majorité des paraffines et des cycloparaffines en  $C_8$ , et dont le point d'ébullition est compris approximativement entre 120 °C et 130 °C.]
- IT distillati (petrolio),  $C_{7-9}$ , ricchi di  $C_8$ , idrodesolforati dearomatizzati; Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per distillazione di una frazione leggera di petrolio, idrodesolforata e dearomatizzata. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_9$ , prevalentemente paraffine e cicloparaffine  $C_8$ , con punto di ebollizione nell'intervallo 120 °C-130 °C ca.]
- NL destillaten (aardolie),  $C_{7-9}$ ,  $C_8$ -rijk, met waterstof onttzwaveld gedearomatiseerd, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van een lichte aardoliefractie, met waterstof onttzwaveld en gedearomatiseerd. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_7$  tot en met  $C_9$ , voornamelijk  $C_8$ -paraffinen en cycloparaffinen, met een kooktraject van ongeveer 120 °C tot 130 °C]
- PT destilados (petróleo),  $C_{7-9}$ , ricos em  $C_8$ , hidrogenodessulfurizados, desaromatizados, nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação de uma fração petrolífera leve, hidrogenodessulfurizada e desaromatizada. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono na gama de  $C_7$  até  $C_9$ , predominantemente parafinas e cicloparafinas em  $C_8$ , e destila no intervalo de aproximadamente 120 °C a 130 °C.]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45	Xn, R 65
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*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C $\geq$ 10 %	T, R 45-65
0,1 % $\leq$ C < 10 %	T, R 45

NOTA 4

CAS No 101316 6n 9

FEC No 309 870 9

No 449 345 00 7

NOTA H

NOTA P

- ES hidrocarburos,  $C_{6-8}$ , hidrogenados desaromatizados por sorción, retinación de tolueno. Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida durante la sorción de una fracción hidrocarbonada de gasolina craqueada tratada con hidrógeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_8$  y con un intervalo de ebullición de 80 °C a 135 °C]
- DA carbonhydrider,  $C_{6-8}$ , hydrogenerede sorption-afaromatiserede, toluenraffinering, Lavtkogende uspecificeret nafta  
[En sammensat blanding af carbonhydrider opnået under sorptionen af toluen fra en carbonhydridfraction fra krakket benzin behandlet med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af carbonhydrider, overvejende  $C_6$  til og med  $C_8$ , med kogesinterval omtrent fra 80 °C til 135 °C]
- DE Kohlenwasserstoffe,  $C_{6-8}$ , hydriert, durch Sorption dearomatisiert, Toluol Raffination, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man während der Sorptionen von Toluol aus einer Kohlenwasserstoff-Fraktion aus gekracktem Benzin erhält, das mit Wasserstoff in Gegenwart eines Katalysators behandelt wurde. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_8$  und siedet im Bereich von etwa 80 °C bis 135 °C]
- EL υδρογονάνθρακες,  $C_{6-8}$ , υδρογονωμένοι απαλλανμένοι αρωματικών με διαδικασία ροφήσης, από εξευγενισμό τολουολίου. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται κατά τη διαδικασία ροφήσεων τολουολίου από κλάσμα υδρογονάνθρακος πυρολύμενης βενζίνης, κατεργασμένης με υδρογόνο, παρουσία καταλύτη. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  ως και  $C_8$  και με περιοχή βρασμού από 80° C ως 135° C περίπου]
- EN Hydrocarbons,  $C_{6-8}$ , hydrogenated sorption-dearomatized, toluene rafination, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained during the sorptions of toluene from a hydrocarbon fraction from cracked gasoline treated with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_8$  and boiling in the range of approximately 80 °C to 135 °C (176 °F to 275 °F)]
- FR hydrocarbures en  $C_{6-8}$ , hydrogenes et desaromatises par absorption, rafinage du toluene, Naphta a point d'ebullition bas — non specifique  
[Combinaison complexe d'hydrocarbures obtenue durant l'absorption du toluene derive d'une fraction petroliere a partir d'essence de craquage et traitee a l'hydrogene en presence d'un catalyseur. Se compose principalement d'hydrocarbures dont le nombre de carbonos se situe en majorite dans la gamme  $C_6$   $C_8$  et dont le point d'ebullition est compris approximativement entre 80 °C et 135 °C]
- IT idrocarburi,  $C_{6-8}$ , idrogenati dearomatizzati per assorbimento, raffinazione del toluene. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta durante gli assorbimenti di toluene proveniente da una frazione idrocarbureica da benzina da cracking trattata con idrogeno in presenza di un catalizzatore. E' costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$   $C_8$  e punto di ebollizione nell'intervallo 80 °C 135 °C ca.]
- NL koolwaterstoffen,  $C_{6-8}$ , gehydrogeneerde door sorptie gedearomatiseerde, toluenraffinage. Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen tijdens de sorptie van toluen uit een koolwaterstoffractie uit gekraakte gasolie die behandeld is met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_6$  tot en met  $C_8$ , met een kooktraject van ongeveer 80 °C tot 135 °C]
- PT hidrocarbonetos,  $C_{6-8}$ , desaromatizados por absorção hidrogenados, da refinação de tolueno. Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida durante absorção de tolueno de uma fração petrolífera de gasolina de cracking tratada com hidrogenio na presença de um catalisador. E' constituída predominantemente por hidrocarbonetos com número de átomos de carbono predominantemente na gama de  $C_6$  até  $C_8$  e destila no intervalo de aproximadamente 80 °C a 135 °C]

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MC 501 - R 45 | No. R 65

Etiquetado, Etikettering, Kennzeichen, Kennzeichnung, Rotulagem, Etichettatura, Kenmerken, Rotulagem



**R : 4.5-65**

S : 53-45

α. *concentraciunea* / *Konzentration* / *grense* / *Konzentrationsgrenzwerte* / *Όρια συγκέντρωσης* / *Concentration limits* / *Limites de concentration* / *Limite di concentrazione* / *Concentrationsgrenzen* / *Limites de concentração*

$C \geq 10\%$	T, R 45-65
$0,1\% \leq C < 10\%$	T, R 45

NOTA 4

CAS No 101316-76-1

LEC No 309 879 8

No 649-396-00 2

NOTA H


NOTA P

- ES *nafta* (petróleo), serie completa hidrodesulfurada del coquizado, *Nafta de baja temperatura de inflamación, sin especificar*  
[Combinación completa de hidrocarburos obtenida por fraccionamiento del destilado hidrodesulfurado del coquizador. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 23 °C a 196 °C.]
- DA *naphtha* (råolie), hydroafsvovlet full-range coker — Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrider opnået ved fraktionering fra hydroafsvovlet cokerdestillat. Den består overvejende af carbonhydrider, overvejende  $C_4$  til og med  $C_{11}$ , med kogepunkt interval omtrent fra 23 °C til 196 °C.]
- DE *Naphtha* (Erdöl), hydrodesulfurierte gesamte Verkoker, *Naphtha, niedrig siedend, nicht spezifiziert*  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Fraktionieren aus hydrodesulfuriertem Verkokerdestillat erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa 23 °C bis 196 °C.]
- EL *ναφθα* (πετρελαιο), αποθειωμένη με υδρογόνο πτηνούς συστάσης από μονάδα εξανθράκωσης. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Πολύ πλούσιος συνδυασμός υδρογονανθράκων που λαμβάνεται με κλασματική αποσταξη αποθειωμένου με υδρογόνο αποσταγματος από μονάδα εξανθράκωσης. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως  $C_{11}$ , και με περιοχή βρασμού από 23 °C ως 196 °C περίπου.]
- EN *Naphtha* (petroleum), hydrodesulfurized full-range coker, *Low boiling point naphtha — unspecified*  
[A complex combination of hydrocarbons obtained by fractionation from hydrodesulfurized coker distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  to  $C_{11}$  and boiling in the range of approximately 23 °C to 196 °C (73 °F to 385 °F).]
- FR *naphta de cokéfaction a large intervalle d'ébullition* (pétrole), hydrodésulfuré, *Naphta a point d'ébullition bas — non spécifié*  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement a partir de distillat de cokéfaction hydrodésulfuré. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 23 °C et 196 °C.]
- IT *nafta* (petrolio), idrodesolforata taglio intero da « coker ». *Nafta con basso punto di ebollizione — non specificata*  
[Combinazione complessa di idrocarburi ottenuta per frazionamento di distillato da « coker » idrodesolforato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$  e punto di ebollizione nell'intervallo 23 °C-196 °C ca.]
- NL *nafta* (aardolie), met waterstof ontzwaveld totaal bereik uit verkookser, *Nafta met laag kookpunt — niet gespecificeerd*  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door fractionering van met waterstof ontzwaveld verkookserdestillaat. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_4$  tot  $C_{11}$ , met een kooktraject van ongeveer 23 °C tot 196 °C.]
- PT *nafta* (petróleo); de carga do coker hidrogenodessulfurizada, *Nafta de baixo ponto de ebulição — não especificada*  
[Uma combinação complexa de hidrocarbonetos obtida por fracionamento de um destilado do coker hidrogenodessulfurizado. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e destila no intervalo de aproximadamente 23 °C a 196 °C.]

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2, R 45	Xn, R 65
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div style="text-align: right;"> <p>R : 45-65</p> <p>S : 53-45</p> </div> </div>
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...límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	T; R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4



Cas No 101795 01 1

FEC No 309 976-5

No 649-397-00-8

NOTA H

NOTA P

- ES nafta (petroleo), fraccion ligera desazutrada. Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida sometiendo nafta de petróleo a un proceso de desazufrado para transformar los mercaptanos o separar impurezas ácidas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 20 °C a 130 °C]
- DA naphtha (råolie), sweetenet let, Lavtkogende uspecifiseret nafta  
En sammensat blanding af carbonhydrider opnået ved at underkaste en råolienaphtha en sweetening-proces, for at omdanne mercaptaner eller for at fjerne sure urenheder. Den består overvejende af carbonhydrider, overvejende  $C_4$  til og med  $C_{12}$ , med koginterval omtrænt fra 20 °C til 130 °C]
- DE Naphtha (Erdöl), gesußt leicht, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man erhält, wenn man eine Erdöl-Naphtha einem Süßungsverfahren zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verunreinigungen aussetzt. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{12}$  und siedet im Bereich von etwa 20 °C bis 130 °C]
- EL ναφθα (πετρέλαιου), ηλυκασμένη ελαφρά. Ελαφρά ναφθα — ηη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με ηλυκανση νάφθας πετρελαίου για να μετατραπούν μερκαπτανες η να απομακρυνθούν οξίνες προσμίξεις. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  ως και  $C_{12}$  και με περιοχή βρασμού από 20 °C ως 130 °C περίπου]
- EN Naphtha (petroleum), sweetened light, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by subjecting a petroleum naphtha to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{12}$  and boiling in the range of approximately 20 °C to 130 °C (68 °F to 266 °F)]
- FR naphtha léger adouci (pétrole), Naphtha a point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue en soumettant un naphtha pétrolier a un procédé d'adoucissement afin de convertir les mercaptans ou d'éliminer les impuretés acides. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ ,  $C_{12}$  et dont le point d'ébullition est compris approximativement entre 20 °C et 130 °C]
- IT nafta (petrolio), leggera addolcita, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta sottoponendo una nafta di petrolio ad un processo di addolcimento per convertire i mercaptani o eliminare impurezze acide. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ ,  $C_{12}$  e punto di ebollizione nell'intervallo 20 °C-130 °C ca.]
- NL nafta (aardolie), stankvrij gemaakte lichte, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het onderwerpen van een aardolienafta aan een stankverwijderingsproces waarbij mercaptanen worden omgezet of zure onzuiverheden worden verwijderd. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 20 °C tot 130 °C]
- PT nafta (petróleo), leve tratada (sweetened), Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida submetendo uma nafta petrolífera a um processo de sweetening para converter mercaptanos ou para remover impurezas ácidas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{12}$  e destila no intervalo de aproximadamente 20 °C a 130 °C]

Classification, Klassifizierung, Einstufung, Τξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2 R 45	Xn, R 65
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
 Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45

NOTA 4

Cas No 102110-14-5

EEC No 310-012-0

No 649-398-00-3

NOTA H

NOTA P

- ES hidrocarburos,  $C_{10}$ , ricos en  $C_{10}$ , nafta craqueada a vapor. Nafta de baja temperatura de inflamación, sin especificar  
[Combinación compleja de hidrocarburos obtenida por destilación de nafta craqueada a vapor. Compuesta fundamentalmente de hidrocarburos con un número de carbonos dentro del intervalo de  $C_1$  a  $C_{10}$ , en su mayor parte  $C_{10}$ .]
- DA carbonhydrider,  $C_{10}$ -,  $C_{10}$ -rige, dampkrakket naphtha, Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrider opnået ved destillation af dampkrakket naphtha. Den består overvejende af carbonhydrider,  $C_1$  til og med  $C_{10}$ , overvejende  $C_{10}$ .]
- DE Kohlenwasserstoffe,  $C_{10}$ -,  $C_{10}$ -reich, dampfgekrackte Naphtha, Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von dampfgekrackter Naphtha erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_1$  bis  $C_{10}$ , vorherrschend  $C_{10}$ .]
- EL υδρογονάνθρακες,  $C_{10}$ -, πλουσιον σε  $C_{10}$ , από ατμοπυρόλυση ναφθας. Ελαφρά νάφθα — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με αποσταξη ατμοπυρολυμένης ναφθας. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_1$  ως και  $C_{10}$ , κυρίως  $C_{10}$ .]
- EN Hydrocarbons,  $C_{10}$ -,  $C_{10}$ -rich, steam-cracked naphtha, Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by distillation of steam-cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_{10}$ , predominantly  $C_{10}$ .]
- FR hydrocarbures en  $C_{10}$ -, riches en  $C_{10}$ , naphtha de vapocraquage, Naphtha à point d'ébullition bas — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par distillation de naphtha de vapocraquage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_1$  -  $C_{10}$ , surtout en  $C_{10}$ .]
- IT idrocarburi,  $C_{10}$ -, ricchi di  $C_{10}$ , nafta crackizzata con vapore, Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per distillazione di nafta da cracking con vapore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_1$ - $C_{10}$ , prevalentemente  $C_{10}$ .]
- NL koolwaterstoffen,  $C_{10}$ -, rijk aan  $C_{10}$ , stoomgekraakte nafta, Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van stoomgekraakte nafta. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_1$  tot en met  $C_{10}$ , hoofdzakelijk  $C_{10}$ .]
- PT hidrocarbonetos,  $C_{10}$ -, ricos em  $C_{10}$ , do steam-cracking da nafta, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida por destilação dos produtos do steam-cracking da nafta. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono na gama de  $C_1$  até  $C_{10}$ , predominantemente  $C_{10}$ .]

классификация, Klassifizierung, Enkategorisering, классификация, Classification, Classificazione, Classificação, Intelekt, Classificação

nc Cat 2; R 45 | Xn, R 65 |

Etiquetado, Etikettering, Kennzeichnung, ετικετοποίηση, Labelung, Etiquetage, Etichettatura, Kenmerken, Rotulagem



limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T, R 45
-	

NOTA 4

Cas No 102110-15-6

EEC No 310-013-6

No 649-399-00-9

NOTA H

NOTA P

- ES hidrocarburos, ricos en C<sub>4</sub>, con d ciclopentadieno, Nafta de baja temperatura de inflamacion, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por destilacion de los productos de un proceso de craqueo a vapor. Compuesta en su mayor parte de hidrocarburos con un numero de carbonos de C<sub>4</sub> y d ciclopentadieno y con un intervalo de ebullicion aproximado de 30 °C a 170 °C]
- DA carbonhydrider, C<sub>4</sub>-rige, bicyclopentadienholdige, Luvtkogende uspecificieret nafta  
[En sammensat blanding af carbonhydrider opnået ved destillation af produkterne fra en dampkrakningsproces. Den består overvejende af carbonhydrider C<sub>4</sub> og bicyclopentadien, med kogesinterval omtrent fra 30 °C til 170 °C]
- DE Kohlenwasserstoffe, C<sub>4</sub> reich, Dicyclopentadien enthaltend, Naphta, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen die man durch Destillation der Produkte aus einem Dampfcrackverfahren erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen von C<sub>4</sub> und Dicyclopentadien und siedet im Bereich von etwa 30 °C bis 170 °C]
- EL υδρογονάνθρακες, πλούσιοι σε C<sub>4</sub>, που περιέχουν δicycloπενταδιένιο. Ελαφρά ναφθα — μη προδιαγεγραμμένη  
[Περίπλοκη συνδυασμένη ποσότητα υδρογονάνθρακα που παράγεται με ατμοποίηση των προϊόντων της υδροποίησης με ατμό. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμούς ατόμων άνθρακα C<sub>4</sub> και δicycloπενταδιένιο και με περιοχή βρασμού από 30 °C ως 170 °C περίπου]
- EN Hydrocarbons, C<sub>4</sub>-rich, bicyclopentadiene-contg. Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by distillation of the products from a steam cracking process. It consists predominantly of hydrocarbons having carbon numbers of C<sub>4</sub> and bicyclopentadiene and boiling in the range of approximately 30 °C to 170 °C (86 °F to 338 °F)]
- FR hydrocarbures riches en C<sub>4</sub>, contenant du dicyclopentadiene, Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage. Se compose principalement d'hydrocarbures en C<sub>4</sub> et de dicyclopentadiene. Son point d'ébullition est compris approximativement entre 30 °C et 170 °C]
- IT idrocarburi, ricchi di C<sub>4</sub>, contenenti dicyclopentadiene. Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per distillazione dei prodotti di un processo di cracking con vapore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio C<sub>4</sub> e dicyclopentadiene e punto di ebollizione nell'intervallo 30 °C-170 °C (a)]
- NL koolwaterstoffen, rijk aan C<sub>4</sub>, bevat dicyclopentadien. Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van de producten uit een stoomkraakproces. Bestaat voornamelijk uit koolwaterstoffen overwegend C<sub>4</sub> en dicyclopentadien, met een kooktraject van ongeveer 30 °C tot 170 °C]
- PT hidrocarbonetos, ricos em C<sub>4</sub>, contendo dicyclopentadieno, Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida por destilação dos produtos de um processo de steam-cracking. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono de C<sub>4</sub> e dicyclopentadieno e destila no intervalo de aproximadamente 30 °C a 170 °C]

Classification Klassifizierung, E-ητάσηση, Ταξινόμηση Classification, Classification, Classificazione Indeling Classificacao

Carc. Cat. 2, R 45	Xn, R 65
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45-65
	S : 53-45

Limites de concentration Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits  
Limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentraçao

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

Cas No 102110-55-4

EEC No 310-057 6

No 649-400-00-2

NOTA H  
NOTA P


- ES residuos (petroleo), fraccion ligera craqueada a vapor, aromaticos , Nafta de baja temperatura de inflamación, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por la destilacion de los productos de craqueo a vapor o procesos similares despues de la separacion de productos muy ligeros teniendo como resultado un residuo que comienza con hidrocarburos con un numero de carbonos superior a  $C_4$ . Compuesta en su mayor parte de hidrocarburos aromaticos con un numero de carbonos superior a  $C_4$  y con un punto de ebullición aproximado por encima de  $40^\circ\text{C}$ ]
- DA rester (råolie), dampkrakkede lette, aromatiske , Lavtkogende uspecifiseret nafta  
[En sammensat blanding af carbonhydrider opnået ved destillationen af produkterne fra dampkrakning eller lignende processer efter fjernelse af de meget lette produkter, resulterende i en rest begyndende med carbonhydrider med carbonantal større end  $C_4$ . Den består overvejende af aromatiske carbonhydrider, større end  $C_4$ , og koger omtrent over  $40^\circ\text{C}$ ]
- DE Rückstände (Erdöl), dampfgekrackte leichte, aromatisch , Naphtha, niedrig siedend, nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation der Produkte aus Dampfkrack- oder ähnlichen Verfahren nach Abnahme der sehr leichten Produkte erhält und einen Rückstand mit Kohlenwasserstoffen ergibt, dessen Kohlenstoffzahlen bei größer als  $C_4$  beginnen. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen größer als  $C_4$  und siedet über etwa  $40^\circ\text{C}$ ]
- EL υπολείμματα (πετρελαιο), ελαφρα ατμοπυρολυμενα αρωματικά Ελαφρα ναφθα — μη προδιαγεγραμμένη  
[Ποικιλομορφός συνδυασμός υδρογονανθράκων που λαμβάνεται με την αποστάξη των προϊόντων ατμοπυρόλυσης ή παρόμοιων κατεργασιών, μετά την απομάκρυνση των πολύ ελαφρών προϊόντων, ώστε να προκύπτει υπολείμμα το οποίο αρχίζει με υδρογονανθράκες με αριθμό ατόμων άνθρακα μεγαλύτερο από  $C_4$ . Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα μεγαλύτερο από  $C_4$  και βράζει πάνω από  $40^\circ\text{C}$  περίπου]
- EN Residues (petroleum), steam-cracked light, arom , Low boiling point naphtha — unspecified  
[A complex combination of hydrocarbons obtained by the distillation of the products of steam cracking or similar processes after taking off the very light products resulting in a residue starting with hydrocarbons having carbon numbers greater than  $C_4$ . It consists predominantly of aromatic hydrocarbons having carbon numbers greater than  $C_4$  and boiling above approximately  $40^\circ\text{C}$  ( $104^\circ\text{F}$ )]
- FR résidus légers de vapocraquage (pétrole), aromatiques , Naphta a point d'ébullition bas — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage ou de traitements similaires après élimination des produits très légers, produisant un résidu composé d'hydrocarbures dont le nombre de carbones est supérieur à  $C_4$ . Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones est supérieur à  $C_4$ , et dont le point d'ébullition est approximativement supérieur à  $40^\circ\text{C}$ ]
- IT residui (petrolio), leggeri da cracking con vapore, aromatici , Nafta con basso punto di ebollizione — non specificata  
[Combinazione complessa di idrocarburi ottenuta per distillazione dei prodotti del cracking con vapore o processi simili dopo aver eliminato i prodotti molto leggeri, risultante in un residuo che inizia con idrocarburi con numero di atomi di carbonio superiore a  $C_4$ . È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio maggiore di  $C_4$ , e punto di ebollizione superiore a  $40^\circ\text{C}$ ]
- NL residuen (aardolie), stoomgekraakte lichte, aromatisch , Nafta met laag kookpunt — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van de producten van stoomkraken of vergelijkbare processen, na verwijdering van de zeer lichte producten, resulterend in een residu dat begint met koolwaterstoffen groter dan  $C_4$ . Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend groter dan  $C_4$ , kokend boven ongeveer  $40^\circ\text{C}$ ]
- PT resíduos (petróleo), leves do steam-cracking, aromaticos , Nafta de baixo ponto de ebulição — não especificada  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação dos produtos do steam-cracking ou processos semelhantes após remoção dos produtos muito leves de que resulta um residuo constituído por hidrocarbonetos com numeros de atomos de carbono superiores a  $C_4$ , e destila acima de aproximadamente  $40^\circ\text{C}$ ]

Classification, Klassifizierung, Ενστάση, Ταξινόηση, Classification, Classificazione, Classificação, Indeling, Classificação

Carc. Cat. 2, R 45

Xn, R 65

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 45-65</p> <p>S : 53-45</p>
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Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

C ≥ 10 %	T, R 45-65
0,1 % ≤ C < 10 %	T: R 45

NOTA 4



Cas No 68476-50-6

EEC No 270-690-8

No 649-401-00-8

NOTA H  
NOTA P

- ES hidrocarburos,  $C \geq 5$ , ricos en  $C_{5-6}$ , Nafta de baja temperatura de inflamación, sin especificar
- DA carbonhydrier,  $C \geq 5$ ,  $C_{5-6}$ -rige, Lavtkogende uspecifiseret nafta
- DE Kohlenwasserstoffe,  $C \geq 5$ ,  $C_{5-6}$ -reich, Naphtha, niedrig siedend, nicht spezifiziert
- EL υδρογονανθρακες,  $C \geq 5$ , πλουσιοι σε  $C_{5-6}$ , Ελαφρα ναφθα — μη προδιαγεγραμμενη
- EN Hydrocarbons,  $C \geq 5$ ,  $C_{5-6}$ -rich, Low boiling point naphtha — unspecified
- FR hydrocarbures  $C \geq 5$ , riches en  $C_{5-6}$ , Naphta a point d'ébullition bas — non spécifique
- IT idrocarburi,  $C \geq 5$ , arricchiti in  $C_{5-6}$ , Nafta con basso punto di ebollizione — non specificata
- NL koolwaterstoffen,  $C \geq 5$ , rijk aan  $C_{5-6}$ , Nafta met laag kookpunt — niet gespecificeerd
- PT hidrocarbonetos,  $C \geq 5$ , ricos em  $C_{5-6}$ , Nafta de baixo ponto de ebulição — não especificada

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione Indeling, Classificação

Carc Cat 2, R 45 Xn, R 65

Etiquetado Etikettering Kennzeichnung, Επισήμανση, Labelling, Etiquetage Etichettatura Kenmerken, Rotulagem

T	
	R : 45-65
	S : 53-45

Limites de concentration, Konzentrationsgrenser Konzentrationsgrenzwerte, Όρια συγκεντρώσεως Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

L. N. 6476/95

EEC No 270-695-5

No 649-402-00-3


NOTA H  
NOTA P

- hidrocarburos, ricos en  $C_{12}$ , Nafta de baja temperatura de inflamación, sin especificar
- carbonhydrider, C -rige, Lavtkogende uspecificeret nafta
- Kohlenwasserstoffe,  $C_{12}$ -reich, Naphtha, niedrig siedend, nicht spezifiziert
- υδρογονάνθρακες, πλούσιοι σε  $C_{12}$ , Ελαφρά νάφθα — μη προδιαγεγραμμένη
- Hydrocarbons, C -rich, Low boiling point naphtha — unspecified
- hidrocarbures riches en  $C_{12}$ , Naphta a point d'ébullition bas — non spécifié
- idrocarburi, arricchiti in  $C_{12}$ , Nafta con basso punto di ebollizione — non specificata
- koolwaterstoffen, rijk aan  $C_{12}$ , Nafta met laag kookpunt — niet gespecificeerd
- hidrocarbonetos, ricos em  $C_{12}$ , Nafta de baixo ponto de ebulição — não especificada

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat 2 ; R 45	Xn ; R 65
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45-65
	S : 53-45

limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao

$C \geq 10 \%$	T, R 45-65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA 4

Cas No 20449 39 2

E.C. No 292 611 4

No 649 403 00 9

NOTA \*


NOTA

- ES hidrocarburos aromaticos,  $C_{8-10}$ , Nafta de baja temperatura de inflamacion, sin especificar
- DA aromatiske carbonhydrider,  $C_{8-10}$ , Lavtkogende uspecificeret nafta
- DE Aromatische Kohlenwasserstoffe,  $C_{8-10}$ , Naphta, niedrig siedend, nicht spezifiziert
- EL αρωματικοί υδρογονάνθρακες,  $C_{8-10}$ , Ελαφρά ναφθα — μη προσυμμετρημένη
- EN aromatic hydrocarbons,  $C_{8-10}$ , Low boiling point naptha — unspecified
- FR hydrocarbures aromatiques en  $C_{8-10}$ , Naphta a point d'ebullition bas — non specifié
- IT idrocarburi aromatici  $C_{8-10}$ , Nafta con basso punto di ebollizione — non specificata
- NL aromatische koolwaterstoffen,  $C_{8-10}$ , Nafta met laag kookpunt — niet gespecificeerd
- PT hidrocarbonetos aromaticos,  $C_{8-10}$ , Nafta de baixo ponto de ebulição — não especificada
- FI aromaattiset hiilivedyt,  $C_{8-10}$  matalan kiehumispisteen teollisuusbensiini (nafta)-maarittelemalon
- SV aromatiska kolvaten,  $C_{8-10}$ , ospecificerad nafta med låg kokpunkt

*Classification Klassificering, Einstufung, Ταξινόηση, Classification*  
*Classification Classificazione, Indeling, Classificação Luokitus Klassifisering*

Car. Cat 2 R 45	Xn, R 65
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*Etiquetado Etikettering, Kennzeichnung, Επισήμανση Labelling*  
*Etiquetage Etikettering, Kenmerken, Etikettering, Merkinnaat Markning*

T	
	R 45 65
	S 53 45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzuerte, Ορια συγκεντρώσεως*  
*Concentration limits Limites de concentration Limiti di concentrazione, Concentratiegrenzen*  
*Limites de concentração, Pitoisuusraajat Konzentrationsgränser*

$C \geq 10 \%$	T, R 45 65
$0,1 \% \leq C < 10 \%$	T, R 45

NOTA \*

Lis No 8008-20-6

FEC No 232-366-4

No 649-404-00-4

## NOTA H

Kerosina (petroleum): Queroseno de destilación directa

Combinación compleja de hidrocarburos producida por la destilación del petróleo crudo. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{25}$ , y con un intervalo de ebullición aproximado de 150 °C a 290 °C.

K petroleum (raffine): Straight run petroleum

En sammensat blanding af carbonhydrider fremstillet ved destillation af råolie. Den består af carbonhydrider, overvejende  $C_{10}$  til og med  $C_{25}$  med kogefterval omfrent fra 150 °C til 290 °C.

Kerosin (Erdöl): Straight-run-Kerosin

Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Rohöl. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{25}$ , und siedet im Bereich von etwa 150 °C bis 290 °C.

Κηροζίνη (πετρέλαιο): Κηροζίνη από ατμοσφαιρική αποστάξη

Πολύπλοκη σε σύσταση οργανική ουσία που παράγεται με την αποστάξη αργού πετρελαίου. Αποτελείται από οργανοκινητρικά με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  ως και  $C_{25}$  και δράζει στην περιοχή από 150 °C ως 290 °C περίπου.

Kerosine (petroleum): Straight run kerosine

A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{25}$  and boiling in the range of approximately 150 °C to 290 °C (320 °F to 554 °F).

Kerosene (petroleu): Kerosene de distillation directe

Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole brut. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{10}$ - $C_{25}$  et dont le point d'ébullition est compris approximativement entre 150 °C et 290 °C.

Kerosene (petrolio): Kerosene di prima distillazione

Combinazione complessa di idrocarburi prodotta per distillazione del grezzo. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{25}$  con punto di ebollizione nell'intervallo 150 °C-290 °C ca.]

kerosine (aardolie): Gedestilleerde kerosine

En complexe verzameling van koolwaterstoffen, geproduceerd door de destillatie van ruwe olie. Het bestaat uit koolwaterstoffen, verwegend in de reeks van  $C_{10}$  tot en met  $C_{25}$ , met een kooktraject van ongeveer 150 °C tot 290 °C.

Kerosene (petroleu): Queroseno de destilação directa

Uma combinação complexa de hidrocarbonetos produzida pela destilação de petróleo bruto. É constituída por hidrocarbonetos em número de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{25}$  e destila no intervalo de aproximadamente 150 °C a 290 °C.

Classification KL - Einstufung / Classificazione / Classificação / Classificação / Classificação / Classificação / Classificação / Classificação / Classificação / Classificação

Xn R 65

Etiquetado / Etikettering / Kennzeichnung / Επισήμανση / Labelling / Etiquetage / Etichettatura / Kenmerken / Rotulagem

Xn	
	R 65
	S (2-) 23-24 62

Limites de concentration / Konzentrationsgrenzen / Konzentrationsgrenzwerte, Όρια συγκεντρώσεως / Concentration limits / Limite de concentration / Limiti di concentrazione / Concentratiegrenzen / Limites de concentraçao

C ≥ 10 %	Xn R 65

NOTA 4

No 64742-88-7

EEC No 265-191-7

No 649-405-00-X

## NOTA H

- **nafta disolvente (petróleo), fracción alifática intermedia ; Queroseno de destilación directa**  
Combinación compleja de hidrocarburos obtenida de la destilación de petróleo crudo o de gasolina natural. Compuesta principalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{12}$  y con un intervalo de ebullición aproximado de 140 °C a 220 °C ]
- **solventnaphtha (råolie), middeltung aliphatisk , Straight run petroleum**  
En sammensat blanding af carbonhydinder opnået ved destillation af råolie eller naturgaskondensat. Den består overvejende af mættede carbonhydinder, overvejende  $C_6$  til og med  $C_{12}$ , med kogesinterval omtrent fra 140 °C til 220 °C.]
- **Lösungsmittelnaphtha (Erdöl), mittlere aliphatische ; Straight-run-Kerosin**  
Komplexe Kombination von Kohlenwasserstoffen, erhalten aus der Destillation von Rohöl oder natürlichem Benzin. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{12}$  und siedet im Bereich von etwa 140 °C bis 220 °C ]
- **διαλύτης ναφθα (πετρελαίου), μεσαία αλειφατική- Κεροξίνη από ατμοσφαιρική**  
Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη αργού πετρελαίου ή φυσικής βενζίνης. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  ως και  $C_{12}$  και βράζει στην περιοχή από 140 °C ως 220 °C περίπου.]
- **Solvent naphtha.(petroleum), medium aliph. ; Straight run kerosine**  
A complex combination of hydrocarbons obtained from the distillation of crude oil or natural gasoline. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{12}$  and boiling in the range of approximately 140 °C to 220 °C (284 °F to 428 °F).]
- **solvant naphtha aliphatique moyen (pétrole) ; Kérosène de distillation directe**  
[Combinaison complexe d'hydrocarbures obtenue par distillation de pétrole brut ou d'essence naturelle. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_6$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 140 °C et 220 °C ]
- **nafta solvente (petrolio), alifatica intermedia ; Cherosene di prima distillazione**  
Combinazione complessa di idrocarburi ottenuta dalla distillazione del petrolio grezzo o della benzina naturale. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{12}$  e punto di ebollizione nell'intervallo 140 °C-220 °C ca.]
- **solvent-nafta (aardolie), middenfractie alifatisch , Gedestilleerde kerosine**  
Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van ruwe olie of gasbenzine. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 140 °C tot 220 °C ]
- **nafta de petróleo (petróleo), alifática media , Queroseno de destilação directa**  
Uma combinação complexa de hidrocarbonetos obtida da destilação de petróleo bruto ou de gasolina natural. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_6$  ate  $C_{12}$  e destila no intervalo de aproximadamente 140 °C a 220 °C ]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn , R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-) 23-24-62

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn , R 65

NOTA 4

Cas No 64742-96-7

EEC No 265-200-4

No 649-406-00-5

NOTA H

- ±S** nafta disolvente (petroleo), fraccion alifatica pesada, Queroseno de destilacion directa  
[Combinacion compleja de hidrocarburos obtenida de la destilacion de petroleo crudo o de gasolina natural. Compuesta fundamentalmente de hidrocarburos saturados con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{16}$  y con un intervalo de ebullicion aproximado de 190 °C a 290 °C]
- ±A** solventnaphtha (råolie), tung aliphatisk; Straight run petroleum  
[En sammensat blanding af carbonhydinder opnået ved destillation af råolie eller naturgaskondensat. Den består overvejende af mættede carbonhydinder, overvejende  $C_{11}$  til og med  $C_{16}$ , med kogesinterval omtrent fra 190 °C til 290 °C.]
- ±E** Lösungsmittelnaphtha (Erdöl), schwere aliphatische; Straight-run-Kerosin  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Rohöl oder natürlichem Benzin. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{16}$  und siedet im Bereich von etwa 190 °C bis 290 °C]
- ±L** διαλύτης ναφθα (πετρελαιο), βαρεια αλειφατική Κεροζίνη από ατμοσφαιρική απόσταξη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη αργού πετρελαίου ή φυσικής δενζίνης. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με αριθμό ατόμων ανθράκα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{16}$  και βράζει στην περιοχή από 190 °C ως 290 °C περίπου]
- ±N** Solvent naphtha (petroleum) heavy aliph; Straight run kerosine  
[A complex combination of hydrocarbons obtained from the distillation of crude oil or natural gasoline. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{16}$  and boiling in the range of approximately 190 °C to 290 °C (374 °F to 554 °F)]
- ±R** solvant naphta aliphatique lourd (pétrole); Kérosène de distillation directe  
[Combinaison complexe d'hydrocarbures obtenue par distillation de pétrole brut ou d'essence naturelle. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 190 °C et 290 °C]
- nafta solvente (petrolio), alifatica pesante, Cherosene di prima distillazione  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione del petrolio grezzo o della benzina naturale. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{16}$  e punto di ebollizione nell'intervallo 190 °C - 290 °C ca]
- solvent-nafta (aardolie), zwaar alifatisch, Gedestilleerde kerosine  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van ruwe olie of gasbenzine. Bestaat voornamelijk uit erzadigde koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 190 °C tot 290 °C.]
- nafta de petroleo (petróleo), alifática pesada, Queroseno de destilação directa  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de petróleo bruto ou de gasolina natural. É constituída predominantemente por hidrocarbonetos saturados com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{16}$  e destila no intervalo de aproximadamente 190 °C a 290 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn ; R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn



R : 65

S : (2-) 23-24-62

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn ; R 65

NOTA 4

Cas No 92045-37-9

EEC No 295-418-5

No 649-407-00-0

## NOTA H

- querosina (petróleo), fracción amplia de primera destilación ; Queroseno de destilación directa  
[Combinación compleja de hidrocarburos obtenida como una fracción amplia de la fracción combustible hidrocarbonada de la destilación atmosférica y con un intervalo de ebullición aproximado de 70 °C a 220 °C.]
- petroleum (råolie), straight-run bred fraktion ; Straight run petroleum  
[En sammensat blandning af carbonhydnder, opnået som en bred fraktion fra atmosfærisk destillation af en carbonhydndbrændselsfraktion, med kogesinterval omtrent fra 70 °C til 220 °C.]
- ≡ Kerosin (Erdöl), Straight-run weiter Schnitt ; Straight-run-Kerosin  
[Komplexe Kombination von Kohlenwasserstoffen, die man als breite Fraktion der Kohlenwasserstoff-Brennstoff-Fraktion aus offener Destillation erhält. Siedet im Bereich von etwa 70 °C bis 220 °C.]
- κηροζίνη (πετρελαίου), ευρέος κλάσματος απευθείας απόσταξης Κεροζίνη από ατμοσφαιρική απόσταξη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν ευρύ κλάσμα υδρογονανθρακικού καυσίμου ευρείας περιοχής από ατμοσφαιρική απόσταξη και που βράζει στην περιοχή από 70 °C ως 220 °C περίπου.]  
  
Kerosine (petroleum), straight-run wide-cut ; Straight run kerosine  
[A complex combination of hydrocarbons obtained as a wide cut hydrocarbon fuel cut from atmospheric distillation and boiling in the range of approximately 70 °C to 220 °C (158 °F to 428 °F)]
- kerosène (pétrole), coupe large de distillation directe ; Kérosène de distillation directe  
[Combinaison complexe d'hydrocarbures obtenue comme coupe hydrocarbure combustible large par distillation atmosphérique et dont le point d'ébullition es compris approximativement entre 70 °C et 220 °C.]
- cherosene (petrolio), di prima distillazione taglio largo ; Cherosene di prima distillazione  
[Combinazione complessa di idrocarburi ottenuta come combustibile idrocarbunco a taglio largo dalla distillazione atmosferica e con punto di ebollizione nell'intervallo 70 °C-220 °C ca.]
- .. kerosine (aardolie), uit directe fractionering verkregen ruime fractie ; Gedestilleerde kerosine  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een ruime koolwaterstof-brandstof-fractie uit atmosferische destillaatie, met een kooktraject van ongeveer 70 °C tot 220 °C]
- querosene (petróleo), corte largo de destilação directa ; Queroseno de destilação directa  
[Uma combinação complexa de hidrocarbonetos obtida como um corte de intervalo da destilação largo de destilação atmosférica e que destila no intervalo de aproximadamente 70 °C a 220 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn , R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-) 23-24-62

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn ; R 65

NOTA 4

Cas No 64742-91-2

EEC No 265-194-3

No 649-408-00-6

## NOTA H

- ES** destilados (petróleo), craqueados a vapor, Queroseno craqueado  
[Combinación compleja de hidrocarburos obtenida por la destilación de los productos de un proceso de craqueo a vapor. Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{16}$  y con un intervalo de ebullición aproximado de 90 °C a 290 °C.]
- DA** destillater (råolie), dampkrakkede, Krakket petroleum  
[En sammensat blanding af carbonhydrider opnået ved destillation af produkterne fra en dampkrakningsproces. Den består overvejende af umættede carbonhydrider, overvejende  $C_7$  til og med  $C_{16}$ , med kogesinterval omtrent fra 90 °C til 290 °C.]
- DE** Destillate (Erdöl), Dampf-gekrackte, Krackkerosin  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation der Produkte aus einem Dampfkrackverfahren. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{16}$  und siedet im Bereich von etwa 90 °C bis 290 °C.]
- EL** αποσταγματα (πετρελαιο), ατμοπυρολυμένα· Κεροζίνη από διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με την απόσπαση των προϊόντων ατμοπυρόλυσης. Συνίσταται κυρίως από ακορεστούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  ως και  $C_{16}$  και δράζει στην περιοχή από 90 °C ως 290 °C περίπου.]
- EN** Distillates (petroleum), steam-cracked; Cracked kerosine  
[A complex combination of hydrocarbons obtained by the distillation of the products from a steam cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{16}$  and boiling in the range of approximately 90 °C to 290 °C (190 °F to 554 °F).]
- FR** distillats (pétrole), vapocraquage; Kérosène de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majorité dans la gamme  $C_7$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 90 °C et 290 °C.]
- IT** distillati (petrolio), crackizzati con vapor d'acqua, Cherosene da cracking  
[Combinazione complessa di idrocarburi ottenuto distillando i prodotti provenienti da un processo di cracking con vapor d'acqua. È prevalentemente costituita da idrocarburi insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{16}$  e punto di ebollizione nell'intervallo 90 °C-290 °C ca.]
- NL** destillaten (aardolie), stoomgekraakt; Gekraakte kerosine  
[Een complexe verzameling koolwaterstoffen, verkregen door de destillatie van de produkten uit een stoomkraakproces. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 90 °C tot 290 °C.]
- PT** destilados (petróleo), do steam-cracking; Queroseno de « cracking »  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação dos produtos de um processo de steam-cracking. É constituída predominantemente por hidrocarbonetos insaturados com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{16}$  e destila no intervalo de aproximadamente 90 °C a 290 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn ; R 65

*Etiquetada, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-) 23-24-62

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn ; R 65

NOTA 4

Cas No 68477-39-4

EEC No 270-728-3

No 649-409-00-1

## NOTA H

- ⇒ destilados (petróleo), destilados craqueados y rectificados del petróleo craqueado a vapor, fracción de  $C_{8-10}$ ; Que-  
roseno craqueado  
[Combinación compleja de hidrocarburos obtenida por destilación de destilados craqueados, craqueados a vapor y rectificados.  
Compuesta de hidrocarburos con un número de carbonos dentro del intervalo de  $C_8$  a  $C_{10}$  y con un intervalo de ebullición  
aproximado de 129 °C a 194 °C]
- ⇒ destillater (råolie), krakkede strippede dampkrakkede råoliedestillater,  $C_{8-10}$ -fraktion; Krakket petroleum  
[En sammensat blanding af carbonhydinder opnået ved at destillere krakkede, strippede, dampkrakkede destillater. Den består af  
carbonhydinder,  $C_8$  til og med  $C_{10}$ , med kogesinterval omtrent fra 129 °C til 194 °C.]
- ⇒ Destillate (Erdöl), gekrackte gestrippte Dampf-gekrackte Erdöldestillate,  $C_{8-10}$ -Fraktion; Krackkerosin  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation gekrackter gestrippter Dampf-gekrackter Destillate  
Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_8$  bis  $C_{10}$  und siedet im Bereich von etwa 129 °C bis  
194 °C.]
- ⇒ αποσταγμα (πετρελαίου), πυρολυμένων απογυμνωμένων ατμοπυρολυμένων αποσταγμάτων πετρελαίου, κλάσμα  
 $C_{8-10}$ ; Κεροξίνη από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με απόσπαξη πυρολυμένων αποσταγμάτων, που έχουν υποστεί ατμο-  
πυρόλυση και απογύμνωση. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  ως και  
 $C_{10}$  και με περιοχή βρασμού από 129 °C ως 194 °C περίπου.]
- ⇒ Distillates (petroleum), cracked stripped steam-cracked petroleum distillates,  $C_{8-10}$  fraction; Cracked kerosine  
[A complex combination of hydrocarbons obtained by distilling cracked, stripped steam-cracked distillates. It consists of hydro-  
carbons having carbon numbers in the range of  $C_8$  through  $C_{10}$  and boiling in the range of approximately 129 °C to 194 °C  
(264 °F to 382 °F)]
- ⇒ distillats (pétrole), distillats pétroliers, vapo- craquage, rectification puis craquage, fraction en  $C_{8-10}$ ; Kérosène de  
craquage  
Combinaison complexe d'hydrocarbures obtenue par distillation de distillats ayant subi vapocraquage, rectification et craquage  
se compose d'hydrocarbures dont le nombre de carbones se situe dans la gamme  $C_{8-10}$  et dont le point d'ébullition est compris  
approximativement entre 129 °C et 194 °C]
- ⇒ distillati (petrolio), distillati di petrolio crackizzati con vapore sottoposti a stripping-cracking, frazione  $C_{8-10}$ ; Che-  
rosene da cracking  
Combinazione complessa di idrocarburi ottenuta per distillazione di distillati crackizzati con vapore sottoposti a strip-  
ping-cracking. È costituita da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_8-C_{10}$  e punto di ebollizione  
nell'intervallo 129 °C-194 °C ca.]
- ⇒ destillaten (aardolie), gekraakte gestrippte stoomgekraakte aardoliedestillaten,  $C_{8-10}$ -fractie, Gekraakte kerosine  
Een complexe verzameling koolwaterstoffen, verkregen door het destilleren van gekraakte gestrippte stoomgekraakte destillaten.  
Bestaat uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{10}$ , met een kooktraject van ongeveer 129 °C tot 194 °C.]
- ⇒ destilados (petróleo), de destilados de cracking e de stripping do steam-cracking de petróleo, fracção  $C_{8-10}$ ; Que-  
roseno de « cracking »  
Uma combinação complexa de hidrocarbonetos obtida por destilação de destilados de cracking e de stripping do steam-cracking.  
É constituída por hidrocarbonetos com números de átomos de carbono na gama de  $C_8$  até  $C_{10}$  e destila no intervalo de aproxima-  
damente 129 °C a 194 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-) 23-24-62

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	Xn ; R 65

NOTA 4

No 68477-40-7

EEC No 270-729-9

No 649-410-00-7

## NOTA H

destilados (petroleo), destilados craqueados y rectificadas del petroleo craqueado a vapor, fraccion de  $C_{10-12}$ , Que  
roseno craqueado  
{Combinacion compleja de hidrocarburos obtenida por destilacion de destilados craqueados y craqueados a vapor y rectificadas  
Compuesta en su mayor parte de hidrocarburos aromaticos con un numero de carbonos dentro del intervalo de  $C_{10}$  a  $C_{12}$ }

- destillater (råolie), krakkede strippede dampkrakkede råoliedestillater,  $C_{10-12}$ -fraktion, Krakket petroleum  
{En sammensat blanding af carbonhydrier opnået ved at destillere krakkede, strippede, dampkrakkede destillater Den består  
overvejende af aromatiske carbonhydrider,  $C_{10}$  til og med  $C_{12}$ }
- Ξ Destillate (Erdöl), gekrakte gestrippte Dampf-gekrakte Erdöldestillate,  $C_{10-12}$ -Fraktion, Kraekkerosin  
{Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation gekrakter gestrippter Dampf-gekrakter Destillate  
Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_{10}$  bis  $C_{12}$ }

αποσταγμα (πετρελαιο), πυρολυμένων αποπυρωμένων ατμοπυρολυμένων αποσταγμάτων πετρελαιοιού κλάσμα  
 $C_{10-12}$  Κερόζινη από διασπαση  
{Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με αποσταξη πυρολυμένων αποσταγμάτων, του έχουν υποστεί ατμο-  
πύρωση και αποπύρωση. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα στην περιοχή από  
 $C_{10}$  ως και  $C_{12}$ }

Distillates (petroleum), cracked stripped steam-cracked petroleum distillates,  $C_{10-12}$  fraction, Cracked kerosine  
A complex combination of hydrocarbons obtained by distilling cracked stripped steam-cracked distillates. It consists predomi-  
nantly of aromatic hydrocarbons having carbon numbers in the range of  $C_{10}$  through  $C_{12}$ .

- distillats (petrole), distillats petroliers, vapocraquage, rectification puis craquage, fraction en  $C_{10-12}$ , Kérosène de  
craquage  
{Combinaison complexe d'hydrocarbures obtenue par distillation de distillats ayant subi vapocraquage, rectification et craquage  
Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe dans la gamme  $C_{10}$  -  $C_{12}$ }

distillati (petrolio), distillati di petrolio crackizzati con vapore sottoposti a stripping-cracking, frazione  $C_{10-12}$ , Che-  
rosene da cracking  
Combinazione complessa di idrocarburi ottenuta per distillazione di distillati crackizzati con vapore sottoposti a strip-  
ping-cracking. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio nell'intervallo  $C_{10}$  -  $C_{12}$ .


- destillaten (aardolie), gekraakte gestrippte stoomgekraakte aardoliedestillaten,  $C_{10-12}$ -fractie, Gekraakte kerosine  
Een complexe verzameling koolwaterstoffen, verkregen door het destilleren van gekraakte gestrippte stoomgekraakte destillaten  
Bestaat voornamelijk uit aromatische koolwaterstoffen,  $C_{10}$  tot en met  $C_{12}$ }
- destilados (petroleo), de destilados do cracking e de stripping do steam-cracking de petroleo, fração  $C_{10-12}$ , Que-  
roseno de « cracking »  
A combinação complexa de hidrocarbonetos obtida por destilação de destilados de cracking e de stripping do steam-cracking. É  
constituída predominantemente por hidrocarbonetos aromaticos com numeros de atomos de carbono na gama de  $C_{10}$  ate  $C_{12}$ .



*Classification, Klassifizierung, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem*

Xn	
	R : 65 S : (2-) 23-24-62

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	Xn, R 65

NOTA 4

No 68477-54-3

EEC No 270-737-2

No 649-411-00-2

## NOTA H

destilados (petroleo), craqueados a vapor, fracción de  $C_{8-12}$ , Queroseno craqueado  
 Combinación compleja de compuestos orgánicos obtenida por destilación de productos de un proceso de craqueo a vapor  
 Compuesta fundamentalmente de hidrocarburos insaturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{12}$

- Destillater (råolie), dampkrakkede,  $C_{8-12}$ -fraktion, Krakket petroleum  
 En sammensat blanding af organiske forbindelser opnået ved destillationen af produkter fra en dampkrakningsproces. Den består hovedsagende af umættende carbonhydrider, overvejende  $C_8$  til og med  $C_{12}$

- Destillate (Erdöl), Dampf-gekrackt,  $C_{8-12}$ -Fraktion, Krackkerosin  
 Komplexe Kombination organischer Verbindungen, erhalten durch Destillation von Produkten aus einem Dampf-Krackverfahren besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{12}$

Προσταγµα (πετρελαιο), ατµοπυρολύµενα, κλάσµα  $C_{8-12}$ , Κεροζίνη από διασπασή  
 Πολυπλόκος συνδυασµός οργανικών ενώσεων που λαµβάνεται µε την αποστάξη προϊόντων ατµοπυρόλυσης. Συνίσταται κυρίως από ακόρεστους υδρογονάνθρακες µε αριθµό ατοµών άνθρακα κυρίως στην περιοχή από  $C_8$  ως και  $C_{12}$

Distillates (petroleum), steam-cracked,  $C_{8-12}$  fraction, Cracked kerosine  
 A complex combination of organic compounds obtained by the distillation of products from a steam cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{12}$

Destillats de vapocraquage (petrole), fraction  $C_{8-12}$ , Kerosene de craquage  
 Combinaison complexe de composés organiques obtenue par distillation des produits résultant d'un vapocraquage. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majeure partie dans la gamme  $C_8$ - $C_{12}$

- Destillati (petrolio), crackizzati a vapore, frazione  $C_{8-12}$ , Cherosene da cracking  
 Combinazione complessa di composti organici ottenuta per distillazione di prodotti provenienti da un processo di cracking con vapore. È costituita prevalentemente da idrocarburi insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{12}$


- Destillaten (aardolie), stoomgekraakt,  $C_{8-12}$ -fractie, Gekraakte kerosine  
 Een complexe verzameling organische verbindingen, verkregen door de destillatie van producten van een stoomkraakproces bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{12}$

- Destilados (petróleo), do steam-cracking, fracção  $C_{8-12}$ , Queroseno de « cracking »  
 Uma combinação complexa de compostos orgânicos obtida pela destilação de produtos de um processo de steam-cracking. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_8$  até  $C_{12}$

*Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Endelung Classificação*

Xn , R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	R - 65
	S . (2-) 23-24-62

*Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	Xn , R 65

NOTA 4

No 85116-55-8

EEC No 285-507-7

No 649-412-00-8

## NOTA H

κerosina (petroleo), hidrodesulfurada craqueada termicamente, Queroseno craqueado  
 Combinación compleja de hidrocarburos obtenida por el fraccionamiento del destilado hidrodesulfurado del craqueador termico  
 Compuesta fundamentalmente de hidrocarburos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{16}$  y con un intervalo de ebullición aproximado de 120 °C a 283 °C ]

- petroleum (råolie), hydroafsvovlet termisk krakket, Krakket petroleum  
 En sammensat blanding af carbonhydrider opnået ved fraktionering af hydroafsvovlet termisk krakket destillat. Den består overvejende af carbonhydrider, overvejende  $C_8$  til  $C_{16}$ , med kogesinterval omtrent fra 120 °C til 283 °C ]

- kerosin (Erdöl), hydrodesulfurierte thermisch gekrackte, Krackkerosin  
 Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung aus hydrosulfiniertem thermisch gekracktem Destillat. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{16}$  und siedet im Bereich von etwa 120 °C bis 283 °C ]

• κεροζίνη (πετρέλαιο), θερμικά πυρολυμένη υδρογονοαποθεωμένη Κεροζίνη από διάσπαση  
 Πικνωτικό συνδυασμός υδρογονανθράκων που λαμβάνεται με κλασματώση από αποσταγμα θερμικής πυρόλυσης υδρογονοαποθεωμένο. Συνίσταται κυρίως από υδρογονανθράκες κυρίως στην περιοχή από  $C_8$  ως  $C_{16}$  και βράζει στην περιοχή από 120 °C ως 283 °C περίπου ]

kerosine (petroleum), hydrodesulfurized thermal cracked, Cracked kerosine  
 A complex combination of hydrocarbons obtained by fractionation from hydrodesulfurized thermal cracker distillate. It consists predominantly of hydrocarbons predominantly in the range of  $C_8$  to  $C_{16}$  and boiling in the range of approximately 120 °C to 283 °C (284 °F to 541 °F) ]

- kerosene (pétrole), craquage thermique, hydrodésulfuration, Kérosène de craquage  
 Combinaison complexe d'hydrocarbures obtenue par fractionnement à partir d'un distillat de craquage thermique hydrodesulfuré. Le composé principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_8$ ,  $C_{16}$ , et dont le point d'ébullition est compris approximativement entre 120 °C et 283 °C ]

- kerosene (petrolio), crackizzato termicamente idrodesolfato, Cherosene da cracking  
 Combinazione complessa di idrocarburi ottenuta per frazionamento di distillato da « cracker » termico idrodesolfato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ ,  $C_{16}$ , e punto di ebollizione nell'intervallo 120 °C-283 °C ca ]

- kerosine (aardolie), met waterstof ontwaveld thermisch gekraakt, Gekraakte kerosine  
 Een complexe verzameling koolwaterstoffen verkregen door fractionering van met waterstof ontwaveld thermische krakerdestillaat. Het bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_8$  tot  $C_{16}$ , met een kooktraject van ongeveer 120 °C tot 283 °C ]

- querosene (petroleo), do cracking termico hidrogenossulfurizado, Queroseno de « cracking »  
 Uma combinação complexa de hidrocarbonetos obtida por fracionamento de destilados hidrogenodessulfurizados do cracking termico. É constituída predominantemente por hidrocarbonetos predominantemente na gama de  $C_8$  ate  $C_{16}$ , e destila no intervalo de aproximadamente 120 °C a 283 °C ]

*Clasificación Klasičiranje, Einordnung, Ταξινόμηση, Classification Classification Classificazione Inddeling Classificação*

Xn R 65

*Etiquetado Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R 65
	S. (2) 23-24-62

*Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεων, Concentration limits, Limites de concentration Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn R 65

NOTA 4

No 90640-98-5

EEC No 292-621-0

No 649-413-00-3

## NOTA H

- hidrocarburos aromaticos,  $C_{\geq 10}$ , craqueo a vapor, tratados con hidrógeno, Queroseno craqueado  
Combinación compleja de hidrocarburos producida por la destilación de los productos de un proceso de craqueo a vapor tratados con hidrogeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte superior a  $C_{10}$  y con un intervalo de ebullicion aproximado de 150 °C a 320 °C ]
- aromatiske carbonhydrider,  $C_{\geq 10}$ , dampkrakning, hydrogenbehandlede ; Krakket petroleum  
Een sammensat blanding af carbonhydrider fremstillet ved destillation af produkterne fra en dampkrakningsproces og behandling med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af aromatiske carbonhydrider, overvejende større end  $C_{10}$ , med kogeperiode omtrent fra 150 °C til 320 °C ]
- aromatische Kohlenwasserstoffe,  $C_{\geq 10}$ , Dampfkracken, mit Wasserstoff behandelt, Krackkerosin  
Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation der Produkte aus einem Dampfkrackverfahren, mit Wasserstoff in Gegenwart eines Katalysators behandelt. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{10}$  und siedet im Bereich von etwa 150 °C bis 320 °C ]
- αρωματικοί υδρογονάνθρακες,  $C_{\geq 10}$ , ατμοπυρόλυσης, υδρογονοκατεργασμένοι. Κεροζίνη από διάσπαση  
Παύλοκος συνδυασμός υδρογονάνθρακων που παραγεται με την αλυσταξη των προϊόντων ατμοπυρόλυσης κατεργασμένων με υδρογονο παρουσία καταλυτη. Συνιστάται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμο ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{10}$  και βράζει στην περιοχή από 150 °C ως 320 °C περίπου ]
- aromatic hydrocarbons,  $C_{\geq 10}$ , steam-cracking, hydrotreated, Cracked kerosine  
A complex combination of hydrocarbons produced by the distillation of the products from a steam cracking process treated with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly greater than  $C_{10}$  and boiling in the range of approximately 150 °C to 320 °C (302 °F to 608 °F) ]
- hidrocarbures aromatiques supérieurs ou égaux a  $C_{10}$ , de apocraquage, hydrotraitement, Kérosène de craquage  
Combinaison complexe d'hydrocarbures produite par distillation des produits résultant d'un vapocraquage et traitée à l'hydrogene en presence d'un catalyseur. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones est en majorité supérieur a  $C_{10}$  et dont le point d'ébullition est approximativement compris entre 150 °C et 320 °C ]
- idrocarburi aromatici,  $C_{\geq 10}$ , da cracking con vapore, idrotrattati ; Cherosene da cracking  
Combinazione complessa di idrocarburi ottenuti dalla distillazione dei prodotti da un processo di cracking con vapore trattati con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente maggiore di  $C_{10}$  e punto di ebollizione nell'intervallo 150 °C-320 °C ca ]
- aromatische koolwaterstoffen,  $C_{\geq 10}$ , stoomkraken, met waterstof behandeld, Gekraakte kerosine  
Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van de produkten uit een stoom-kraakproces die zijn behandeld met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend groter dan  $C_{10}$ , met een kooktraject van ongeveer 150 °C tot 320 °C ]
- hidrocarbonetos aromaticos,  $C_{\geq 10}$ , do steam-cracking, tratados com hidrogénio, Queroseno de steam-cracking  
Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de steam-cracking tratados com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos aromaticos com números de átomos de carbono predominantemente superiores a  $C_{10}$  e destila no intervalo de aproximadamente 150 °C a 320 °C ]

*Classification Klassifizierung Eintragung Ταξινόμηση Classification Classificazione Classificazione Inddeling Classificação*

Xn R 65

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem*

Xn	
	R · 65
	S · (2-) 23-24 62

*Limite de concentration Konzentrationsgrenze / Konzentrationsgrenzwerte, Όρια συσκήντρωσης, Concentration limit  
Limite de concentration, Limita di concentrazione, Concentratiegrenzen Limites de concentraçao*

C ≥ 10 %	Xn, R 65

NOTA 4

No 90641-13-7

EEC No 292-637 8

No 649-414-00-9

## NOTA H

*Nafta (petroleo), craqueada a vapor, tratada con hidrogeno, rica en aromaticos de  $C_{9,10}$ . Queroseno craqueado*  
*Combinacion compleja de hidrocarburos producida por la destilacion de los productos de un proceso de craqueo a vapor despues de tratados con hidrogeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos dentro del intervalo de  $C_9$  a  $C_{11}$  con un intervalo de ebullicion aproximado de 140 °C a 200 °C }*

- Nafta (raolie), dampkrakket, hydrogenbehandlet,  $C_{9,10}$ -aromatrig, Krakket petroleum*  
*En sammensat blanding af carbonhydrier opnået ved destillation af produkterne fra en dampkrakningsproces, efterfulgt af rensning med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af aromatiske carbonhydrier,  $C_9$  til og med  $C_{11}$ , med koginterval omfrent fra 140 °C til 200 °C }*

*Nafta (Erdöl), dampfgekrackt, mit Wasserstoff behandelt,  $C_{9,10}$ -Aromaten-reich, Krackkerosin*  
*Komplexe Kombination von Kohlenwasserstoffen, die durch Destillation der Produkte aus einem Dampfkrackverfahren mit anschließender Wasserstoffbehandlung in Gegenwart eines Katalysators entsteht. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_9$  bis  $C_{11}$  und siedet im Bereich von etwa 140 °C bis 200 °C }*

- Nafta (petrelaiou), atμoπυρoλyμενη, υδρoγoνoκατεργασμένη, πλoύσια σε αρωματικά με  $C_{9,10}$ . Κηροζίνη απο ατμoπύρoση*  
*Πομπoλoκoς συνδυασμoς υδρoγoνoανθρακων πoυ παρaγεται με την ατμoστάξη των λυoιoντων ατμoπυρoλyσης, τα oπoia στη συνέχεια υφιστάνται κατεργασία με υδρoγoνo παρoυσία καταλυτή. Συσταται κυρίως απo αρωματίκοις υδρoγoνoανθρακωις με αριθμo ατομων ανθρακω στην περιοχή απo  $C_9$  ως και  $C_{11}$  και βράζει στην περιοχή απo 140 °C ως 200 °C περίπoυ }*

*Nafta (petroleum), steam-cracked, hydrotreated,  $C_{9,10}$ -arom -rich, Cracked kerosine*  
*A complex combination of hydrocarbons produced by the distillation of the products from a steam cracking process thereafter treated with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers in the range of  $C_9$  through  $C_{11}$  and boiling in the range of approximately 140 °C to 200 °C (284 °F to 392 °F) }*

*Nafta de vapocraquage (pétrole), hydrotraite, riche en aromatiques en  $C_{9,10}$ , Kérosene de craquage*  
*Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un vapocraquage traités à l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_9$ - $C_{11}$  et dont le point d'ébullition est compris approximativement entre 140 °C et 200 °C }*

- Nafta (petrolio), crackizzata a vapore, idrotrattata, ricchi di aromatici  $C_{9,10}$ , Cherosene da cracking*  
*Combinazione complessa di idrocarburi prodotta dalla distillazione dei prodotti di un processo di cracking con vapore quindi trattati con idrogeno in presenza di un catalizzatore. Costituita prevalentemente da idrocarburi aromatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_9$ - $C_{11}$  e con punto di ebollizione nell'intervallo 140 °C-200 °C ca }*

*Nafta (aardolie), stoomgekraakt, met waterstof behandeld, rijk aan  $C_{9,10}$ -aromaten, Gekraakte kerosine*  
*Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van de produkten uit een stoomkraakproces gevolgd door behandeling met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_9$  en  $C_{11}$ , met een kooktraject van ongeveer 140 °C tot 200 °C }*

- Nafta (petroleo), do steam-cracking, tratada com hidrogenio, rica em aromaticos  $C_{9,10}$ , Queroseno de steam-cracking*  
*Uma combinação complexa de hidrocarbonetos produzida pela destilação dos produtos de um processo de steam-cracking e tratada com hidrogenio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos aromaticos com numeros de atomos de carbono na gama de  $C_9$  ate  $C_{11}$  e destila no intervalo de aproximadamente 140 °C a 200 °C }*



*Classification Klassificering Einstufung Ταξινόμηση, Classification Classification, Classificazione Indeling, Classificação*

Xn , R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	<p>R : 65</p> <p>S : (2-) 23-24-62</p>

*Limites de concentration Konzentrationsgr.enzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione Concentratsegrenzen, Limites de concentraçào*

C ≥ 10 %	Xn , R 65

NOTA 4

as No 101316-61-4

EEC No 309-866-7

No 649-415-00-4

## NOTA H

destilados (petróleo), craqueados térmicamente, ricos en hidrocarburos alquilaromáticos, Queroseno craqueado  
[Combinación compleja de hidrocarburos obtenida por destilación de alquitranes pesados de craqueo térmico. Compuesta en su mayor parte de hidrocarburos aromáticos muy alquilados con un intervalo de ebullición aproximado de 100 °C a 250 °C]

- destillater (råolie), termisk krakkede, alkylaromat carbonhydrid-rige, Krakket petroleum  
[En sammensat blanding af carbonhydrider opnået ved destillation af termisk krakkede tunge tærer. Den består overvejende af polyalkylerede aromatiske carbonhydrider, med koginterval omtrent fra 100 °C til 250 °C]
- = Destillate (Erdöl), thermisch gekrackt, alkylaromatisch Kohlenwasserstoff-reich; Krackkerosin  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von thermisch gekrackten schweren Teeren erhält. Besteht vorherrschend aus hoch alkylierten aromatischen Kohlenwasserstoffen und siedet im Bereich von etwa 100 °C bis 250 °C]

αποσταγμάτα (πετρελαίου), θερμικά πυρολυμένα, πλούσια σε αλκυλοαρωματικούς υδρογονάνθρακες. Κεροξίνη από διάσπαση

Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με αποσταξη προϊόντων θερμικής πυρόλυσης από βαριές πιτσες. Συνίσταται κυρίως από αλκυλιωμένους αρωματικούς υδρογονάνθρακες με περιοχή βρασμού από 100 °C ως 250 °C περίπου.]

- Distillates (petroleum), thermal-cracked, alkylarom. hydrocarbon-rich; Cracked kerosine  
[A complex combination of hydrocarbons obtained by distillation of thermal-cracking heavy tars. It consists predominantly of highly alkylated aromatic hydrocarbons boiling in the range of approximately 100 °C to 250 °C (212 °F to 482 °F)]
- distillats de craquage thermique (pétrole), riches en hydrocarbures alkylaromatiques, Kérosène de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation de goudrons lourds de craquage thermique. Se compose principalement d'hydrocarbures aromatiques très alkylés dont le point d'ébullition est compris approximativement entre 100 °C et 250 °C]
- distillati (petrolio), crackizzati termicamente, ricchi di idrocarburi alchilaromatici, Cherosene da cracking  
[Combinazione complessa di idrocarburi ottenuta per distillazione di catrami pesanti da cracking termico. È costituita prevalentemente da idrocarburi aromatici altamente alchilati con punto di ebollizione nell'intervallo 100 °C-250 °C ca.]
- destillaten (aardolie), thermisch gekraakt, rijk aan alkylaromatische koolwaterstoffen; Gekraakte kerosine  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van thermisch gekraakte zware teren. Bestaat voornamelijk uit in hoge mate gealkyleerde aromatische koolwaterstoffen, met een kooktraject van ongeveer 100 °C tot 250 °C]
- destilados (petróleo), do cracking térmico, ricos em hidrocarbonetos alquilaromáticos, Queroseno de « cracking »  
[Uma combinação complexa de hidrocarbonetos obtida por destilação de alcatrões pesados do cracking térmico. É constituída predominantemente por hidrocarbonetos aromáticos com grau de alquilação elevado e destila no intervalo de aproximadamente 100 °C a 250 °C]

*Classification Klassifisering Einstufung, Ταξινόμηση, Classification Classificazione, Indeling, Classificação*

Xn , R 65

*Etiquetado Etikettering Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65
	S : (2-) 23-24-62

*Limites de concentration Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen Limites de concentração*

C ≥ 10 %	Xn , R 65

NOTA 4

No 101631-13-4

EEC No 309-938-8

No 649-416-00-X

## NOTA H

destilados (petroleo), fracción ligera de alquitran pesado craqueado catalíticamente, Queroseno craqueado

Combinación compleja de hidrocarburos obtenida por destilación de alquitranes pesados de craqueo catalítico. Compuesta en su mayor parte de hidrocarburos aromáticos muy alquilados con un intervalo de ebullición aproximado de 100 °C a 250 °C]

- destillater (råolie), katalytisk krakket tung tjære, lette, Krakket petroleum  
En sammensat blanding af carbonhydrider opnået ved destillation af katalytisk krakkede tunge tjærer. Den består overvejende af polyalkylerede aromatiske carbonhydrider, med kogesinterval omtrent fra 100 °C til 250 °C]
- Destillate (Erdöl), katalytisch gekrackter schwerer Teer, leicht; Krackkerosin  
Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von katalytisch gekrackten schweren Teeren erhält. Besteht vorherrschend aus hoch alkylierten aromatischen Kohlenwasserstoffen und siedet im Bereich von etwa 100 °C bis 250 °C]
- αποσταγμάτα (πετρελαίου), ελαφρά καταλυτικής πυρόλυσης βαριές πίσσες. Κεροξίνη από διάσπαση  
Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται αποσταζοντας βαριές πίσσες καταλυτικής πυρόλυσης. Αποτελείται κυρίως από ισχυρούς αλκυλιωμένους αρωματικούς υδρογονανθράκες με περιοχή βρασμού από 100 °C ως 250 °C περίπου]
- Distillates (petroleum), catalytic cracked heavy tar light, Cracked kerosine  
A complex combination of hydrocarbons obtained by distillation of catalytic cracking heavy tars. It consists predominantly of highly alkylated aromatic hydrocarbons boiling in the range of approximately 100 °C to 250 °C (212 °F to 482 °F)]
- distillats légers (pétrole), goudron lourd de craquage catalytique; Kerosène de craquage  
Combinaison complexe d'hydrocarbures obtenue par distillation de goudrons lourds de craquage catalytique. Se compose principalement d'hydrocarbures aromatiques très alkylés dont le point d'ébullition est compris approximativement entre 100 °C et 250 °C]
- distillati (petrolio), leggeri da cracking catalitico di catrame pesante; Cherosene da cracking  
Combinazione complessa di idrocarburi ottenuta per distillazione di catrami pesanti da cracking catalitico. È costituita prevalentemente da idrocarburi aromatici altamente alchilati con punto di ebollizione nell'intervallo 100 °C-250 °C ca.]
- destillaten (aardolie), lichte uit katalytisch gekraakte zware teer; Gekraakte kerosine  
Een complexe verzameling koolwaterstoffen die wordt verkregen door destillaat van katalytisch gekraakte zware teren. Bestaat oornamelijk uit in hoge mate gealkyleerde aromatische koolwaterstoffen, met een kooktraject van ongeveer 100 °C tot 250 °C]
- destilados (petroleo), leves de alcatrões pesados do cracking catalítico; Queroseno de « cracking »  
Uma combinação complexa de hidrocarbonetos obtida por destilação de alcatrões pesados do cracking catalítico. É constituída predominantemente por hidrocarbonetos aromáticos com grau de alquilação elevado e destila no intervalo de aproximadamente 100 °C a 250 °C]

*Classification Klassificering, Einstufung Ταξινόμηση, Classification Classification Classificazione Indeling Classificação*

Xn, R 65

*Etiquetado, Etikettering Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura Kenmerken, Rotulagem*

Xn	R : 65
	S : (2-) 23-24-62

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen Limites de concentração*

C ≥ 10 %	Xn, R 65

NOTA 4

Cas No 101316 80-7

EEC No 309-881 9

No 649-417-00-5

## NOTA H

- ~ nafta disolvente (petróleo), fracción aromática pesada hidrocraqueada, Queroseno craqueado  
[Combinación compleja de hidrocarburos obtenida por la destilación de un destilado de petróleo hidrocraqueado. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_9$  a  $C_{16}$ , y con un intervalo de ebullición aproximado de 235 °C a 290 °C]
- ^ solventnaphtha (råolie), hydrokrakket tung aromatisk, Krakket petroleum  
[En sammensat blanding af carbonhydrider opnået ved destillationen af hydrokrakket råoliedestillat. Den består overvejende af carbonhydrider, overvejende  $C_9$  til og med  $C_{16}$ , med koginterval omfrent fra 235 °C til 290 °C]
- z Lösungsmittelnaphtha (Erdöl), hydrogekrackte schwere aromatische, Krackkerosin  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von hydrogekracktem Erdöldestillat erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_9$  bis  $C_{16}$  und siedet im Bereich von etwa 235 °C bis 290 °C]
- Σ νάφθα διαλύτης (πετρελαιο), υδρογονοπυρολυμένη βαριά αρωματική. Κεροζίνη από διάσπαση  
[Πυρηνιακός συνδυασμός υδρογονανθράκων που λαμβάνεται με την αποσταξη υδρογονοπυρολυμένου αποσταγμάτος πετρελαιο. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_9$  ως  $C_{16}$  και με περιοχή βρασμού από 235 °C ως 290 °C περίπου]
- Σ Solvent naphtha (petroleum), hydrocracked heavy arom., Cracked kerosine  
[A complex combination of hydrocarbons obtained by the distillation of hydrocracked petroleum distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_9$  through  $C_{16}$  and boiling in the range of approximately 235 °C to 290 °C (455 °F to 554 °F)]
- ΣR solvant naphtha aromatique lourd (pétrole), hydrocraquage; Kérosène de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation de distillat de pétrole ayant subi un hydrocraquage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_9$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 235 °C et 290 °C]
- T nafta solvente (petrolio), idrocrackizzata pesante aromatica, Cherosene da cracking  
[Combinazione complessa di idrocarburi ottenuta per distillazione di distillato di petrolio idrocrackizzato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_9$ - $C_{16}$  e punto di ebollizione nell'intervallo 235 °C-290 °C ca.]
- ^ L solventnafta (aardolie), met waterstof gekraakte zware aromatische, Gekraakte kerosine  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van met waterstof gekraakt aardoliedestillaat. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_9$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 235 °C tot 290 °C]
- ~ nafta de petróleo (petróleo), aromática pesada do hidrocracking, Queroseno de "cracking"  
[Uma combinação complexa de hidrocarbonetos obtida pela destilação de um destilado petrolífero do hidrocracking. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_9$  até  $C_{16}$ , e destila no intervalo de aproximadamente 235 °C a 290 °C]

*Classification Klassituering, Einstufung, Ταξινόηση, Classification Classificazione In leling Classificação*

Xn, R 65

*Etiquetado Etikettering Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura Kenmerken Rotulagem*

Xn	
	R : 65 S : (2-) 23-24-62

*Limites de concentracion Konzentrationsgrenzen Konzentrationsgrenzuerte Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration, Limiti di concentrazione Concentratiegrenzen Limites de concentraço*

C ≥ 10 %	Xn, R 65

NOTA 4

Cas No 101631-15-6

EEC No 309-940-9

No 649-418-00-0

## NOTA H

- destilados (petroleo), fracción ligera de alquitran pesado craqueada a vapor, Queroseno craqueado  
[Combinacion compleja de hidrocarburos obtenida por destillation de alquitranes pesados de craqueo a vapor. Compuesta en su mayor parte de hidrocarburos aromaticos muy alquilados con un intervalo de ebullición aproximado de 100 °C a 250 °C.]
- 1 destillater (råolie), dampkrakket tung tjære, lette, Krakket petroleum  
[En sammensat blanding af carbonhydrier opnået ved destillation af dampkrakkede tunge tjærer. Den består overvejende af polyalkylerede aromatiske carbonhydrider, med kogesinterval omtrent fra 100 °C til 250 °C.]
- 2 E Destillate (Erdöl), dampfgekrackter schwerer Teer, leicht, Krackkerosin  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von dampfgekrackten schweren Teeren erhält. Besteht vorherrschend aus hoch alkylierten aromatischen Kohlenwasserstoffen und siedet im Bereich von etwa 100 °C bis 250 °C.]
- αποσταγματα (πετρελαίου), ελαφρά ατμοπυρολυμένα βαριά πίσσας Κεροζίνη από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται αποσταζοντας βαριές πίσσες ατμοπυρόλυσης. Συνίσταται κυρίως από ισχυρούς αλκυλιωμένους αρωματικούς υδρογονανθράκες με περιοχή βρασμού από από 100 °C ως 250 °C περίπου.]
- 2 A Distillates (petroleum), steam-cracked heavy tar light, Cracked kerosine  
[A complex combination of hydrocarbons obtained by distillation of steam cracking heavy tars. It consists predominantly of highly alkylated aromatic hydrocarbons boiling in the range of approximately 100 °C to 250 °C (212 °F to 482 °F).]
- 2 B distillats légers (pétrole), goudron lourd de vapocraquage, Kérosène de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation de goudrons lourds de vapocraquage. Se compose principalement d'hydrocarbures aromatiques très alkylés dont le point d'ébullition est compris approximativement entre 100 °C et 250 °C.]
- distillati (petrolio), leggeri da catrame pesante crackizzato con vapore; Cherosene da cracking  
[Combinazione complessa di idrocarburi ottenuta per distillazione di catrami pesanti da cracking con vapore. È costituita prevalentemente da idrocarburi aromatici altamente alchilati con punto di ebollizione nell'intervallo 100 °C-250 °C ca.]
- 2 C destillaten (aardolie), lichte uit stoomgekraakte zware teer, Gekraakte kerosine  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van stoomgekraakte zware teren. Bestaat voornamelijk uit in hoge mate gealkyleerde aromatische koolwaterstoffen, met een kooktraject van ongeveer 100 °C tot 250 °C.]
- 2 D destilados (petróleo), leves de alcatrões pesados do steam-cracking; Queroseno de « cracking »  
[Uma combinação complexa de hidrocarbonetos obtida por destilação de alcatrões pesados do steam-cracking. É constituída predominantemente por hidrocarbonetos aromaticos com grau de alquilação elevado e destila no intervalo de aproximadamente 100 °C a 250 °C.]



*Clasificación, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-) 23-24-62

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn, R 65

NOTA 4

Cas No 64741-73-7

EEC No 265-074-0

No 649-419-00-6

NOTA H

- ES : destilados (petróleo), alquilato ; Queroseno, sin especificar  
Combinación compleja de hidrocarburos producida por la destilación de los productos de reacción de isobutano con hidrocarburos monoolefinicos con un número de carbonos normalmente dentro del intervalo de  $C_3$  a  $C_{12}$ . Compuesta fundamentalmente de hidrocarburos saturados de cadena ramificada con un número de carbonos en su mayor parte dentro del intervalo de  $C_3$  a  $C_{12}$ , y con un intervalo de ebullición aproximado de 205 °C a 320 °C.]
- DA : destillater (råolie), alkylat- ; Uspecificeret petroleum  
En sammensat blanding af carbonhydrider fremstillet ved destillation af produkterne fra reaktionen mellem isobutan og monoolefiniske carbonhydrider, sædvanligvis  $C_3$  til og med  $C_{12}$ . Den består af overvejende forgrenede, mættede carbonhydrider, overvejende  $C_3$  til og med  $C_{12}$ , med kogesinterval omfrent fra 205 °C til 320 °C.]
- DE : Destillate (Erdöl), Alkylat- ; Kerosin — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation der Reaktionsprodukte von Isobutan mit monoolefinischen Kohlenwasserstoffen gewöhnlich mit Kohlenstoffzahlen zwischen  $C_3$  und  $C_{12}$ . Besteht aus gesättigten Kohlenwasserstoffen mit vorherrschend verzweigter Kette und Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{12}$ , und siedet im Bereich von etwa 205 °C bis 320 °C.]
- αποσταγµατα (πετρελαιο), προϊόν αλκυλίωσης Κεροζίνη — μη προδιαγεγραµµένη  
{Πολυπλοκός συνδυασµός υδρογονάνθρακων που παράγεται µε απόσταξη των προϊόντων αντίδρασης ισοδουτανίου µε μονοολεφινικούς υδρογονάνθρακες µε αριθµό ατόµων άνθρακα που συνήθως κυµαίνονται από  $C_3$  ως και  $C_{12}$ . Συνίσταται κυρίως από διακλαδισµένης αλυσού κορεσµένους υδρογονάνθρακες µε αριθµο ατόµων άνθρακα κυρίως στην περιοχή από  $C_{11}$  ως και  $C_{12}$  και µε περιοχή βρασµού από 205 °C ως 320 °C περίπου }
- EN : Distillates (petroleum), alkylate ; Kerosine — unspecified  
[A complex combination of hydrocarbons produced by distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from  $C_3$  through  $C_{12}$ . It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{12}$ , and boiling in the range of approximately 205 °C to 320 °C (401 °F to 608 °F).]
- FR : distillats (pétrole), alkylation ; Kerosene — non spécifié  
[Combinaison complexe d'hydrocarbures produite par la distillation des produits de réaction de l'isobutane avec des hydrocarbures monooléfiniques généralement en  $C_3$  à  $C_{12}$ . Se compose d'hydrocarbures saturés, en majorité à chaîne ramifiée, dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{12}$ , et dont le point d'ébullition est compris approximativement entre 205 °C et 320 °C.]
- IT : distillati (petrolio), alchilato, Cherosene — non specificato  
[Combinazione complessa di idrocarburi ottenuta per distillazione dei prodotti di reazione di isobutano con idrocarburi monoolefinici con numero di atomi di carbonio normalmente nell'intervallo  $C_3$ - $C_{12}$ . È costituita prevalentemente da idrocarburi saturi a catena ramificata con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{12}$  e punto di ebollizione nell'intervallo 205 °C-320 °C ca.]
- destillaten (aardolie), gealkyleerd ; Kerosine — niet gespecificeerd  
{Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de reactieproducten van isobutaan met mono-olefinische koolwaterstoffen gewoonlijk variërend van  $C_3$  tot en met  $C_{12}$ . Bestaat voornamelijk uit verzadigde koolwaterstoffen met vertakte ketens, overwegend  $C_{11}$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 205 °C tot 320 °C.]
- destilados (petróleo), da alquilação ; Queroseno — não especificado  
{Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos de reacção de isobutano com hidrocarbonetos monoolefinicos com números de átomos de carbono geralmente na gama de  $C_3$  até  $C_{12}$ . É constituída predominantemente por hidrocarbonetos saturados de cadeia ramificada com numero de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{12}$ , e destila no intervalo de aproximadamente 205 °C a 320 °C.]

*Classification Klassificering Einstufung, Ταξινόμηση Classification, Classificazione, Indeling, Classificação*

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>Xn</p> 	<p>R : 65</p> <p>S : (2-) 23-24-62</p>
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*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	Xn, R 65

NOTA 4

No 64741-98-6

EEC No 265-099-7

No 649-420-00-1

## NOTA H

·εκτράκτος (πετρώλεο), nafta pesada extraída con disolvente, Queroseno, sin especificar

Combinación compleja de hidrocarburos obtenida como el extracto de un proceso de extracción con disolvente. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{12}$ , y en un intervalo de ebullición de 90 °C a 220 °C]

·εκστράκτης (råolie), tung naphtha solvent-; Uspecificeret petroleum

En sammensat blanding af carbonhydnder opnået som ekstraktet fra en solventekstraktionsproces. Den består overvejende af aromatiske carbonhydnder, overvejende  $C_7$  til og med  $C_{12}$ , med koginterval omtrent fra 90 °C til 220 °C]

·Εκτράκτε (Erdöl), schwere Naphtha-Lösungsmittel-, Kerosin — nicht spezifiziert

Complexe Kombination von Kohlenwasserstoffen, erhalten als Extrakt aus einem Lösungsmittelextraktionsverfahren. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{12}$  und siedet im Bereich von etwa 90 °C bis 220 °C]

·εκχύλισμα (πετρελαίου), βαριάς νάφθας εξευγενισμένης με διαλύτη· Κεροζίνη — μη προδιαγεγραμμένη  
Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το εκχύλισμα από εκχύλιση με διαλύτη. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_7$  ως και  $C_{12}$  και με περιοχή βρασμού από 90 °C ως 220 °C περίπου]

·Εκτράκτος (petroleum), heavy naphtha solvent; Kerosine — unspecified

A complex combination of hydrocarbons obtained as the extract from a solvent extraction process. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_7$  through  $C_{12}$  and boiling in the range of approximately 90 °C to 220 °C (194 °F to 428 °F)]

·εκτράκτς au solvant (pétrole), naphtha lourd; Kérosène — non spécifié

Combinaison complexe d'hydrocarbures obtenue comme extrait lors d'une extraction au solvant. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_7$ - $C_{12}$  et dont le point d'ébullition est compris approximativement entre 90 °C et 220 °C]

·εκτράκτι (petrolio), nafta solvente pesante; Cherosene — non specificato

Combinazione complessa di idrocarburi ottenuta come raffinata da un processo di estrazione con solvente. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{12}$  e punto di ebollizione nell'intervallo 90 °C-220 °C ca]

·εκτράκτεν (aardolie), zware nafta-solvent, Kerosine — niet gespecificeerd

Een complexe verzameling koolwaterstoffen, verkregen als het extract van een solvent-extractieproces. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_7$  tot en met  $C_{12}$ , met een kooktraject van ongeveer 90 °C tot 220 °C]

·εκτράκτος (petróleo), de solvente de nafta pesada; Queroseno — não especificado

Uma combinação complexa de hidrocarbonetos obtida como o extracto de um processo de extração com solvente. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_7$  até  $C_{12}$  e destila no intervalo de aproximadamente 90 °C a 220 °C]

*Classification Klassificering Einstufung Ταξινόμηση Classification, Classificazione Classificação Indeling Classificação*

Xn, R 65

*Etiquetado Etikettering Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R - 65 S : (2-) 23-24-62

*Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzuere Όρια συγκέντρωσης, Concentration limits, Limites de concentration Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn, R 65

NOTA 4

L. No 64742-31-0

EEC No 265-132-5

No 649-421-00-7

## NOTA H

destilados (petroleo), fraccion ligera neutralizada quimicamente ; Queroseno, sin especificar

Combinacion compleja de hidrocarburos producida por un proceso de tratamiento para separar materiales acidos. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{16}$  y con un intervalo de ebullición aproximado de 150 °C a 290 °C]

- destillater (råolie), kemisk neutraliserede lette ; Uspecificeret petroleum

[En sammensat blanding af carbonhydrider fremstillet ved en behandlingsproces til fjernelse af sure materialer. Den består af carbonhydrider, overvejende  $C_8$  til og med  $C_{16}$ , med koginterval omtrent fra 150 °C til 290 °C.]

- Destillate (Erdöl), chemisch neutralisierte leichte ; Kerosin — nicht spezifiziert

[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch eine Behandlungsmethode zum Entfernen saurer Stoffe. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{16}$  und siedet im Bereich von etwa 150 °C bis 290 °C.]

προσταγμένα (πετρελαιο), ελαφρά χημικώς εξουδετερωμένα· Κεροζίνη — μη προδιαγεγραμμένη

[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία για να απομακρυνθούν όξινα συστατικά. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  ως και  $C_{16}$  και με περιοχή βρασμού από 150 °C ως 290 °C περίπου.]

- Distillates (petroleum), chemically neutralized light ; Kerosine — unspecified

[A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{16}$  and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).]

- distillats légers (pétrole), neutralisés chimiquement ; Kérosène — non spécifié

[Combinaison complexe d'hydrocarbures résultant d'un traitement consistant à éliminer les matières acides. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_8$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 150 °C a 290 °C.]

- distillati (petrolio), frazione leggera neutralizzata chimicamente ; Cherosene — non specificato

[Combinazione complessa di idrocarburi prodotta con un processo di trattamento per la rimozione delle sostanze acide. E costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{16}$  e intervallo di ebollizione 150 °C-290 °C ca.]

- destillaten (aardolie), chemisch geneutraliseerd lichte fractie ; Kerosine — niet gespecificeerd

[Een complexe verzameling koolwaterstoffen, verkregen uit een behandlingsproces om zure materialen te verwijderen. Bestaat uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 150 °C tot 290 °C.]

- destilados (petroleo), leves neutralizados quimicamente ; Queroseno — não especificado

[Uma combinação complexa de hidrocarbonetos produzida por um processo de tratamento para remoção de materiais ácidos. E constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_8$  ate  $C_{16}$  e destila no intervalo de aproximadamente 150 °C a 290 °C.]

*in allen Klassifikationen eintragung Eintragung Classification, Classification Classificazione Indeling Classificacao*

Xn, R 65

*en alle de Etikettering kenzeichnung Επισήμανση, Labelling, Etiquetage Etichettatura, Kenmerken Rotulagem*

<p>Xn</p> 	<p>R : 65</p> <p>S : (2-) 23-24-62</p>
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*les limites de concentration Konzentrationsgrensen Konzentrationsgrenzwerte Ορια συγκεντρώσεως, Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	Xn, R 65

NOTA 4

n.° 64-42-4-8

EEC No 265-149-8

No 649-422 00-2

## NOTA H

Destilados (petroleo), fraccion ligera tratada con hidrogeno, Queroseno, sin especificar  
 Combinacion compleja de hidrocarburos obtenida por tratamiento de una fraccion de petroleo con hidrogeno en presencia de un catalizador. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo  $C_8$  a  $C_{16}$  y con un intervalo de ebullicion aproximado de 150 °C a 290 °C }

- Destillater (raolie), hydrogenbehandlede lette, Uspecificeret petroleum  
 En sammensat blanding af carbonhydrider opnået ved at behandle en raoliefraction med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, overvejende  $C_8$  til og med  $C_{16}$ , med kogesinterval omfrent fra 150 °C til 290 °C }
- Destillate (Erdöl), mit Wasserstoff behandelte leichte Kerosin — nicht spezifiziert  
 Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraction mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{16}$ , und siedet im Bereich von etwa 150 °C bis 290 °C }

Γεωστάμια (πετρελαιοί), ελαφρά κατεργασμένα με υδρογόνο Κερωζίνη — μη προδιαγεγραμμένη  
 Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία κλάσματος πετρελαιοί με υδρογόνο παρουσία κατι-  
 -στης. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  ως και  $C_{16}$  και με περιοχή  
 βρασμού από 150 °C ως 290 °C περίπου }

Distillates (petroleum), hydrotreated light, Kerosine — unspecified  
 A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{16}$  and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F) }

- Distillats legers (petrole), hydrotraités, Kerosene — non spécifique  
 Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction petroliere a l'hydrogene en preence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbonos se situe principalement dans la gamme  $C_8$  -  $C_{16}$  et dont le point d'ebullition est compris approximativement entre 150 °C et 290 °C }
- Distillati (petrolio), frazione leggera di "hydrotreating", Cherosene — non specificato  
 Combinazione complessa di idrocarburi ottenuta per trattamento di una frazione di petrolio con idrogeno in presenza di un catalizzatore. E costituita da idrocarburi con numero di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{16}$  e punto di ebollizione nell'intervallo 150 °C - 290 °C ca }
- Destillaten (aardolie), met waterstof behandelde lichte fractie, Kerosine — niet gespecificeerd  
 Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 150 °C tot 290 °C }
- Destilados (petroleo), leves tratados com hidrogenio, Queroseno — não especificado  
 Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fração petrolífera com hidrogenio na presença de um catalisador. E constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_8$  ate  $C_{16}$ , e destila no intervalo de aproximadamente 150 °C a 290 °C }



*Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificazione In deling Classificatie*

Xn , R 65

*Etiquetado, Etikettering Kennzeichnung, Επισήμανση Labelling, Etiquetage, Etichettatura Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-) 23-24-62

*Limits de concentration, Konzentrationsgrenzen, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*

C ≥ 10 %	Xn , R 65

NOTA 4

No 64742-81-0

EEC No 265-184-9

No 649-423-00-8

## NOTA H

querosina (petróleo), hidrodesulfurada, Queroseno, sin especificar

Combinación compleja de hidrocarburos obtenida de una reserva de petróleo por tratamiento con hidrógeno para transformar el azufre orgánico en sulfuro de hidrógeno, que se separa. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{16}$ , y con un intervalo de ebullición aproximado de 150 °C a 290 °C]

- petroleum (råolie), hydroafsvovlet; Uspecificeret petroleum  
En sammensat blanding af carbonhydnder opnået fra en rå olie ved behandling med hydrogen for at omdanne organisk svovl til hydrogensulfid, der fjernes. Den består af carbonhydnder, overvejende  $C_6$  til og med  $C_{16}$ , med kogesinterval omtrent fra 150 °C til 290 °C]
- Kerosin (Erdöl), hydrodesulfuriertes, Kerosin — nicht spezifiziert  
Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem Erdölgrundstoff durch Behandeln mit Wasserstoff, um organischen Schwefel in Schwefelwasserstoff zu verwandeln, der entfernt wird. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{16}$  und siedet im Bereich von etwa 150 °C bis 290 °C]
- κηροζίνη (πετρελαίου), υδρογονοαποθειωμένη· Κηροζίνη — μη προδιαγεγραμμένη  
Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από πρώτη ύλη πετρελαίου με κατεργασία με υδρογόνο για την μετατροπή του οργανικού θείου σε υδρόθειο, το οποίο απομακρύνεται. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{16}$  και βράζει στην περιοχή από 150 °C έως 290 °C περίπου]

Kerosine (petroleum), hydrodesulfurized, Kerosine — unspecified

A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{16}$  and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F)]

- kerosene (pétrole), hydrodésulfuré; Kérosène — non spécifié  
Combinaison complexe d'hydrocarbures obtenue par traitement à l'hydrogène d'une charge pétrolière afin de convertir le soufre organique en hydrogène sulfuré qui est ensuite éliminé. Se compose d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_6$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 150 °C et 290 °C]
- kerosene (petrolio), idrodesolforato; Cherosene — non specificato  
Combinazione complessa di idrocarburi ottenuta da uno stock di petrolio trattandolo con idrogeno per trasformare lo zolfo organico in idrogeno solforato che viene eliminato. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_6$ - $C_{16}$  e punto di ebollizione nell'intervallo 150 °C - 290 °C ca]
- kerosine (aardolie), met waterstof ontzwaveld; Kerosine — niet gespecificeerd  
Een complexe verzameling koolwaterstoffen, verkregen uit een aardoliegrondstof door behandeling met waterstof om organische zwavel om te zetten in waterstofsulfide dat wordt verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 150 °C tot 290 °C]
- querosene (petróleo), hidrogenodessulfurizado, Queroseno — não especificado  
Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fração petrolífera com hidrogénio para converter o enxofre orgânico em sulfureto de hidrogénio que é removido. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_6$  até  $C_{16}$  e destila no intervalo de aproximadamente 150 °C a 290 °C]

(iii)  $\text{ind}(\pi) = \kappa$ , where  $\kappa \in E$ . Using Theorem 6.10, we obtain Classification Indefinite Classification.

Xn R 65

*English: Flakt-rug Kennzeichnung Friction, Friction Labeling, Frictionage, Frictionage, Frictionage Kennzeichen, Rotulagem*

Xn  
 R 65  
S (2-)23-24-62

*Limits of concentration* Limiti di concentrazione, Concentratie grenzen, Límite de concentraçào

$C \geq 10^{-6}$	$X_n, R 65$

NOTA 4

Cas No 64742-94-5

EEC No 265-198-5

No 649-424-00-3

## NOTA H

- Ⓔ **nafta disolvente (petróleo), fracción aromática pesada, Queroseno, sin especificar**  
[Combinación compleja de hidrocarburos obtenida de la destilación de corrientes aromáticas. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_9$  a  $C_{16}$ , y con un intervalo de ebullición aproximado de 165 °C a 290 °C.]
- Ⓙ **solventnaphtha (råolie), tung aromatisk, Uspecificeret petroleum**  
[En sammensat blanding af carbonhydrier opnået fra destillation af aromatiske strømme. Den består overvejende af aromatiske carbonhydrier, overvejende  $C_9$  til og med  $C_{16}$ , med koginterval omtrent fra 165 °C til 290 °C.]
- Ⓚ **Lösungsmittelnaphtha (Erdöl), schwere aromatische; Kerosin — nicht spezifiziert**  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation aromatischer Laufe. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_9$  bis  $C_{16}$  und siedet im Bereich von etwa 165 °C bis 290 °C.]
- Ⓛ **διαλύτης νάφθα (πετρελαίου), βαρεία αρωματική· Κηροζίνη — μη προδιαγεγραμμένη**  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από απόσταξη αρωματικών ρευμάτων. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_9$  έως και  $C_{16}$  και βράζει στην περιοχή από 165 °C έως 290 °C περίπου.]
- Ⓜ **Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified**  
[A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_9$  through  $C_{16}$  and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).]
- Ⓝ **solvant naphtha aromatique lourd (pétrole); Kérosène — non spécifié**  
[Combinaison complexe d'hydrocarbures obtenue par distillation de fractions aromatiques. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_9$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 165 °C et 290 °C.]
- Ⓟ **nafta solvente (petrolio), aromatica pesante; Cherosene — non specificato**  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di correnti aromatiche. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente  $C_9$ - $C_{16}$  e punto di ebollizione nell'intervallo 165 °C-290 °C ca.]
- Ⓡ **solvent-nafta (aardolie), zwaar aromatisch; Kerosine — niet gespecificeerd**  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van aromatische stromen. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_9$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 165 °C tot 290 °C.]
- Ⓢ **nafta de petróleo (petróleo), aromática pesada; Queroseno — não especificado**  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de frações aromáticas. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama de  $C_9$  até  $C_{16}$  e destila no intervalo de aproximadamente 165 °C a 290 °C.]

*Classificação de perigos: Ennetzung, Ταξινόμηση, Classificação, Classifikation, Classificação, Classificação, Classificação, Classificação*

Xn R 65

*Etiquetado: Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Rotulagem*

Xn	
	R : 65 S : (2-)23-24-62

*Limites de concentration: Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçã*

C ≥ 10 %	Xn, R 65

NOTA 4

0 8333 23-3

EEC No 269-778-9

No 649-425-00-9

## NOTA H

-αττα (petroleo), coquizador para nafta pesada, Queroseno, sin especificar

Combinacion compleja de hidrocarburos de la destilacion de productos de un coquizador fluidizado. Compuesta fundamentalmente de hidrocarburos insaturados con un numero de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{11}$ , y con un intervalo de ebullicion aproximado de 157 °C a 288 °C.

-αpntha (råolie), tung coker-, Uspecificeret petroleum

En sammensat blanding af carbonhydrider fra destillationen af produkterne fra en væske-coker. Den består overvejende af umættede carbonhydrider, overvejende  $C_8$  til og med  $C_{11}$ , med kogeinterval omtrent fra 157 °C til 288 °C.]

-αpntha (Erdöl), schwere Kokerei, Kerosin — nicht spezifiziert

Complexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Flüssig-Verkoker. Besteht hauptsächlich aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{11}$  und siedet im Bereich von etwa 157 °C bis 288 °C.]

-αφα (πετρελαιο), βαριας κοκεριας Κηροζίνη — μη προδιαγεγραμμένη

Πύκνωτος συνδυασμός υδρογονανθράκων από την αποσταξη προϊόντων από ρευστό κοκερίας. Συνίσταται κυρίως από ακόρεστο υδρογονανθράκες με αριθμό ατόμων ανθράκα κυρίως στην περιοχή από  $C_8$  έως και  $C_{11}$  και βράζει στην περιοχή από 157 °C έως 288 °C περίπου.]

-αpntha (petroleum), heavy coker, Kerosine — unspecified

A complex combination of hydrocarbons from the distillation of products from a fluid coker. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{11}$  and boiling in the range of approximately 157 °C to 288 °C (315 °F to 550 °F).]

1 -αpntha lourd de cokéfaction (pétrole), Kérosène — non spécifique

Combinaison complexe d'hydrocarbures obtenue par distillation des produits resultant d'une cokéfaction fluide. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majorite dans la gamme  $C_8$ ,  $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 157 °C et 288 °C.]

-αττα (petrolio), apparecchiatura di coking, Cherosene — non specificato

Combinazione complessa di idrocarburi proveniente dalla distillazione dei prodotti di un'apparecchiatura di coking fluido. E costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ ,  $C_{11}$  e punto di ebollizione nell'intervallo 157 °C-288 °C ca.]

-αττα (aardolie), zware verkookser-, Kerosine — niet gespecificeerd

Een complexe verzameling koolwaterstoffen die wordt verkregen uit de destillatie van producten van een fluide verkookser. Deze bestaat voornamelijk uit onverzadigde koolwaterstoffen overwegend  $C_8$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 157 °C tot 288 °C.]

— -αττα (petroleo), pesada do coker, Queroseno — não especificado

— a combinação complexa de hidrocarbonetos da destilação dos produtos de um de coker de leito fluidizado. E constituída predominantemente por hidrocarbonetos insaturados com numeros de atomos de carbono predominantemente na gama de  $C_8$  ate e destila no intervalo de aproximadamente 157 °C a 288 °C.]

*Classification Klassifizierung Einstufung Τεξινούση Classification Classificazione Classificazione Indeling Classificação*

Xn R 65

*Enquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-)23-24-62

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	Xn , R 65

NOTA 4

No 649 426-00 4

EEC No 285-508 2

No 649 426-00 4

NOTA H

nafta (petroleum) fraccion pesada hidrodesulfurada reformada cataliticamente, fraccion aromatica, Queroseno, sin especificar  
 Complexe combinatie van koolwaterstoffen verkregen door fractionering van nafta hidrodesulfurada reformada cataliticamente  
 Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_7$  a  $C_{11}$ , con un intervalo de ebullicion aproximado de 98 °C a 218 °C]

nafta (råolie), katalytisk reformeret hydroafsvovlet tung, aromatfraktion, Uspecificeret  
 Sammensat blanding af carbonhydrider fremstillet ved fraktionering af katalytisk reformeret, hydroafsvovlet nafta. Den overvejende af aromatiske carbonhydrider, overvejende  $C_7$  til  $C_{11}$ , med kogesinterval omtrent fra 98 °C til 218 °C]

naftina (Erdöl), katalytisch reformierte hydrodesulfurierte schwere, aromatische Fraktion, Kerosin — nicht spezifiziert  
 Komplexe Kombination von Kohlenwasserstoffen erhalten durch Fraktionierung aus katalytisch reformierter hydrodesulfurierter naftina. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_7$  bis  $C_{11}$  und siedet im Bereich von etwa 98 °C bis 218 °C]

ναφθα (πετρελαιο), καταλυτικά αναμορφωμένης, υδρογονοαποθειωμένης βαριάς, αρωματικό κλάσμα Κηρυζίνη — μη προδιαγεγραμμένη  
 Πολύπλοκος συνδυασμός υδρογονάνθρακων που παραγεται με κλασματωση απο υδρογονοαποθειωμένη ναφθα που έχει υποστεί καταλυτική πυρόλυση. Συνιστάται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή  $C_7$  έως  $C_{11}$ , και βράζει στην περιοχή απο 98 °C έως 218 °C περίπου]

nafta (petroleum), catalytic reformed hydrodesulfurized heavy, arom. fraction, Kerosine — unspecified  
 A complex combination of hydrocarbons produced by fractionation from catalytically reformed hydrodesulfurized nafta. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_7$  to  $C_{11}$ , and boiling in the range of approximately 98 °C to 218 °C (208 °F to 424 °F)]

nafta lourde hydrodésulfurée (pétrole), reformage catalytique, fraction aromatique, Kérosène — non spécifique  
 Combinaison complexe d'hydrocarbures obtenue par fractionnement a partir de nafta hydrodésulfurée de reformage catalytique. Elle compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorite dans la gamme  $C_7$ - $C_{11}$ , et dont le point d'ebullition est compris approximativement entre 98 °C et 218 °C]

nafta (petrolio), pesante idrodesolforata da reforming catalitico, frazione aromatica, Cherosene — non specificato  
 Combinazione complessa di idrocarburi ottenuta per frazionamento di nafta da reformer catalitico idrodesolforata. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_7$ - $C_{11}$  e punto di ebollizione nell'intervallo 98 °C-218 °C ca]

nafta (aardolie), katalytisch gereformeerd met waterstof ontzwavelde zware fracties, aromatische fractie, Kerosine — niet gespecificeerd  
 Een complexe verzameling koolwaterstoffen verkregen door fractionering van katalytisch gereformeerde met waterstof ontzwavelde nafta. Het bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_7$  tot  $C_{11}$ , met een kooktraject van ongeveer 98 °C tot 218 °C]

nafta (petroleo), pesada hidrogenodessulfurizada do reforming catalitico, fraccão aromática, Queroseno — não especificado  
 Combinação complexa de hidrocarbonetos produzida por fracionamento da nafta hidrogenodessulfurizada do reforming catalítico. É constituída predominantemente por hidrocarbonetos aromaticos com numeros de átomos de carbono predominantemente na gama de  $C_7$  ate  $C_{11}$  e destila no intervalo de aproximadamente 98 °C a 218 °C]



... ..

Xn R 65

... ..

Xn	
	<ul style="list-style-type: none"> <li>• R 65</li> <li>• S (2-)23-24-62</li> </ul>

... ..

C ≥ 10 %	Xn , R 65

NOTA 4

No 91770-15-9

EEC No 294-799-5

No 649-427-00-X

## NOTA H

querosina (petroleo), desazufrada, Queroseno, sin especificar

Combinacion compleja de hidrocarburos obtenida sometiendo un destilado del petroleo a un proceso de desazufrado para transformar mercaptanos o separar impurezas acidas. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_9$  a  $C_{16}$ , y con un intervalo de ebullición de 130 °C a 290 °C.]

petroleum (råolie), sweetenet; Uspecificeret petroleum

En sammensat blanding af carbonhydrier opnået ved at underkaste en råoliedestillat en sweetening-proces for at omdanne mercaptaner eller fjerne sure urenheder. Den består overvejende af carbonhydrider, overvejende  $C_9$  til og med  $C_{16}$ , med kogeinterval omtrent fra 130 °C til 290 °C.]

= Kerosin (Erdöl), gesußt, Kerosin — nicht spezifiziert

Komplexe Kombination von Kohlenwasserstoffen, die man aus einem Erdöl-Destillat durch Einwirkung eines Süßungsverfahrens zur Konvertierung von Mercaptanen oder zum Entfernen saurer Verunreinigungen erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_9$  bis  $C_{16}$  und siedet im Bereich von etwa 130 °C bis 290 °C.]

κηροζίνη (πετρελαιο), γλυκασμένη· Κηροζίνη — μη προδιαγεγραμμένη

Πολυπλοκής συνδυασμός υδρογονανθράκων που λαμβάνεται όταν απόσταγμα πετρελαιο υποβληθεί σε κατεργασία γλυκανσης για τη μετατροπή των μερκαπτανών ή την απομακρυνση των οξίων προσμιξέων. Αποτελείται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κατά κύριο λόγο στην περιοχή από  $C_9$  έως και  $C_{16}$  και βράζει στην περιοχή από 130 °C έως 290 °C.]

Kerosine (petroleum), sweetened, Kerosine — unspecified

A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_9$  through  $C_{16}$  and boiling in the range of 130 °C to 290 °C (266 °F to 554 °F).]

• kerosene adouci (petrole), Kérosène — non spécifique

Combinaison complexe d'hydrocarbures obtenue par adoucissement d'un distillat de petrole, afin de convertir les mercaptans ou d'eliminer les impuretes acides. Se compose en majorite d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_9$ - $C_{16}$ , et dont le point d'ébullition est compris entre 130 °C et 290 °C.]

• cherosene (petrolio), addolcito, Cherosene — non specificato

Combinazione complessa di idrocarburi ottenuta sottoponendo un distillato di petrolio ad un procedimento di addolcimento per convertire i mercaptani o per eliminare impurezze acide. È costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_9$ - $C_{16}$  e con punto di ebollizione nell'intervallo 130 °C-290 °C.]

kerosine (aardolie), stankvrij gemaakt, Kerosine — niet gespecificeerd

Een complexe verzameling koolwaterstoffen die wordt verkregen door het onderwerpen van een aardoliedestillaat aan een stankverwijderend proces om mercaptanen om te zetten of zure onzuiverheden te verwijderen. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_9$  tot en met  $C_{16}$ , met een kooktraject van 130 °C tot 290 °C.]

• kerosene (petroleo), tratado (sweetened), Queroseno — não especificado

Uma combinação complexa de hidrocarbonetos obtida sujeitando uma fração petrolífera a um processo de sweetening para converter mercaptans ou remover impurezas acidas. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_9$  ate  $C_{16}$  e destila no intervalo de aproximadamente 130 °C a 290 °C.]

*Classification Klassifizierung Einordnung Ταξινόμηση Classification Classificazione Indeling Classificacão*

Xn , R 65

*Etiquetado, Etikettering, Kennzeichnung Επισήμανση, Labelling Etiquetage Etichettatura Kenmerken Rotulagem*

Xn	
	R 65 S : (2-)23-24-62

*Limite de concentration Konzentrationsgrenze, Konzentrationsgrenzwerte Όρια συγκεντρώσεως, Concentration limits  
Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçã*

C ≥ 10%	Xn , R 65

NOTA 4

Cas No 92045-36-8

EEC No 295-416-4

No 649-428-00-5

NOTA H

- ES querosina (petroleo), desazufrada refinada con disolvente Queroseno, sin especificar  
[Combinación compleja de hidrocarburos obtenida de una reserva de petróleo por refinado con disolvente y desazufrado y con un intervalo de ebullición aproximado de 150 °C a 260 °C]
- DA petroleum (råolie), solventraffineret sweetenet Uspecificeret petroleum  
[En sammensat blanding af carbonhydrider, opnaet fra en råolie ved solventraffinering og sweetening, med kogesinterval omtrent fra 150 °C til 260 °C]
- DE Kerosin (Erdöl), durch Lösungsmittel aufbereitet gesußt Kerosin — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus einem Erdölaustragsstoff durch Lösungsmittelaufbereitung und Sußen erhält Siedet im Bereich von etwa 150 °C bis 260 °C]
- EL κηροζίνη (πετρελαιο), διυλισμένη με διαλυτή γλυκασμένη Κηροζίνη — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από πρώτη ύλη πετρελαιο με διύλιση με διαλυτή και γλυκανση και που βράζει στην περιοχή από 150 °C έως 260 °C περίπου]
- EN Kerosine (petroleum), solvent-refined sweetened Kerosine — unspecified  
[A complex combination of hydrocarbons obtained from a petroleum stock by solvent refining and sweetening and boiling in the range of approximately 150 °C to 260 °C (302 °F to 500 °F)]
- FR kerosene (pétrole), adouci et raffiné au solvant Kerosene — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue à partir d'un stock pétrolier par raffinage au solvant et adoucissement, et dont le point d'ébullition est compris approximativement entre 150 °C et 260 °C]
- IT cherosene (petrolio), raffinato con solvente addolcito Cherosene — non specificato  
[Combinazione complessa di idrocarburi ottenuti da uno stock di petrolio mediante raffinazione con solvente ed addolcimento e con punto di ebollizione nell'intervallo 150 °C 260 °C ca]
- NL kerosine (aardolie), solventgeraffineerde stankvrij gemaakte Kerosine — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een aardolievoorraad door solventzuivering en stankverwijdering, met een kooktraject van ongeveer 150 °C tot 260 °C]
- PT querosene (petroleo), tratado (sweetened) refinado com solvente Queroseno — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida de uma fracção petrolífera por refinação com solvente e sweetening e que destila no intervalo de aproximadamente 150 °C a 260 °C]

Chlorination chlorinating reaction, In a very early time, reaction of chlorine with chloroacetic acid led to the formation

Xn R 65

*Etiqueta to Etikettering Kennzeichnung, Ε-σημαίνση Labeling, Etiquetage Etiquetatura Kennen von Rotulagem*

Xn		R . 65
		S {2-123-24-62}

Limites de concentracion, Konzentrationsgrenzen Konzentrationsgrenzwerte (Όρια συγκεντρωσης), Concentration limits, Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentratie

$C \geq 10\%$	$X_n, R 65$

NOTA 4

Cas No 93763-35-0

EEC No 297-854-1

No 649-429-00-0

NOTA H

- ES hidrocarburos,  $C_{10}$ , tratados con hidrógeno, desaromatizados, Queroseno, sin especificar  
[Combinación compleja de hidrocarburos obtenida como disolventes que han sido sometidos a tratamiento con hidrogeno para transformar aromaticos en naftenos por hidrogenacion catalitica]
- DA carbonhydrier,  $C_{10}$ , hydrogenbehandlede, afaromatiserede, Uspecificeret petroleum  
[En sammensat blanding af carbonhydrier opnået som solventer, der har været underkastet hydrogenbehandling for at omdanne aromater til naphthener ved katalytisk hydrogenering]
- DE Kohlenwasserstoffe,  $C_{10}$ , mit Wasserstoff behandelt, dearomatisiert, Kerosin — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Lösungsmittel erhält, die einer Behandlung mit Wasserstoff ausgesetzt wurden, um Aromaten in Naphthene durch katalytische Hydrierung umzuwandeln]
- EL υδρογονάνθρακες,  $C_{10}$ , κατεργασμένοι με υδρογόνο, απαλλαγμένοι από αρωματικά: Κηροζίνη — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν διαλύτες που έχουν υποβληθεί σε κατεργασία με υδρογόνο για να μετατραπούν τα αρωματικά σε ναφθενικά με καταλυτική υδρογόνωση]
- EN Hydrocarbons,  $C_{10}$ , hydrotreated, dearomatized Kerosine — unspecified  
[A complex combination of hydrocarbons obtained as solvents which have been subjected to hydrotreatment in order to convert aromatics to naphthenes by catalytic hydrogenation]
- FR hydrocarbures en  $C_{10}$ , hydrotraités, désaromatisés Kérosène — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par hydrotraitement de solvants afin de convertir les aromatiques en naphthènes par hydrogenation catalytique.]
- IT idrocarburi,  $C_{10}$ , idrotrattati, dearomatizzati, Cherosene — non specificato  
[Combinazione complessa di idrocarburi ottenute come solventi che sono stati sottoposti a idrotrattamento con lo scopo di convertire gli aromatici in naftenici per idrogenazione catalitica]
- NL koolwaterstoffen,  $C_{10}$ , met waterstof behandeld, gedearomatiseerd Kerosine — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als solventen die zijn onderworpen aan een behandeling met waterstof teneinde aromaten om te zetten in naftenen door katalytische hydrogenering]
- PT hidrocarbonetos,  $C_{10}$ , tratados com hidrogénio, desaromatizados, Queroseno — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como solventes que foram submetidos a tratamento com hidrogénio para converter aromaticos em naftenicos por hidrogenação catalitica]

*Classification, Kλάσση, Einstufung, Ταξινόμηση, Classification, Classificazione, Indefinirte Classification*

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	<p>R : 65</p> <p>S : (2-)23-24-62</p>

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn : R 65

NOTA 4

Cas No 97488-94-3

EEC No 307-033-2

No 649-430-00-6


NOTA H

- ES queroseno (petroleo), hidrodesulfurado refinado con disolvente, Queroseno, sin especificar
- DA kerosin (råolie), solvent-raffineret hydroafsvovlet Uspecificeret petroleum
- DE Kerosin (Erdöl), durch Lösungsmittel gereinigt hydrodesulfuriert Kerosin — nicht spezifiziert
- EL κηροζίνη (πετρελαίου), διυλισμένη με διαλύτη υδρογονοαποθειωμένη Κηροζίνη — μη προδιαγεγραμμένη
- EN Kerosine (petroleum), solvent-refined hydrodesulfurized Kerosine — unspecified
- FR kerosene (petrole), raffiné au solvant, hydrodésulfure Kérosene — non spécifique
- IT cherosene (petrolio), idrodesolforato raffinato con solvente Cherosene — non specificato
- NL kerosine (aardolie), solvent-geraffineerd met waterstof ontzwaveld Kerosine — niet gespecificeerd
- PT querosene (petróleo), hidrogenodessulfurizado refinado com solvente Queroseno — não especificado

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-)23-24-62

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*

C ≥ 10 %	Xn, R 65

NOTA 4



Cas No 101316-58-9

EEC No 309-864-6

No 649-431-00-1

## NOTA H

- ES destilados (petróleo), fracción intermedia de la serie completa del coquizador hidrodesulfurado Queroseno, sin especificar  
[Combinación compleja de hidrocarburos obtenida por fraccionamiento de un destilado del coquizador hidrodesulfurado. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_8$  a  $C_{16}$  y con un intervalo de ebullición aproximado de 120 °C a 283 °C]
- DA destillater (råolie), hydroaafsvovlede full-range middeltunge coker-, Uspecificeret petroleum  
[En sammensat blanding af carbonhydrider opnået ved fraktionering fra hydroaafsvovlet coker-destillat. Den består overvejende af carbonhydrider, overvejende  $C_8$  til og med  $C_{16}$ , med kogesinterval omtrent fra 120 °C til 283 °C]
- DE Destillate (Erdöl), hydrodesulfurierte gesamte mittlere Verkoker-, Kerosin — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Fraktionieren aus hydrodesulfuriertem Verkokerdestillat erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_8$  bis  $C_{16}$  und siedet im Bereich von etwa 120 °C bis 283 °C]
- EL αποσταγμάτα (πετρελαίου), αποθειωμένα με υδρογόνο μεσαία πλήρους συστασης μονάδας εξανθράκωσης Κηροζίνη — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κλασματική αποθειωμένου με υδρογόνο αποστάγματος μονάδας εξανθράκωσης. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_8$  έως και  $C_{16}$  και με περιοχή θρασμού από 120 °C έως 283 °C περίπου]
- EN Distillates (petroleum), hydrodesulfurized full-range middle coker Kerosine — unspecified  
[A complex combination of hydrocarbons obtained by fractionation from hydrodesulfurized coker distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_8$  through  $C_{16}$  and boiling in the range of approximately 120 °C to 283 °C (248 °F to 541 °F)]
- FR distillats moyens de cokéfaction a large intervalle d'ébullition (pétrole), hydrodésulfurés Kérosène — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement a partir de distillat de cokéfaction hydrodesulfuré. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_8$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 120 °C et 283 °C]
- IT distillati (petrolio), idrodesolforati taglio intero intermedio da « coker » Cherosene — non specificato  
[Combinazione complessa di idrocarburi ottenuta per frazionamento di distillato idrodesolforato da « coker ». È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_8$ - $C_{16}$  e punto di ebollizione nell'intervallo 120 °C-283 °C ca]
- NL destillaten (aardolie), met waterstof ontzwavelde volledig bereik middelste verkookser-, Kerosine — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door fractionering van met waterstof ontzwaveld verkookserdestillaat. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_8$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 120 °C tot 283 °C]
- PT destilados (petróleo), do coker medios hidrogenodessulfurizados, Queroseno — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por fraccionamento de um destilado do coker hidrogenodessulfurizado. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_8$  ate  $C_{16}$  e destila no intervalo de aproximadamente 120 °C a 283 °C]

*Classification* *Klassifizierung* *Επίσημη Ταξινόμηση* *Classification* *Classificazione* *Classificação* *Κατάταξη*

Xn R 65

*Etiquetado* *Etikettering* *Kennzeichnung* *Επισήμανση* *Labelling* *Etiquetage* *Etichettatura* *Kennzeichen* *Rotulagem*

<p>Xn</p> 	<p>R : 65</p> <p>S : (2-)23-24-62</p>
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*Limits de concentration* *Konzentrationsgrenzen* *Konzentrationsgrenzwerte* *Όρια συγκέντρωσης* *Concentration limits*  
*Limites de concentration* *Limiti di concentrazione* *Concentratiegrenzen* *Limites de concentração*

C ≥ 10 %	Xn , R 65

NOTA 4

Cas No 101316-81-8

EEC No 309-882-4

No 649-432-00-7

## NOTA H

- ES nafta disolvente (petróleo), fracción aromática pesada hidrodesulfurada Queroseno, sin especificar  
[Combinación compleja de hidrocarburos obtenida por la hidrodesulfuración catalítica de una fracción de petróleo Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{11}$  y con un intervalo de ebullición aproximado de 180 °C a 240 °C]
- DA solventnaphtha (råolie), hydroafsvovlet tung aromatisk, Uspecificeret petroleum  
[En sammensat blanding af carbonhydrider opnaet ved den katalytiske hydroafsvovling af en raoliefraktion Den består overvejende af carbonhydrider, overvejende  $C_{10}$  til og med  $C_{11}$ , med kogesinterval omtrent fra 180 °C til 240 °C]
- DE Lösungsmittelnaphtha (Erdöl), hydrodesulfurierte schwere aromatische Kerosin — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch katalytische Hydrodesulfurierung einer Erdöl-Fraktion erhält Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{11}$  und siedet im Bereich von etwa 180 °C bis 240 °C]
- EL ναφθα διαλύτης (πετρελαίου), αποθειωμένη με υδρογόνο βαριά αρωματική Κηροζίνη — μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με καταλυτική αποθείωση με υδρογόνο κλάσματος πετρελαίου Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως  $C_{11}$  και με περιοχή βρασμού από 180 °C έως 240 °C περίπου]
- EN Solvent naphtha (petroleum), hydrodesulfurized heavy arom. Kerosine — unspecified  
[A complex combination of hydrocarbons obtained by the catalytic hydrodesulfurization of a petroleum fraction It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{11}$  and boiling in the range of approximately 180 °C to 240 °C (356 °F to 464 °F)]
- FR solvant naphtha aromatique lourd (pétrole), hydrodesulfuré Kérosène — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par hydrodésulfuration catalytique d'une fraction pétrolière Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_{10}$ - $C_{11}$  et dont le point d'ébullition est compris approximativement entre 180 °C et 240 °C]
- IT nafta solvente (petrolio), aromatica pesante idrodesolforata Cherosene — non specificato  
[Combinazione complessa di idrocarburi ottenuta per idrodesolfurazione catalitica di una frazione di petrolio È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{11}$  e punto di ebollizione nell'intervallo 180 °C-240 °C ca]
- NL solventnafta (aardolie), met waterstof ontzwavelde zware aromatische Kerosine — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de katalytische ontzwaveling met waterstof van een aardoliefractie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 180 °C tot 240 °C]
- PT - nafta de petróleo (petróleo), aromática pesada hidrogenodessulfurizada Queroseno — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida pela hidrogenodessulfuração catalítica de uma fracção petrolífera É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{11}$  e destila no intervalo de aproximadamente 180 °C a 240 °C]

*Classification, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Kutochizem*

Xn	
	<p>R : 65</p> <p>S : (2-)23-24-62</p>

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentrație*

C ≥ 10 %	Xn, R 65

NOTA 4

Cas No 101316-82-9

EEC No 309-884-5

No 649-433-00-2

NOTA H

- ES nafta disolvente (petroleo), fraccion media hidrodesulfurada, Queroseno, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por la hidrodesulfuración catalítica de una fracción de petróleo. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 175 °C a 220 °C]
- DA solventnaphtha (råolie), hydroafsvovlet middeltung, Uspecificeret petroleum  
[En sammensat blanding af carbonhydrider opnaet ved den katalytiske hydroafsvøvling af en råoliefraktion. Den består overvejende af carbonhydrider, overvejende  $C_{10}$  til og med  $C_{11}$ , med kogesinterval omtrent fra 175 °C til 220 °C]
- DE Lösungsmittelnaphtha (Erdöl), hydrodesulfurierte mittlere Kerosin — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch katalytische Hydrodesulfurierung einer Erdölfraktion erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{11}$  und siedet im Bereich von etwa 175 °C bis 220 °C]
- EL ναφθα, διαλυτής (πετρελαίου), μεσαία αποθειωμένη με υδρογόνο Κηροζίνη -- μη προδιαγεγραμμένη  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με καταλυτική αποθείωση με υδρογόνο κλασμάτων πετρελαίου. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{11}$ , και με περιοχή βρασμού από 175 °C έως 220 °C περίπου]
- EN Solvent naphtha (petroleum), hydrodesulfurized medium Kerosine — unspecified  
[A complex combination of hydrocarbons obtained by the catalytic hydrodesulfurization of a petroleum fraction. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{11}$  and boiling in the range of approximately 175 °C to 220 °C (347 °F to 428 °F)]
- FR solvant naphta moyen (petrole), hydrodesulfure Kerosene — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par hydrodesulfuration catalytique d'une fraction pétrolière. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 175 °C et 220 °C]
- IT nafta solvente (petrolio), idrodesolforata intermedia Cherosene — non specificato  
[Combinazione complessa di idrocarburi ottenuta per idrodesolforazione catalitica di una frazione di petrolio. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{11}$ , e punto di ebollizione nell'intervallo 175 °C-220 °C ca]
- NL solventnafta (aardolie), met waterstof ontzwavelde tussenfractie Kerosine -- niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de katalytische ontzwaveling met waterstof van een aardoliefractie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 175 °C tot 220 °C]
- PT nafta de petroleo (petroleo), media hidrogenodessulfurizada Queroseno — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida pela hidrogenodessulfurização catalítica de uma fração petrolífera. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{11}$ , e destila no intervalo de aproximadamente 175 °C a 220 °C]

*Classification Klassifisering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificatie*

Xn, R 65

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 65 S : (2-)23-24-62

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*

C ≥ 10%	Xn ; R 65

NOTA 4

Cas No 101631 19-0

FEC No 309-944-0

No 649-434-00-8

## NOTA H

- ES queroseno (petroleo), tratado con hidrogeno Queroseno, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por la destilacion de petroleo y posterior tratamiento con hidrógeno. Compuesta fundamentalmente de alcanos, cicloalcanos y alquilbencenos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{12}$  a  $C_{16}$  y con un intervalo de ebullicion aproximado de 230 °C a 270 °C.]
- DA petroleum (råolie), hydrogenbehandlet Uspecificeret petroleum  
[En sammensat blanding af carbonhydrider opnået ved destillationen af råolie og efterfølgende hydrogenbehandling. Den består overvejende af alkaner, cycloalkaner og alkyibenzener, overvejende  $C_{12}$  til og med  $C_{16}$ , med kogeinterval omtrent fra 230 °C til 270 °C.]
- DE Kerosin (Erdöl), mit Wasserstoff behandelt, Kerosin — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von Erdöl und nachfolgender Behandlung mit Wasserstoff erhält. Besteht vorherrschend aus Alkanen, Cycloalkanen und Alkylbenzolen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{12}$  bis  $C_{16}$  und siedet im Bereich von etwa 230 °C bis 270 °C.]
- EL κηροζίνη (πετρέλαιο), κατεργασμένη με υδρογόνο Κηροζίνη — μη προδιαγεγραμμένη  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από την απόσταξη πετρελίου και στη συνέχεια από κατεργασία με υδρογόνο που ακολουθεί. Συνίσταται κυρίως από αλκάνια, κυκλοαλκάνια και αλκυλοβενζόλια με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{12}$  έως και  $C_{16}$  και με περιοχή βρασμού από 230 °C έως 270 °C περίπου.]
- EN Kerosine (petroleum), hydrotreated Kerosine — unspecified  
[A complex combination of hydrocarbons obtained from the distillation of petroleum and subsequent hydrotreatment. It consists predominantly of alkanes, cycloalkanes and alkylbenzenes having carbon numbers predominantly in the range of  $C_{12}$  through  $C_{16}$  and boiling in the range of approximately 230 °C to 270 °C (446 °F to 518 °F).]
- FR kérosène (pétrole), hydrotraite Kérosène — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par distillation du pétrole puis hydrotraitement. Se compose principalement d'alcane, de cycloalcanes et d'alkylbenzenes dont le nombre de carbones se situe en majorité dans la gamme  $C_{12}$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 230 °C et 270 °C.]
- IT cherosene (petrolio), idrotrattato Cherosene — non specificato  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione di petrolio e successivo idrotrattamento. È costituita prevalentemente da alcani, cicloalcani e alchilbenzeni con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{12}$ ,  $C_{16}$  e punto di ebollizione nell'intervallo 230 °C-270 °C ca.]
- NL kerosine (aardolie), met waterstof behandeld Kerosine — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de destillatie van aardolie gevolgd door een behandeling met waterstof. Bestaat voornamelijk uit alkanen, cycloalkanen en alkyilbenzenen, overwegend  $C_{12}$ , tot en met  $C_{16}$ , met een kooktraject van ongeveer 230 °C tot 270 °C.]
- PT querosene (petroleo), tratado com hidrogenio, Queroseno — não especificado  
[Uma combinação complexa de hidrocarbonetos obtida da destilação de petróleo e tratamento subsequente com hidrogenio. É constituída predominantemente por alcanos, cicloalcanos e alquilbenzenos com numeros de átomos de carbono predominante-mente na gama de  $C_{12}$  até  $C_{16}$  e destila no intervalo de aproximadamente 230 °C a 270 °C.]

*Classification Kennzeichnung Einstufung Ταξινόμηση Classification Classificazione Infeeling Classificação*

Xn, R 65

*Etiquetado, Etikettering Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura; Kennzeichen, Rotulagem*

Xn	
	R : 65
	S : (2-)23-24-62

*Limits de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*

C ≥ 10 %	Xn, R 65

NOTA 4



Cas No 64741-59-9

EEC No 265-060-4

No 649-435-00-3

## NOTA H

- ES destilados (petróleo), fracción ligera craqueada catalíticamente, Gasóleo craqueado  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_6$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 150 °C a 400 °C. Contiene una proporción relativamente grande de hidrocarburos aromáticos bicíclicos]
- DA destillater (råolie), lette katalytisk krakkede; Krakket gasolie  
[En sammensat blanding af carbonhydrier fremstillet ved destillation af produkter fra en katalytisk krakningsproces. Den består af carbonhydrier, overvejende  $C_6$  til og med  $C_{11}$ , med kogesinterval omtrent fra 150 °C til 400 °C. Den indeholder en forholdsvis stor del bicycliske, aromatiske carbonhydrier]
- DE Destillate (Erdöl), leichte katalytisch gekrackte, Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Crackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_6$  bis  $C_{11}$ , und siedet im Bereich von etwa 150 °C bis 400 °C. Enthält eine relativ große Menge bicyclischer aromatischer Kohlenwasserstoffe]
- EL αποσταγμάτα (πετρελαίου), ελαφρά καταλυτικά πυρολυμένα· Πετρέλαιο από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται με την απόσπαξη προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_6$  έως και  $C_{11}$ , και με περιοχή βρασμού από 150 °C έως 400 °C περίπου. Περιέχει σχετικά μεγάλη αναλογία δικυκλικών αρωματικών υδρογονανθράκων]
- EN Distillates (petroleum), light catalytic cracked, Cracked gasoil  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_6$  through  $C_{11}$ , and boiling in the range of approximately 150 °C to 400 °C (302 °F to 752 °F). It contains a relatively large proportion of bicyclic aromatic hydrocarbons]
- FR distillats légers (pétrole), craquage catalytique. Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_6$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 150 °C et 400 °C. Contient une proportion relativement importante d'hydrocarbures aromatiques bicycliques]
- IT distillati (petrolio), frazioni leggere di cracking catalitico, Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo fra  $C_6$ - $C_{11}$ , e punto di ebollizione nell'intervallo 150 °C-400 °C ca. Contiene una percentuale relativamente alta di idrocarburi aromatici biciclici]
- NL destillaten (aardolie), licht katalytisch gekraakte. Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van producten van een katalytisch kraakproces. Bestaat uit koolwaterstoffen, overwegend  $C_6$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 150 °C tot 400 °C. Bevat een relatief grote hoeveelheid bicyclische aromatische koolwaterstoffen.]
- PT destilados (petróleo), leves do cracking catalítico, Gasóleo de « cracking »  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_6$  ate  $C_{11}$ , e destila no intervalo de aproximadamente 150 °C a 400 °C. Contém uma proporção relativamente elevada de hidrocarbonetos aromáticos bicíclicos]

*Classificação, Klassifisering, Einstufung, ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-60-2

EEC No 265-062-5

No 649-436-00-9

## NOTA H

- ES** destilados (petroleo), fracción intermedia craqueada catalíticamente Gasóleo craqueado  
[Combinación compleja de hidrocarburos producida por la destilación de productos de un proceso de craqueo catalítico. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{16}$  y un intervalo de ebullición aproximado de 205 °C a 450 °C. Contiene una proporción relativamente grande de hidrocarburos aromáticos tricíclicos.]
- DA** destillatér (råolie), intermediære katalytisk krakkede Krakket gasolie  
[En sammensat blanding af carbonhydrider fremstillet ved destillation af produkter fra en katalytisk krakningsproces. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{16}$ , med kogesinterval omtrent fra 205 °C til 450 °C. Den indeholder en forholdsvis stor del tricycliske, aromatiske carbonhydrider.]
- DE** Destillate (Erdöl), mittlere katalytisch gekrackte Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Crackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{16}$  und siedet im Bereich von etwa 205 °C bis 450 °C. Enthält eine relativ große Menge tricyclischer aromatischer Kohlenwasserstoffe.]
- EL** αποσταγμάτα (πετρελαίου), ενδιάμεσα καταλυτικά πυρολυμένα Πετρέλαιο από διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παραγεται με την απόσπαξη προϊόντων καταλυτικής πυρόλυσης. Συνίσταται από υδρογονανθρακες με αριθμό ατόμων ανθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{16}$  και βράζει στην περιοχή από 205 °C έως 450 °C περίπου. Περιέχει σχετικά μεγάλη αναλογία τρικυκλικών αρωματικών υδρογονανθράκων.]
- EN** Distillates (petroleum), intermediate catalytic cracked Cracked gasoil  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{16}$  and boiling in the range of approximately 205 °C to 450 °C (401 °F to 842 °F). It contains a relatively large proportion of tricyclic aromatic hydrocarbons.]
- FR** distillats intermédiaires (pétrole), craquage catalytique Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe principalement dans la gamme  $C_{11}$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 205 °C et 450 °C. Contient une proportion relativement importante d'hydrocarbures aromatiques tricycliques.]
- IT** distillati (petrolio), frazioni intermedie di cracking catalitico, Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking catalitico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{16}$  e punto di ebollizione nell'intervallo 205 °C-450 °C ca. Contiene una percentuale relativamente alta di idrocarburi aromatici triciclici.]
- NL** destillaten (aardolie), middenfractie katalytisch gekraakt Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van producten van een katalytisch kraakproces. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 205 °C tot 450 °C. Bevat een relatief grote hoeveelheid tricyclische aromatische koolwaterstoffen.]
- PT** destilados (petróleo), medios do cracking catalítico, Gasóleo de «cracking»  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{16}$  e destila no intervalo de aproximadamente 205 °C a 450 °C. Contém uma proporção relativamente elevada de hidrocarbonetos aromáticos tricíclicos.]

*Classificação, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Limits of concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentrationsgrenzen, Limites de concentrație*


Cas No 64741-77-1

EEC No 265-078-2

No 649-437-00-4

## NOTA H

- ES** destilados (petróleo), fracción ligera hidrocraqueada ; Gasóleo craqueado  
[Combinación compleja de hidrocarburos de la destilación de los productos de un proceso de hidrocrqueo. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{14}$  y con un intervalo de ebullición aproximado de 160 °C a 320 °C]
- DA** destillater (råolie), lette hydrokrakkede , Krakket gasolie  
[En sammensat blanding af carbonhydrier fra destillation af produkterne fra en hydrokrakningsproces. Den består overvejende af mættede carbonhydrier, overvejende  $C_{10}$  til og med  $C_{14}$ , med kogesinterval omtrent fra 160 °C til 320 °C]
- DE** Destillate (Erdöl), leichte hydrogekrackte , Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Hydrokrackverfahren. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{14}$  und siedet im Bereich von etwa 160 °C bis 320 °C.]
- EL** αποσταγματα (πετρελαίου), ελαφρά υδρογονοπυρολυμένα. Πετρέλαιο από διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων από απόσπαση των προϊόντων υδρογονοπυρόλυσης. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{14}$  και με περιοχή θρασμού από 160 °C έως 320 °C περίπου.]
- EN** Distillates (petroleum), light hydrocracked , Cracked gasoil  
[A complex combination of hydrocarbons from distillation of the products from a hydrocracking process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{14}$  and boiling in the range of approximately 160 °C to 320 °C (320 °F to 608 °F)]
- FR** distillats légers (pétrole), hydrocraquage , Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un hydrocraquage. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$ - $C_{14}$  et dont le point d'ébullition est compris approximativement entre 160 °C et 320 °C]
- IT** distillati (petrolio), frazioni leggere di idrocracking , Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuti dalla distillazione dei prodotti di un processo di idrocracking. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{14}$  e punto di ebollizione nell'intervallo 160 °C-320 °C ca.]
- NL** destillaten (aardolie), licht waterstofgekraakt , Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de producten van een waterstofkraakproces. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{14}$ , met een kooktraject van ongeveer 160 °C tot 320 °C.]
- PT** destilados (petróleo), leves do hidrocracking , Gasóleo de « cracking »  
[Uma combinação complexa de hidrocarbonetos da destilação dos produtos de um processo de hidrocracking. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{14}$ , e destila no intervalo de aproximadamente 160 °C a 320 °C.]

*Classification Classification - Etiquetage - Etiquetage - Etiquetage - Etiquetage - Etiquetage - Etiquetage - Etiquetage*

Carb. Cat. A R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennzeichen, Routage*

Xn	
	R : 40 S : (2-)36/37

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 64741-82-8

EEC No 265-084-5

No 649-438-00-X

NOTA H

- ES destilados (petroleo), fracción ligera craqueada termicamente, Gasoleo craqueado  
[Combinación compleja de hidrocarburos de la destilación de los productos de un proceso de craqueo termico. Compuesta fundamentalmente de hidrocarburos insaturados con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{22}$  y con un intervalo de ebullición aproximado de 160 °C a 370 °C]
- DA destillater (råolie), lette termisk krakkende, Krakket gasolie  
[En sammensat blanding af carbonhydrider fra destillation af produkterne fra en termisk krakningsproces. Den består overvejende af umættede carbonhydrider, overvejende  $C_{10}$  til og med  $C_{22}$ , med kogesinterval omtrent fra 160 °C til 370 °C]
- DE Destillate (Erdöl), leichte thermisch gekrackte, Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem thermischen Krackverfahren. Besteht vorherrschend aus ungesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{22}$  und siedet im Bereich von etwa 160 °C bis 370 °C]
- EL αποσταγμάτα (πετρελαιο), ελαφρά θερμικά πυρολυμένα. Πετρελαιο απο διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη των προϊόντων θερμικής πυρόλυσης. Συνίσταται κυρίως από ακόρεστους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{22}$  και με περιοχή βρασμού από 160 °C έως 370 °C περίπου]
- EN Distillates (petroleum), light thermal cracked, Cracked gasoil  
[A complex combination of hydrocarbons from the distillation of the products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{22}$  and boiling in the range of approximately 160 °C to 370 °C (320 °F to 698 °F)]
- FR distillats légers (pétrole), craquage thermique, Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage thermique. Se compose principalement d'hydrocarbures insaturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$ - $C_{22}$  et dont le point d'ébullition est compris approximativement entre 160 °C et 370 °C]
- IT distillati (petrolio), frazioni leggere di cracking termico, Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuti dalla distillazione dei prodotti di un processo di cracking termico. È costituita prevalentemente da idrocarburi insaturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{22}$  e punto di ebollizione nell'intervallo 160 °C - 370 °C ca.]
- NL destillaten (aardolie), licht thermisch gekraakt, Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de producten van een thermisch kraakproces. Bestaat voornamelijk uit onverzadigde koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{22}$ , met een kooktraject van ongeveer 160 °C tot 370 °C]
- PT destilados (petróleo), leves do cracking termico, Gasóleo de "cracking"  
[Uma combinação complexa de hidrocarbonetos da destilação dos produtos de um processo de cracking termico. É constituída predominantemente por hidrocarbonetos insaturados com numeros de atomos de carbono predominantemente na gama de  $C_{10}$  ate  $C_{22}$  e destila no intervalo de aproximadamente 160 °C a 370 °C]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentracion, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 68333-25-5

EEC No 269-781 5

No 649-439-00-5

## NOTA H

- ES destilados (petroleo), fracción ligera hidrodesulfurada craqueada catalíticamente, Gasóleo craqueado  
[Combinación compleja de hidrocarburos obtenida por tratamiento con hidrógeno de destilados ligeros craqueados catalíticamente para transformar el azufre orgánico en sulfuro de hidrógeno que se separa. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_4$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 150 °C a 400 °C. Contiene una proporción relativamente grande de hidrocarburos aromáticos bicíclicos.]
- DA destillater (råolie), hydroafsvovlede lette katalytisk krakkede, Krakket gasolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle lette, katalytisk krakkede destillater med hydrogen for at omdanne organisk svovl til hydrogensulfid, som fjernes. Den består overvejende af carbonhydrider, overvejende  $C_4$  til og med  $C_{11}$ , med koginterval omtrent fra 150 °C til 400 °C. Den indeholder en forholdsvis stor del bicycliske, aromatiske carbonhydrider.]
- DE Destillate (Erdöl), hydrodesulfurierte leichte katalytisch gekrackte, Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln von leichten katalytisch gekrackten Destillaten mit Wasserstoff, um organischen Schwefel in Schwefelwasserstoff zu überführen, der entfernt wird. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_4$  bis  $C_{11}$  und siedet im Bereich von etwa 150 °C bis 400 °C. Enthält eine relativ große Menge bicyclischer aromatischer Kohlenwasserstoffe.]
- EL αποσταγμάτα (πετρελαίου), υδρογονοαποθειωμένα ελαφρά καταλυτικά πυρολυμένα. Πετρελαιο από διάσπαση.  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία ελαφρών καταλυτικά πυρολυμένων αποσταγμάτων με υδρογόνου για να μετατραπεί το οργανικό θείο σε υδρόθειο που απομακρύνεται. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_4$  έως και  $C_{11}$ , και με περιοχή βρασμού από 150 °C έως 400 °C. Περιέχει σχετικά μεγάλη αναλογία δικυκλικών αρωματικών υδρογονανθράκων.]
- EN Distillates (petroleum), hydrodesulfurized light catalytic cracked, Cracked gasoil  
[A complex combination of hydrocarbons obtained by treating light catalytic cracked distillates with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_{11}$ , and boiling in the range of approximately 150 °C to 400 °C (302 °F to 752 °F). It contains a relatively large proportion of bicyclic aromatic hydrocarbons.]
- FR distillats légers (pétrole), craquage catalytique, hydrodesulfuration. Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue en traitant à l'hydrogène des distillats légers de craquage catalytique afin de convertir le soufre organique en hydrogène sulfure, qui est ensuite éliminé. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_4$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 150 °C et 400 °C. Contient une proportion relativement importante d'hydrocarbures aromatiques bicycliques.]
- IT distillati (petrolio), idrodesolforati leggeri crackizzati cataliticamente. Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta trattando con idrogeno distillati leggeri crackizzati cataliticamente per trasformare lo zolfo organico in idrogeno solforato che viene eliminato. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_4$ - $C_{11}$ , e punto di ebollizione nell'intervallo 150 °C - 400 °C ca. Contiene una percentuale relativamente alta di idrocarburi aromatici biciclici.]
- NL destillaten (aardolie), waterstofontzwavelde lichte fractie katalytisch gekraakt, Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van lichte katalytisch gekraakte destillaten met waterstof, om organisch zwavel om te zetten in waterstofsulfide, dat wordt verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_4$  tot en met  $C_{11}$ , met een kooktraject van ongeveer 150 °C tot 400 °C. Bevat een relatief grote hoeveelheid bicyclische aromatische koolwaterstoffen.]
- PT destilados (petróleo), leves do cracking catalítico hidrogenodessulfurizados. Gasóleo de cracking.  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de destilados leves do cracking catalítico com hidrogénio para converter enxofre orgânico em sulfureto de hidrogénio que é removido. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_4$  até  $C_{11}$ , e destila no intervalo de aproximadamente 150 °C até 400 °C. Contem uma proporção relativamente elevada de hidrocarbonetos aromáticos bicíclicos.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="371 463 394 488" data-label="Text">T</div> <div data-bbox="335 512 432 607" data-label="Image"> </div> <div data-bbox="943 512 1023 544" data-label="Text">R : 45</div> <div data-bbox="943 566 1053 598" data-label="Text">S : 53-45</div>
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*Limites de concentration, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 68475-80-9

EEC No 270-662-5

No 649-440-00-0

## NOTA H

- ES : destilados (petróleo), nafta ligera craqueada a vapor ; Gasóleo craqueado  
[Combinación compleja de hidrocarburos de la destilación múltiple de productos de un proceso de craqueo a vapor. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{14}$ .]
- DA : destillater (råolie), let dampkrakket naphtha ; Krakket gasolie  
[En sammensat blanding af carbonhydrider fra den multiple destillation af produkter fra en dampkrakningsproces. Den består af carbonhydrider, overvejende  $C_{10}$  til og med  $C_{14}$ .]
- DE : Destillate (Erdöl), leichte Dampf-gekrackte Naphtha ; Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen aus der multiplen Destillation von Produkten aus einem Dampfkrackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{14}$ .]
- EL : αποσταγμάτα (πετρελαιο), ελαφράς ατμοπυρολυμένης νάφθας ; Πετρέλαιο από διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την πολυβάθμια απόσπαση προϊόντων ατμοπυρόλυσης. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{14}$ .]
- EN : Distillates (petroleum), light steam-cracked naphtha ; Cracked gasoil  
[A complex combination of hydrocarbons from the multiple distillation of products from a steam cracking process. It consists of hydrocarbons having carbon numbers predominant in the range of  $C_{10}$  through  $C_{14}$ .]
- FR : distillats (pétrole), naphtha léger de vapocraquage ; Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation multiple des produits résultant d'un vapocraquage. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$ - $C_{14}$ .]
- IT : distillati (petrolio), frazioni leggere di nafta crackizzata con vapore d'acqua ; Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta dalla distillazione multipla di prodotti provenienti da un processo di cracking catalitico. E costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{14}$ .]
- NL : destillaten (aardolie), lichte stoomgekraakte nafta ; Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen, verkregen uit de meervoudige destillatie van producten uit een stoomkraakproces. Bestaat uit koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{14}$ .]
- PT : destilados (petróleo), nafta leve do steam-cracking ; Gasóleo de « cracking »  
[Uma combinação complexa de hidrocarbonetos da destilação múltipla de produtos de um processo de steam-cracking. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{10}$  ate  $C_{14}$ .]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etikettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentração*


Cas No 68477-38-3

EEC No 270-727-8

No 649-441-00-6

## NOTA H

- ES destilados (petróleo), destilados craqueados de petróleo craqueado a vapor Gasóleo craqueado  
[Combinación compleja de hidrocarburos obtenida por destilación del destilado craqueado, craqueado a vapor y/o sus productos de fraccionamiento Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de C<sub>10</sub> hasta polímeros de bajo peso molecular.]
- DA destillater (råolie), krakkede dampkrakkede råoliedestillater Krakket gasolie  
[En sammensat blanding af carbonhydinder opnået ved at destillere et krakket dampkrakket destillat og/eller dets fraktioneringsprodukter Den består af carbonhydinder, overvejende C<sub>10</sub> til lavmolekylære polymerer.]
- DE Destillate (Erdöl), gekrackte Dampf-gekrackte Erdölestillate, Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Destillation gekrackten Dampf-gekrackten Destillates und/oder seiner Fraktionierungsprodukte Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von C<sub>10</sub> bis zu Polymeren mit niedrigem Molekulargewicht.]
- EL αποσταγμάτα (πετρελαίου), πυρολυμένων ατμοπυρολυμένων αποσταγμάτων πετρελαίου· Πετρέλαιο από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με απόσταξη πυρολυμένου ατμοπυρολυμένου αποστάγματος και/ή των προϊόντων κλασματώσεώς του. Συνίσταται από υδρογονανθρακες με αριθμό ατόμων άνθρακα στην κυρίως περιοχή κυρίως από C<sub>10</sub> έως πολυμερή μικρού μοριακού βάρους.]
- EN Distillates (petroleum), cracked steam-cracked petroleum distillates, Cracked gasoil  
[A complex combination of hydrocarbons produced by distilling cracked steam cracked distillate and/or its fractionation products It consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>10</sub> to low molecular weight polymers.]
- FR distillats (pétrole), distillats pétroliers, vapocraquage puis craquage, Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation d'un distillat ayant subi vapocraquage et craquage et/ou de ses produits de fractionnement. Se compose d'hydrocarbures situés principalement dans une gamme allant de composés en C<sub>10</sub> à des polymères de faible poids moléculaire.]
- IT distillati (petrolio), distillati di « steam cracking » del petrolio crackizzati, Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per distillazione di distillati di steam cracking crackizzati e/o dei suoi prodotti di frazionamento È costituita da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo da C<sub>10</sub> fino a polimeri di basso peso molecolare.]
- NL destillaten (aardolie), gekraakte stoomgekraakte aardoliedestillaten, Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen, verkregen door het destilleren van gekraakt stoomgekraakt destillaat en/of fraktioneringsprodukten daarvan Bestaat uit koolwaterstoffen, overwegend C<sub>10</sub> tot polymeren met klein molecuulgewicht.]
- PT destilados (petróleo), de destilados do cracking do steam-cracking de petróleo Gasóleo de « cracking »  
[Uma combinação complexa de hidrocarbonetos obtida por destilação de destilados do cracking dos produtos do steam-cracking e/ou dos produtos do seu fraccionamento É constituída por hidrocarbonetos com números de carbono predominantemente na gama de C<sub>10</sub> ate polímeros de peso molecular baixo.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentracion, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 6852-18-4

EEC No 271-260-2

No 649-442-00-1

NOTA H

- ES gasoleos (petroleo), craqueado a vapor Gasóleo craqueado  
[Combinación compleja de hidrocarburos producida por destilación de los productos de un proceso de craqueo a vapor. Compuesta de hidrocarburos con un número de carbonos en su mayor parte superior a C<sub>4</sub> y con un intervalo de ebullición aproximado de 205 °C a 400 °C]
- DA gasolier (råolie), dampkrakkede Krakket gasolie  
[En sammensat blanding af carbonhydinder fremstillet ved destillationen af produkterne fra en dampkrakningsproces. Den består af carbonhydridier, overvejende større end C<sub>4</sub>, med koginterval omtrent fra 205 °C til 400 °C]
- DE Gase (Erdöl), Dampf-gekrackt Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Dampfkrackverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als C<sub>4</sub> und siedet im Bereich von etwa 205 °C bis 400 °C]
- EL ακαθαρτα πετρελαια (πετρελαιου), ατμοπυρολυμένα: Πετρέλαιο από διάσπαση  
[Πολυπλόκος συνδυασμός υδρογονανθράκων που παραγεται με απόσπαση των προϊόντων ατμοπυρόλυσης. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από C<sub>4</sub> και βράζει στην περιοχή από 205 °C έως 400 °C περίπου]
- EN Gas oils (petroleum), steam-cracked Cracked gasoil  
[A complex combination of hydrocarbons produced by distillation of the products from a steam cracking process. It consists of hydrocarbons having carbon numbers predominantly greater than C<sub>4</sub> and boiling in the range of from approximately 205 °C to 400 °C (400 °F to 752 °F)]
- FR gazoles de vapocraquage (petrole), Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits resultant d'un vapocraque. Se compose d'hydrocarbures dont le nombre de carbones est en majorite superieur a C<sub>4</sub> et dont le point d'ébullition est compris approximativement entre 205 °C et 400 °C]
- IT gasoli (petrolio), crackizzati con vapore d'acqua Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per distillazione di prodotti provenienti da un processo di cracking con vapore d'acqua. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente superiore a C<sub>4</sub> e punto di ebollizione nell'intervallo 205 °C - 400 °C ca.]
- NL gasoliën (aardolie), stoomgekraakt, Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen, verkregen uit de destillatie van producten van een stroomkraakproces. Bestaat uit koolwaterstoffen, overwegend groter dan C<sub>4</sub>, met een kooktraject van ongeveer 205 °C tot 400 °C]
- PT gasoleos (petróleo), do steam-cracking Gasóleo de "cracking"  
[Uma combinação complexa de hidrocarbonetos produzida por destilação dos produtos de um processo de steam-cracking. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente superiores a C<sub>4</sub>, e destila no intervalo de aproximadamente 205 °C a 400 °C]

*Clasificación Klassificering, Einstufung Ταξινόμηση Classification, Classification, Classificazione Indeling Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*




Cas No 85116-53-6

EEC No 285-505-6

No 649-443-00-7

## NOTA H

- ES destilados (petróleo), fracción intermedia hidrodesulfurada craqueada termicamente Gasóleo craqueado  
[Combinación compleja de hidrocarburos obtenida por el fraccionamiento de reservas de destilado hidrodesulfurado del craqueador termico. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{21}$ , y con un intervalo de ebullición aproximado de 205 °C a 400 °C]
- DA destillater (råolie), hydroafsvovlede termisk krakkede middeltunge, Krakket gasolie  
[En sammensat blandning af carbonhydrier opnaet ved fraktionering fra hydroafsvovlet, termiske krakkede destillatråstoffer. Den består overvejende af carbonhydrier, overvejende  $C_{11}$  til  $C_{21}$ , med koginterval omtrent fra 205 °C til 400 °C]
- DE Destillate (Erdöl), hydrodesulfurierte thermisch gekrackte mittlere Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Fraktionierung aus hydrodesulfurierten thermisch gekrackten Destillatausgangsstoffen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{21}$ , und siedet im Bereich von etwa 205 °C bis 400 °C]
- EL αποσταγμάτα (πετρελαίου), υδρογονοαποθειωμένα θερμικά πυρολυμένα μεσαία Πετρελαιο από διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κλασμάτωση από αποθέματα υδρογονοαποθειωμένων αποσταγμάτων θερμικής πυρόλυσης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως  $C_{21}$ , και βράζει στην περιοχή από 205 °C έως 400 °C περίπου]
- EN Distillates (petroleum), hydrodesulfurized thermal cracked middle, Cracked gasoil  
[A complex combination of hydrocarbons obtained by fractionation from hydrodesulfurized thermal cracker distillate stocks. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  to  $C_{21}$ , and boiling in the range of approximately 205 °C to 400 °C (401 °F to 752 °F)]
- FR distillats moyens (pétrole), craquage thermique, hydrodésulfuration, Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement à partir d'une charge de distillats de craquage thermique hydrodesulfurés. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{21}$ , et dont le point d'ébullition est compris approximativement entre 205 °C et 400 °C]
- IT distillati (petrolio), intermedi crackizzati termicamente idrodesolforati Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per frazionamento di stock di distillo da cracker termico idrodesolforato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{21}$ , e punto di ebollizione nell'intervallo 205 °C-400 °C ca.]
- NL destillaten (aardolie), met waterstof ontzwavelde thermisch gekraakte middenfractie Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen verkregen door fractionering van met waterstof ontzwavelde thermische kraker destillaatgrondstoffen. Het bestaat voornamelijk uit koolwaterstoffen  $C_{11}$  tot  $C_{21}$ , met een kooktraject van ongeveer 205 °C tot 400 °C]
- PT destilados (petróleo), medios do cracking termico hidrogenodesulfurizados Gasóleo de "cracking"  
[Uma combinação complexa de hidrocarbonetos obtida por fraccionamento de destilados hidrogenodesulfurizados do cracking termico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{21}$ , e destila no intervalo de aproximadamente 205 °C a 400 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 92045-29-9

EEC No 295-411-7

No 649-444-00-2

NOTA H

- ES gasoleos (petroleo), craqueados termicamente, hidrodeshulfurados Gasoleos craqueado
- DA gasolie (råolie), termisk krakkende, hydrogenafsvovlede Krakket gasolie
- DE Gasole (Erdöl), thermisch gekrackt, hydrosulfuriert, Krackgasöl
- EL ακαθάρτα πετρελαιο (πετρελαίου), θερμικώς πυρολυμένα, υδρογονοαποθειωμένα Πετρέλαιο από διάσπαση
- EN Gas oils (petroleum), thermal-cracked, hydrosulfurized Cracked gasoil
- FR gasoil (pétrole), craquage thermique, hydrodésulfurisé Gazole de craquage
- IT olii da gas (petrolio), crackizzati termicamente, idrodessolforati Gasolio da cracking
- NL gasoliën (aardolie), thermisch gekraakt, met water onttwamd Gekraakte gasolie
- PT gasoleos (petróleo), do cracking termico, hidrogenodessulfurizados Gasóleo de "cracking"

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken Rotulagem*

T	
	R 45
	S 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92062-00-5

EEC No 295-514-7

No 649-445-00-8


NOTA H

- ES** residuos (petróleo), nafta craqueada a vapor hidrogenada Gasóleo craqueado  
[Combinación compleja de hidrocarburos obtenida como una fracción residual de la destilación de nafta craqueada a vapor tratada con hidrógeno. Compuesta en su mayor parte de hidrocarburos con un intervalo de ebullición aproximado de 200 °C a 350 °C]
- DA** rester (råolie), hydrogeneret dampkrakket naphtha Krakket gasolie  
[En sammensat blanding af carbonhydrider opnået som en restfraktion fra destillation en af hydrogenbehandlet dampkrakket naphtha. Den består overvejende af carbonhydrider med koginterval omtrent fra 200 °C til 350 °C]
- DE** Rückstände (Erdöl), hydrierte dampfgecrackte Naphtha Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Rückstandsfraction aus der Destillation von mit Wasserstoff behandelter dampfgecrackter Naphtha erhält. Besteht vorherrschend aus Kohlenwasserstoffen und siedet im Bereich von etwa 200 °C bis 350 °C.]
- EL** υπολείμματα (πετρελαίου), υδρογονωμένης ναφθας ατμοπυρολυμένης Πετρέλαιο από διάσπαση  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται ως υπολειμματικό κλάσμα από απόσπαξη ατμοπυρολυμένης ναφθας που έχει υποστεί κατεργασία με υδρογόνο. Συνίσταται κυρίως από υδρογονάνθρακες που βράζουν στην περιοχή από 200° C έως 350° C περίπου.]
- EN** Residues (petroleum), hydrogenated steam-cracked naphtha , Cracked gasoil  
[A complex combination of hydrocarbons obtained as a residual fraction from the distillation of hydrotreated steam-cracked naphtha. It consists predominantly of hydrocarbons boiling in the range of approximately 200 °C to 350 °C (32 °F to 662 °F)]
- FR** résidu (pétrole), naphtha de vapocraquage hydrogéné , Gazole de craquage  
[Combinaison complexe d'hydrocarbures produite comme fraction résiduelle dans la distillation de naphtha de vapocraquage hydro-traité. Se compose principalement d'hydrocarbures dont le point d'ébullition est compris approximativement entre 200 °C et 350 °C.]
- IT** residui (petrolio), nafta crackizzata con vapore idrogenata , Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuto come frazione residua della distillazione di nafta crackizzata con vapore e sottoposta ad hydrotreating. È costituita prevalentemente da idrocarburi e con punto di ebollizione nell'intervallo 200 °C-350 °C ca]
- NL** residuen (aardolie), gehydrogeneerde met stoom gekraakte nafta- , Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een residufractie uit de destillatie van met waterstof behandelde met stoom gekraakte nafta. Bestaat voornamelijk uit koolwaterstoffen, met een kooktraject van ongeveer 200 °C tot 350 °C]
- PT** residuos (petróleo), da nafta do steam-cracking hidrogenada , Gasóleo de « cracking »  
[Uma combinação complexa de hidrocarbonetos obtida como uma fracção da destilação da nafta do steam-cracking hidrogenada. É constituída predominantemente por hidrocarbonetos que destilam no intervalo de aproximadamente 200 °C a 350 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification Classification Classificazione Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92062-04-9

EEC No 295-517-3

No 649-446-00-3

## NOTA H

- ES** residuos (petroleo), destilacion de nafta craqueada a vapor Gasóleo craqueado  
[Combinacion compleja de hidrocarburos obtenida como un residuo del fondo de la columna de la separacion de efluentes del craqueo a vapor de nafta a elevada temperatura. Con un intervalo de ebullicion aproximado de 147 °C a 300 °C, y produce un aceite final con una viscosidad de 18cSt a 50 °C]
- DA** rester (råolie), dampkrakkede naphthadestillations- krakket gasolie  
[En sammensat blanding af carbonhydrier opnaet som en kolonnebundfraktion fra separationen af udløb fra dampkrakning af naphtha ved høj temperatur. Den har kogesinterval omtrent fra 147°C til 300°C, og danner en færdig olie med en viskositet på 18cSt ved 50 °C]
- DE** Rückstände (Erdöl), dampfgecrackte Naphthadestillation Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Kolonnenbodenlauf aus der Abtrennung von Ausflüssen aus dampfgecrackter Naphtha bei einer hohen Temperatur erhält. Siedet im Bereich von etwa 147 °C bis 300 °C und ergibt ein Fertigöl mit einer Viskosität von 18 cSt bei 50 °C]
- EL** υπολείμματα (πετρελαίου), απόσταξης ατμοπυρολυμένης ναφθας: Πετρέλαιο από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται ως προϊόν πυθμένα στηλης από τον διαχωρισμό των εκροών από ατμοπύρωση ναφθας σε υψηλή θερμοκρασία. Βράζει στην περιοχή από 147° C έως 300° C περίπου και παράγει τελικό έλαιο με ιξώδες 18cSt σε 50 °C]
- EN** Residues (petroleum), steam-cracked naphtha distn., Cracked gasoil  
[A complex combination of hydrocarbons obtained as a column bottom from the separation of effluents from steam cracking naphtha at a high temperature. It boils in the range of approximately 147 °C to 300 °C (297 °F to 572 °F) and produces a finished oil having a viscosity of 18cSt at 50 °C]
- FR** résidus de distillation (pétrole), vapocraquage de naphtha Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue en fond de colonne lors de la separation des effluents de vapocraquage du naphtha à haute température. Son point d'ébullition est compris approximativement entre 147 °C et 300 °C, et elle donne une huile-produit fini de viscosité égale à 18 cSt à 50 °C]
- IT** residui (petrolio), distillazione di nafta da cracking con vapore Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta come fondo di colonna della separazione di effluenti da nafta da cracking con vapore ad alta temperatura. Bolle nell'intervallo 147°C - 300°C ca. e produce un olio finito con viscosità di 18cSt a 50 °C]
- NL** residuen (aardolie), stoomgekraakte naftadestillatie Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een kolombodemfractie uit de scheiding van uitstromen uit het stoomkraken van nafta bij hoge temperatuur. Heeft een kooktraject van ongeveer 147 °C tot 300 °C en vormt een voltooide olie met een viscositeit van 18 cSt bij 50 °C]
- PT** resíduos (petróleo), de destilação da nafta do steam-cracking, Gasóleo de -cracking-  
[Uma combinação complexa de hidrocarbonetos obtida como um produto de cauda da separação de efluentes do steam-cracking da nafta a temperatura elevada. Destila no intervalo de aproximadamente 147 °C a 300 °C]

*Classificacão, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiōn, Classificaziōne, Indeling, Classificacão*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="373 465 395 490" data-label="Text">T</div> <div data-bbox="336 512 432 607" data-label="Image"> </div> <div data-bbox="944 515 1023 542" data-label="Text">R : 45</div> <div data-bbox="944 566 1053 593" data-label="Text">S : 53-45</div>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 92201-60-0

EEC No 295-991-1

No 649-447-00-9

NOTA H

- ES destilados (petroleo), fraccion ligera craqueada cataliticamente, degradada termicamente Gasoleo craqueado  
[Combinacion compleja de hidrocarburos producida por la destilacion de productos de un proceso de craqueo catalitico que se han utilizado como fluido de transferencia de calor Compuesta en su mayor parte de hidrocarburos con un intervalo de ebullicion aproximado de 190 °C a 340 °C Esta corriente es probable que contenga compuestos organicos de azufre]
- DA destillater (råolie), lette katalytisk krakkede, termisk nedbrudte Krakket gasolie  
[En sammensat blanding af carbonhydrier fremstillet ved destillation af produkterne fra en katalytisk krakningsproces, der har været brugt som en varmeoverførselsvæske Den består overvejende af carbonhydrier med kogepunkt omtrent fra 190 °C til 340 °C Denne strøm indeholder sandsynligvis organiske svovforbindelser]
- DE Destillate (Erdöl), leichte katalytisch gekrackte, thermisch abgebaut Krackgsöl  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Destillation von Produkten aus einem katalytischen Crackverfahren, das als Wärmetransfer-Flüssigkeit benutzt wurde Besteht vorherrschend aus Kohlenwasserstoffen und siedet im Bereich von etwa 190 °C bis 340 °C Dieser Laut enthält wahrscheinlich organische Schwefelverbindungen]
- EL αποσταγματα (πετρελαίου), ελαφρά καταλυτικά, θερμικώς υποβαθμισμένα Πετρέλαιο απο διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παράγεται με την απόσπαση προϊόντων καταλυτικής πυρόλυσης και οποία έχουν χρησιμοποιηθεί σαν ρευστό μέσο μεταφοράς θερμότητας. Συνίσταται κυρίως από υδρογονάνθρακες με περιοχή βρασμού από 190 °C έως 340 °C περίπου. Το ρευστό αυτό είναι πιθανό να περιέχει οργανικές ενώσεις θείου]
- EN Distillates (petroleum), light catalytic cracked, thermally degraded Cracked gasoil  
[A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process which has been used as a heat transfer fluid It consists predominantly of hydrocarbons boiling in the range of approximately 190 °C to 340 °C (374 °F to 644 °F) This stream is likely to contain organic sulfur compounds.]
- FR distillats légers (petrole), craquage catalytique, dégradation thermique, Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un craquage catalytique, et qui a été utilisée comme fluide caloporteur Se compose principalement d'hydrocarbures dont le point d'ébullition est compris approximativement entre 190 °C et 340 °C Peut contenir des composés organiques soufrés.]
- IT distillati (petrolio), leggeri da cracking catalitico, degradati termicamente Gasolio da cracking  
[Combinazione complessa di idrocarburi prodotta dalla distillazione di prodotti da un processo di cracking catalitico che è stato usato come fluido di scambio di calore È costituita prevalentemente da idrocarburi con punto di ebollizione nell'intervallo 190 °C-340 °C ca. Questa corrente può contenere probabilmente composti organici dello zolfo]
- NL destillaten (aardolie), katalytisch gekraakte lichte fracties, thermisch gedisintegreerd Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de destillatie van producten uit een katalytisch kraakproces en die is gebruikt als een warmte-overdrachtsvloeistof Bestaat voornamelijk uit koolwaterstoffen met een kooktraject van ongeveer 190 °C tot 340 °C Deze stroom bevat waarschijnlijk organische zwavelverbindingen]
- PT: destilados (petroleo), leves do cracking catalítico, degradados termicamente Gasoleo de cracking  
[Uma combinação complexa de hidrocarbonetos produzida pela destilação de produtos de um processo de cracking catalítico que foi usada como fluido térmico É constituída predominantemente por hidrocarbonetos que destilam no intervalo de aproximadamente 190 °C a 340 °C Esta fracção geralmente contém compostos organicos de enxofre]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 93763-85-0

EEC No 297-905-8

No 649-448-00-4

## NOTA H

- ES residuos (petróleo), nafta saturada con calor craqueada a vapor , Gasóleo craquedo  
[Combinación compleja de hidrocarburos obtenida como residuo de la destilación de nafta saturada con calor craqueada a vapor y con un intervalo de ebullición aproximado de 150 °C a 350 °C.]
- DA rester (råolie), dampkrakket varemeudblødt naphtha , Krakket gasolie  
[En sammensat blanding af carbonhydrier, opnået som rest fra destillationen af dampkrakket varmeudblødt naphtha, med koges-interval omtrent fra 150 °C til 350 °C.]
- DE Rückstände (Erdöl), dampfgekrackt Wärme-Soaker Naphtha , Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Rückstand aus der Destillation von dampfgekrackter Naphtha aus dem Wärme-Soaker erhält und im Bereich von etwa 150 °C bis 350 °C siedet.]
- EL υπολείμματα (πετρελαίου), παρατεταμένης θέρμανσης ατμοπυρολυμένης ναφθας. Πετρέλαιο από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν υπόλειμμα από την απόσπαση παρατεταμένης θέρμανσης ατμοπυρολυμένης νάφθας και περιοχή βρασμού από 150° C έως 350° C περίπου.]
- EN Residues (petroleum), steam-cracked heat-soaked naphtha , Cracked gasoil  
[A complex combination of hydrocarbons obtained as residue from the distillation of steam cracked heat soaked naphtha and boiling in the range of approximately 150 °C to 350 °C (302 °F to 662 °F)]
- FR résidus (pétrole), naphtha de vapocraquage, maturation , Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue comme résidu de la distillation de naphtha de vapocraquage ayant subi une maturation, et dont le point d'ébullition est compris approximativement entre 150 °C et 350 °C.]
- IT residui (petrolio), nafta da immersione di calore (« heat soaking ») e cracking con vapore , Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta come residuo della distillazione di nafta da immersione di calore (« heat soaking ») e cracking con vapore e con punto di ebollizione nell'intervallo 150 °C-350 °C ca.]
- NL residuen (aardolie), stoomgekraakte uitputtend verhitte nafta , Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als residu uit de destillatie van stoomgekraakte uitputtend verhitte nafta, met een kooktraject van ongeveer 150 °C tot 350 °C.]
- PT residuos (petróleo), de nafta aquecida do steam-cracking , Gasóleo de « cracking »  
[Uma combinação complexa de hidrocarbonetos obtida como com residuo da destilação dos produtos de nafta aquecida do steam-cracking e que destila no intervalo de aproximadamente de 150 °C até 350 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97675-88-2

EEC No 307-662-2

No 649-449-00-X

## NOTA H

- ES** hidrocarburos,  $C_{14-20}$ , residuo de destilación parafínico hidrocraqueado desparafinado con disolvente Gasóleo craqueado  
[Combinación compleja de hidrocarburos obtenida por desparafinación con disolvente de un residuo de destilación de un destilado parafínico hidrocraqueado. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{20}$  y con un intervalo de ebullición aproximado de 360 °C a 500 °C. Produce un aceite final con una viscosidad de 4,5 cSt a aproximadamente 100 °C.]
- DA** carbonhydrider,  $C_{14-20}$ , solvent-afvokset hydrokrakket paraffindestillationsrest Krakket gasolie  
[En sammensat blanding af carbonhydrider opnået ved solventafvoksning af en destillationsrest fra et hydrokrakket paraffindestillat. Den består overvejende af carbonhydrider, overvejende fra  $C_{14}$  til og med  $C_{20}$ , med kogesinterval omtrent fra 360 °C til 500 °C. Den danner en færdig olie med en viskositet på 4,5 cSt ved omtrent 100 °C.]
- DE** Kohlenwasserstoffe,  $C_{14-20}$  durch Lösungsmittel entwachst hydrogekrackt paraffinhaltig Destillationsrückstand Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Entwachsen eines Destillationsrückstandes aus hydrogekracktem paraffinhaltigen Destillat durch Lösungsmittel erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{20}$  und siedet im Bereich von etwa 360 °C bis 500 °C. Ergibt ein Fertigöl mit einer Viskosität von 4,5 cSt bei etwa 100 °C.]
- EL** υδρογονάνθρακες,  $C_{14-20}$ , αποκηρωμένου με διαλύτη υδρογονοπυρλυμένου παραφινικού υπολειμματος απόσταξης Πετρέλαιο υπό διασπασή  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από την αποκήρωση με διαλύτη υπολειμματος απόσταξης υδρογονοπυρλυμένου παραφινικού αποσταγματος. Συνίσταται κυρίως από υδρογονανθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  έως και  $C_{20}$  και με περιοχή θρασμού από 360 °C έως 500 °C περίπου. Παράγει έτοιμο έλαιο που έχει ισχύος 4,5 cSt στους 100 °C.]
- EN** Hydrocarbons,  $C_{14-20}$ , solvent-dewaxed hydrocracked paraffinic distn. residue, Cracked gasoil  
[A complex combination of hydrocarbons obtained by solvent dewaxing of a distillation residue from a hydrocracked paraffinic distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{20}$  and boiling in the range of approximately 360 °C to 500 °C (680 °F to 932 °F). It produces a finished oil having a viscosity of 4,5 cSt at approximately 100 °C (212 °F).]
- FR** hydrocarbures en  $C_{14-20}$ , résidu de distillation paraffinique, hydrocraquage et déparaffinage au solvant Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par déparaffinage au solvant d'un résidu de distillation issu d'un distillat paraffinique ayant subi un hydrocraquage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{14}$ - $C_{20}$  et dont le point d'ébullition est compris approximativement entre 360 °C et 500 °C, donne une huile-produit fini de viscosité égale à 4,5 cSt à environ 100 °C.]
- IT** idrocarburi,  $C_{14-20}$ , residuo della distillazione di paraffine da idrocracking decerati con solvente Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per decerazione con solvente di un residuo della distillazione da un distillato paraffinico da idrocracking. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ - $C_{20}$  e con intervallo di ebollizione 360 °C-500 °C ca. Produce un olio finito avente viscosità di 4,5 cSt a 100 °C.]
- NL** koolwaterstoffen,  $C_{14-20}$ , met solvent van was ontdaan waterstofgekraakt paraffinisch destillatieresidu Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het met solvent van was ontdoen van een waterstofgekraakt paraffinisch destillaat. Bestaat voornamelijk uit koolwaterstoffen overgaand  $C_{14}$  tot en met  $C_{20}$  met een kooktraject van ongeveer 360 °C tot 500 °C. Het vormt een voltooide olie met een viscositeit van 4,5 cSt bij ongeveer 100 °C.]
- PT** hidrocarbonetos,  $C_{14-20}$ , residuo da destilação de destilado parafínico do hidrocracking desparafinado com solvente Gasóleo de cracking  
[Uma combinação complexa de hidrocarbonetos obtida por desparafinação com solvente de um residuo da destilação do produto do hidrocracking de um destilado parafínico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{14}$  até  $C_{20}$  e destila no intervalo de aproximadamente 360 °C a 500 °C. Produz um óleo acabado com uma viscosidade de 4,5 cSt a aproximadamente 100 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 3, R 40

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xn	
	R : 40
	S : (2-) 36/37

*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 97926-59-5

EEC No 308-278-8

No 649-450-00-5

## NOTA H

- ES gasoleos (petróleo), fracción ligera obtenida a vacío, hidrodesulfurada craqueada termicamente, Gasóleo craqueado  
[Combinación compleja de hidrocarburos obtenida por deshidrosulfuración catalítica de petróleo ligero obtenida a vacío craqueado termicamente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{30}$  y con un intervalo aproximado de 270 °C a 370 °C]
- DA gasolier (råolie), lette vakuum-, termisk-krakkede hydroafsvovlede Krakket gasolie  
[En sammensat blanding af carbonhydrider opnået ved katalytisk hydroafsvovling af termisk-krakket let vakuumråolie. Den består overvejende af carbonhydrider, overvejende  $C_{14}$  til og med  $C_{30}$ , med kogesinterval omtrent fra 270 °C til 370 °C]
- DE Gasöl (Erdöl), leichte Vakuum, thermisch gekrackt hydrodesulfuriert Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch katalytische Dehydrosulfurierung von thermisch gekracktem leichten Vakuum-Erdöl erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{30}$  und siedet im Bereich von etwa 270 °C bis 370 °C]
- EL ακαθαρτο πετρέλαιο (πετρελαιο), ελαφρό κενού, υδρογονοαποθειωμένο θερμικά πυρολυμένο. Πετρέλαιο από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με καταλυτική υδρογονοαποθείωση θερμικά πυρολυμένου ελαφρού πετρελαιο κενού. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  έως και  $C_{30}$  και με περιοχή θρασμού από 270 °C έως 370 °C περίπου]
- EN Gas oils (petroleum), light vacuum, thermal-cracked hydrodesulfurized Cracked gasoil  
[A complex combination of hydrocarbons obtained by catalytic dehydrosulfurization of thermal-cracked light vacuum petroleum. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{30}$  and boiling in the range of approximately 270 °C to 370 °C (518 °F to 698 °F)]
- FR gazoles légers sous vide (pétrole), hydrodésulfuration et craquage thermique, Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par hydrodésulfuration catalytique de gazole pétrolier léger sous vide ayant subi un craquage thermique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{14}$ - $C_{30}$  et dont le point d'ébullition est compris approximativement entre 270 °C et 370 °C]
- IT gasoli (petrolio), leggeri sotto vuoto, idrodesolforati crackizzati termicamente, Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per idrodesolfurazione catalitica di petrolio leggero crackizzato termicamente sotto vuoto. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ - $C_{30}$  e punto di ebollizione nell'intervallo 270 °C-370 °C ca.]
- NL gasolien (aardolie), lichte vacuum-, thermisch gekraakt met waterstof ontwaveld, Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door katalytische verwijdering van zwavelwaterstofgroepen uit thermisch gekraakte lichte vacuum aardoliefracties. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{14}$  tot en met  $C_{30}$ , met een kooktraject van ongeveer 270 °C tot 370 °C]
- PT gasoleos (petróleo), leves de vacío, do cracking térmico hidrogenodessulfurizados, Gasóleo de cracking  
[Uma combinação complexa de hidrocarbonetos obtida por hidrogenossulfuração catalítica de gasóleo leve de vacío do cracking térmico. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{14}$  até  $C_{30}$  e destila no intervalo de aproximadamente 270 °C a 370 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 101316-59-0

EEC No 309-865-1

No 649-451-00-0

## NOTA H

- ES:** destilados (petroleo), fracción intermedia del coquizador hidrodesulfurada, Gasóleo craqueado  
[Combinación compleja de hidrocarburos obtenida por fraccionamiento de reservas del destilado del coquizador hidrodesulfurado. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo  $C_{12}$  a  $C_{21}$  y con un intervalo de ebullición aproximado de 200 °C a 360 °C]
- DA:** destillater (råolie), hydroafsvovlede middeltinge coker-, Krakket gasolie  
[En sammensat blanding af carbonhydrier opnået ved fraktionering fra hydroafsvovlede coker-destillat råstoffer. Den består overvejende af carbonhydrier, overvejende  $C_{12}$  til og med  $C_{21}$ , med koginterval omtrent fra 200 °C til 360 °C]
- DE:** Destillate (Erdöl), hydrodesulfurierte mittlere Verkoker-, Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Fraktionieren aus hydrodesulfurierten Verkokerdestillatausgangsstoffen erhält. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{12}$  bis  $C_{21}$  und siedet im Bereich von etwa 200 °C bis 360 °C]
- EL:** αποσταγμάτα (πετρελαίου), αποθειωμένα με υδρογόνο, μεσαία, από μονάδα εξανθράκωσης. Πετρέλαιο από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κλασμάτωση αποθειωμένου με υδρογόνο αποσταγματος υλικών μονάδας εξανθράκωσης. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{12}$  έως και  $C_{21}$  και με περιοχή θρασμού από 200° C έως 360° C περίπου]
- EN:** Distillates (petroleum), hydrodesulfurized middle coker-, Cracked gasoil  
[A complex combination of hydrocarbons by fractionation from hydrodesulfurised coker distillate stocks. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{12}$  through  $C_{21}$  and boiling in the range of approximately 200 °C to 360 °C (392 °F to 680 °F)]
- FR:** distillats moyens de cokéfaction (pétrole), hydrodésulfurés, Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par fractionnement à partir de charges de distillat de cokéfaction hydrodesulfurées. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{12}$ - $C_{21}$ , et dont le point d'ébullition est compris approximativement entre 200 °C et 360 °C]
- IT:** distillati (petrolio), idrodesolforati intermedi da coker-, Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per frazionamento di stocks di distillato idrodesolforato da coker-. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{12}$ - $C_{21}$  e punto di ebollizione nell'intervallo 200 °C-360 °C ca]
- NL:** destillaten (aardolie), met waterstof ontzwaveld middelste verkookser-, Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door fractionering van met waterstof ontzwavelde verkookserdestillaatuitgangsstoffen. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{12}$  tot en met  $C_{21}$ , met een kooktraject van ongeveer 200 °C tot 360 °C]
- PT:** destilados (petróleo), do coker medios hidrogenodessulfurizados, Gasóleo de c cracking  
[Uma combinação complexa de hidrocarbonetos obtida por fraccionamento de destilados do coker hidrogenodessulfurizados. É constituída por hidrocarbonetos com número de átomos de carbono predominantemente na gama de  $C_{12}$  até  $C_{21}$ , e destila no intervalo de aproximadamente 200 °C a 360 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101631-14-5

EEC No 309-939-3

No 649-452-00-6


## NOTA H

- ES:** destilados (petroleo), fraccion pesada craqueda a vapor; Gasóleo craquedo  
[Combinacion compleja de hidrocarburos obtenida por destilación de residuos pesados de craqueo a vapor. Compuesta en su mayor parte de hidrocarburos aromaticos pesados muy alquilados con un intervalo de ebullicion aproximado de 250 °C a 400 °C]
- DA:** destillater (råolie), tunge dampkrakkede, Krakket gasolie  
[En sammensat blanding af carbonhydrier opnået ved dampkrakkede tunge rester. Den består overvejende af polyalkylerede tunge aromatiske carbonhydrier, med koginterval omtrent fra 250 °C til 400 °C]
- DE:** Destillate (Erdöl), schwere dampfgekrackte, Krackgasöl  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Destillation von dampfgekrackten schweren Rückständen erhält. Besteht vorherrschend aus hoch alkylierten schweren aromatischen Kohlenwasserstoffen und siedet im Bereich von etwa 250 °C bis 400 °C]
- EL:** αποσταγμάτα (πετρελαίου), βαριά ατμοπυρολυμένα· Πετρέλαιο από διάσπαση  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με απόσπαξη βαρέων υπολειμμάτων ατμοπυρόλυσης με ατμό. Συνίσταται κυρίως από βαρείς αλκυλιωμένους αρωματικούς υδρογονάνθρακες με περιοχή βρασμού από 250° C έως 400° C περίπου]
- EN:** Distillates (petroleum), heavy steam-cracked, Cracked gasoil  
[A complex combination of hydrocarbons obtained by distillation of steam cracking heavy residues. It consists predominantly of highly alkylated heavy aromatic hydrocarbons boiling in the range of approximately 250 °C to 400 °C (482 °F to 752 °F)]
- FR:** distillats lourds (pétrole), vapocraquage, Gazole de craquage  
[Combinaison complexe d'hydrocarbures obtenue par distillation de résidus lourds de vapocraquage. Se compose principalement d'hydrocarbures aromatiques lourds très alkylés dont le point d'ébullition est compris approximativement entre 250 °C et 400 °C]
- IT:** distillati (petrolio), pesanti crackizzati con vapore; Gasolio da cracking  
[Combinazione complessa di idrocarburi ottenuta per distillazione di residui pesanti da cracking con vapore. È costituita prevalentemente da idrocarburi aromatici pesanti altamente alchilati con punto di ebollizione nell'intervallo 250 °C-400 °C ca.]
- NL:** destillaten (aardolie), zware stoomgekraakte; Gekraakte gasolie  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door destillatie van stoomgekraakte zware residuen. Bestaat voornamelijk uit in hoge mate gealkyleerde zware aromatische koolwaterstoffen, met een kooktraject van ongeveer 250 °C tot 400 °C]
- PT:** destilados (petroleo), de residuos pesados do steam-cracking, Gasóleo de « cracking »  
[Uma combinação complexa de hidrocarbonetos obtida por destilação de resíduos pesados do steam-cracking. É constituída predominantemente por hidrocarbonetos aromaticos pesados com grau de alquilação elevado e destila no intervalo de aproximadamente 250 °C a 400 °C]

*Classificação, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-76-0

EEC No 265-077-7

No 649-453-00-1

NOTA H

NOTA L

- ES** destilados (petroleo), fracción pesada hidrocracuada ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos de la destilación de los productos de un proceso de hidrocrackeo. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos dentro del intervalo de  $C_{11}$  a  $C_{16}$ , y con un intervalo de ebullición aproximado de 260 °C a 600 °C]
- DA** destillater (råolie), tunge hydrokrakkede , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider fra destillation af produkterne fra en hydrokrakningsproces. Den består overvejende af mættede carbonhydrider,  $C_{11}$ - $C_{16}$ , med koginterval omtrent fra 260 °C til 600 °C]
- DE** Destillate (Erdöl), schwere hydrogekrackte , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen aus der Destillation von Produkten aus einem Hydrokrackverfahren. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_{11}$  bis  $C_{16}$  und siedet im Bereich von etwa 260 °C bis 600 °C]
- EL** αποσταγμάτα (πετρελαιο), βαριά υδρογονοπυρλούμενα. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων από την απόσταξη των προϊόντων υδρογονοπυρόλυσης. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{16}$  και με περιχή θραύσμου από 260° C έως 600° C περίπου]
- EN** Distillates (petroleum), heavy hydrocracked , Baseoil — unspecified  
[A complex combination of hydrocarbons from the distillation of the products from a hydrocracking process. It consists predominantly of saturated hydrocarbons having carbon numbers in the range of  $C_{11}$ - $C_{16}$  and boiling in the range of approximately 260 °C to 600 °C (500 °F to 1112 °F)]
- FR** distillats lourds (petrole), hydrocraquage , Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par distillation des produits résultant d'un hydrocraquage. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{16}$  et dont le point d'ébullition est compris approximativement entre 260 °C et 600 °C]
- IT** : distillati (petrolio), frazioni pesanti di idrocracking , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuti dalla distillazione dei prodotti di un processo di idrocracking. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio nell'intervallo  $C_{11}$ - $C_{16}$ , e punto di ebollizione nell'intervallo 260 °C -600 °C ca.]
- NL** . destillaten (aardolie), zwaar waterstofgekraakt , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door destillatie van de produkten van een waterstofkraakproces. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_{11}$ - $C_{16}$ , met een kooktraject van ongeveer 260 °C tot 600 °C]
- PT** destilados (petroleo), pesados do hidrocracking ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos da destilação dos produtos de um processo de hidrocracking. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono na gama de  $C_{11}$  até  $C_{16}$ , e destila no intervalo de aproximadamente 260 °C a 600 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 64741-88-4

EEC No 265-090-8

No 649-454-00-7

NOTA H

NOTA L

- ES** destilados (petróleo), fracción parafínica pesada con disolvente, Aceite de base, sin especificar  
{Combinación compleja de hidrocarburos obtenida como el refinado de un proceso de extracción con disolvente. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 19cSt a 40 °C (100 SUS a 100 °F)}
- DA** destillater (råolie), solventraffinerede tunge paraffin-, Uspecificeret baseolie  
{En sammensat blanding af carbonhydrier opnået som raffinatet fra en solventekstraktionsproces. Den består overvejende af mættede carbonhydrier, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C}
- DE** Destillate (Erdöl), Lösungsmittel-aufbereitete schwere paraffinhaltige, Grundöl — nicht spezifiziert  
{Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Lösungsmittelextraktionsverfahren. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19 cSt bei 40 °C}
- EL** αποστάγματα (πετρελαίου), βαρέα παραφινικά εξευγενισμένα με διαλύτη Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
{Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται σαν εκχυλισμένο προϊόν εκχύλισης με διαλύτη. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C}
- EN** Distillates (petroleum), solvent-refined heavy paraffinic, Baseoil — unspecified  
{A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C)}
- FR** distillats paraffiniques lourds (pétrole), raffinés au solvant, Huile de base — non spécifié  
{Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'une extraction au solvant. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$  et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C}
- IT** distillati (petrolio), frazione paraffinica pesante raffinata con solvente, Olio base — non specificato  
{Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di estrazione con solvente. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito di viscosità pari ad almeno 19cSt a 40 °C}
- NL** destillaten (aardolie), solvent-geraffineerde zware paraffinische, Basisolie — niet gespecificeerd  
{Een complexe verzameling koolwaterstoffen verkregen als het raffinaat van een solvent-extractieproces. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit van minstens 19 cSt bij 40 °C}
- PT** destilados (petróleo), parafínicos pesados refinados com solvente; Óleo-base não especificado  
{Uma combinação complexa de hidrocarbonetos obtida como o refinado de um processo de extração com solvente. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C}

*Clasificación Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Inbeting Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling, Etiquetage, Etichettatura Kenmerken, Rotulagem*

T	
	R : 45
	S 53-45

*Limites de concentration, Konzentrationsgrænser Konzentrationsgrenzuerte Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentraçao*


Cas No 64741-89-5

EEC No 265-091-3

No 649-455-00-2 |

NOTA H

NOTA L

- ES** destilados (petroleo), fraccion parafinica ligera refinada con disolvente , Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida como el refinado de un proceso de extraccion con disolvente. Compuesta fundamentalmente de hidrocarburos saturados con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40 °C (100 SUS a 100 °F)]
- DA** destillater (råolie), solventraffinerede lette paraffin-, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået som raffinat fra en solventekstraktionsproces. Den består overvejende af mættede carbonhydrier opnået som raffinat fra en solventekstraktionsproces. Den består overvejende af mættede carbonhydrier overvejende  $C_{11}$  og med  $C_{30}$  og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C]
- DE** Destillate (Erdöl), Lösungsmittel-aufbereitete leichte paraffinhaltige , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Lösungsmittel-extraktionsverfahren. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40 °C]
- EL** αποσταγμάτα (πετρελαιο), ελαφρά παραφινικά εξευγενισμένα με διαλυτή. Βασικό ορυκτέλαιο — μη προδιαγε-  
ραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν εκχυλισμένο προϊόν εκχύλισης με διαλυτή. Συνίσταται κυρίως από κορεσμένους υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$ , έως και  $C_{30}$  και παράγει τελικά έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C]
- EN** Distillates (petroleum) solvent refined light paraffinic , Baseoil — unspecified  
[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C)]
- FR** distillats paraffiniques legers (petrole), raffines au solvant , Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'une extraction au solvant. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorite dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosite inferieure a 19 cSt a 40 °C]
- IT** distillati (petrolio), frazione paraffinica leggera raffinata con solvente , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di estrazione con solvente. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito di viscosità inferiore a 19cSt a 40 °C]
- NL** destillaten (aardolie), solventgeraffineerde lichte paraffinehoudende , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen verkregen als het raffinaat uit een solventextractieproces. Bestaat voornamelijk uit verzadigde koolwaterstoffen overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit van minstens 19 cSt bij 40 °C]
- PT** destilados (petroleo), parafinicos leves refinados com solvente , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como o refinado de um processo de extração com solvente. É constituída predominantemente por hidrocarbonetos saturados com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{30}$  e produz um oleo acabado com uma viscosidade inferior a 19cSt a 40 °C]



*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64741-95-3

EEC No 265-096-0

No 649-456-00-8

NOTA H

NOTA L

- ES** aceites residuales (petroleo), fraccion desasfaltada con disolventes . Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida como la fraccion soluble en el disolvente del desasfaltado con disolvente de un residuo de  $C_1$ - $C_4$ . Compuesta de hidrocarburos con un numero de carbonos en su mayor parte superior a  $C_{21}$ , y con un punto de ebullicion aproximado por encima de  $400^{\circ}\text{C}$ ]
- DA** restolier (råolie), solventafasfalterede . Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået som den solventopløselige fraktion fra  $C_1$ - $C_4$ -solventafasfaltering af en remans . Den består af carbonhydrider, overvejende større end  $C_{21}$ , og koger omtrent over  $400^{\circ}\text{C}$ ]
- DE** Ruckstandsole (Frdol), Lösungsmittel-deasphalitierte , Grundol — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Lösungsmittel-lösliche Fraktion aus  $C_1$ - $C_4$  Lösungs mittel-Deasphaltieren eines Ruckstandes . Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend höher als  $C_{21}$  und siedet über etwa  $400^{\circ}\text{C}$ ]
- EL** υπολειμματικά ελαία (πετρελαιο), απασφαλτωμένα με διαλυτή Βασικό ορυκτέλαιο — μη προδιανεγγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το διαλυτό σε διαλυτή κλάσμα υπό απασφαλτώση υπολειμμάτος με διαλυτή  $C_1$ - $C_4$ . Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{21}$ , και βράζει πάνω από  $400^{\circ}\text{C}$  περίπου]
- EN** Residual oils (petroleum), solvent deasphalted , Baseoil — unspecified  
[A complex combination of hydrocarbons obtained as the solvent soluble fraction from  $C_1$ - $C_4$  solvent deasphalting of a residuum . It consists of hydrocarbons having carbon numbers predominantly higher than  $C_{21}$  and boiling above approximately  $400^{\circ}\text{C}$  ( $752^{\circ}\text{F}$ )]
- FR** huiles residuelles (petrole), desasphaltees au solvant , Huile de base — non specifique  
[Combinaison complexe d'hydrocarbures obtenue comme fraction soluble lors du desasphaltage avec un solvant en  $C_1$ - $C_4$  d'un residu . Se compose d'hydrocarbures dont le nombre de carbones est en majorite superieur a  $C_{21}$ , et dont le point d'ebullition est approximativement superieur a  $400^{\circ}\text{C}$ ]
- IT** olii residui (petrolio), deasfaltazione con solvente , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta come frazione solubile in solvente dalla deasfaltazione di un residuo con solvente  $C_1$ - $C_4$ . È costituita da idrocarburo con un numero di atomi di carbonio prevalentemente maggiore di  $C_{21}$ , e punto di ebollizione superiore a  $400^{\circ}\text{C}$  ca]
- NL** residuolien (aardolie), solvent gedeasfalteerd , Basisolie — niet gespecifieerd  
[Een complexe verzameling koolwaterstoffen verkregen als de solvent oplosbare fractie bij het  $C_1$ - $C_4$ -solvent deasfalteren van een residu . Bestaat uit koolwaterstoffen overwegend groter zijn dan  $C_{21}$ , en kokend boven ongeveer  $400^{\circ}\text{C}$ ]
- PT** oleos residuais (petroleo), desasfaltados com solvente , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como a fracção solúvel em solvente da desasfaltagem de um residuo com solvente  $C_1$ - $C_4$ . É constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente superiores a  $C_{21}$ , e destila acima de aproximadamente  $400^{\circ}\text{C}$ ]

*Classification Klassifisering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificacão*

Carc Cat 2, R 45

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration Konzentrationsgrenser Konzentrationsgrenzwerte Όρια συγκέντρωσης Concentration limits, Limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentração*


Cas No 64741-96-4

EEC No 265-097-6

No 649-457 00-3

NOTA H

NOTA L

- ES** destilados (petroleo), fraccion nafténica pesada refinada con disolvente , Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida como el refinado de un proceso de extracción con disolvente. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 19cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA** destillater (råolie), solventraffinerede tunge naphthen- , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået som raffinatet fra en solventekstraktionsproces. Den består af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cST ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE** Destillate (Erdöl), Lösungsmittel-aufbereitete schwere naphthenhaltige , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Raffinat aus einem Lösungsmittel-extraktionsverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von wenigstens 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL** αποσταγµατα (πετρελαιο), βαρεα ναφθενικα εξευγενισµενα µε διαλυτη Βασικό ορυκτό ελαιο — µη προδιαγεγραµµενο  
[Πολυπλοκο, συνδυασµος υδρογονανθρακων που λαµβανεται σαν το εκχυλισµενο προιον εκχυλισης µε διαλυτη. Συνισταται απο υδρογονανθρακες µε αριθµο ατοµων ανθρακα κυρια, στην περιοχη απο  $C_{20}$  εως και  $C_{40}$  και παραγει τελικο ελαιο µε ιξωδη, τουλαχιστον 19cSt σε 40 °C. Περιεχει σχετικα λιγες κανονικες παραφινες.]
- EN** Distillates (petroleum) solvent-refined heavy naphthenic , Baseoil — unspecified  
[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt a 40 °C). It contains relatively few normal paraffins.]
- FR** distillats naphtheniques lourds (petrole), raffines au solvant , Huile de base — non specifique  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'une extraction au solvant. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{20}$   $C_{40}$ , et donne une huile produit fini de viscosite superieure a 19 cSt a 40 °C. Contient relativement peu de paraffines normales.]
- IT** distillati (petrolio), frazione nafténica pesante raffinata con solvente , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di estrazione con solvente. È costituita da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$   $C_{40}$  e produce un olio finito di viscosità pari ad almeno 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL** destillaten (aardolie), met solvent geraffineerde zware nafteenhoudende fractie , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen als het raffinaat van een solventextractieproces. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$  en levert een voltooide olie met een viscositeit van minstens 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT** destilados (petroleo), nafténicos pesados refinados com solvente , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como o refinado de um processo de extração com solvente. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_{20}$  ate  $C_{40}$  e produz um oleo acabado com uma viscosidade minima de 19cST a 40 °C. Tem um teor relativamente baixo em parafinas normais.]

Classification Klassificering, Einstufung Ταξινόμηση Classification Classification Classificazione Indeline Classificacão

Carc. Cat. 2 R 45

Etiquetado, Etikettering, Kennzeichnung Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45
	S : 53-45

Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte Όρια συγκεντρώσεως, Concentration limits  
 Limites de concentration, Limiti di concentrazione, Concentratiegrenzen Limites de concentraçao


Cas No 64741 97 5

EEC No 265-098-1

No 649-458-00-9

NOTA H

NOTA L

- ES** destilados (petroleo), fraccion naftenica ligera refinada con disolvente, Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida como el refinado de un proceso de extraccion con disolvente. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19 cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA** destillater (råolie), solventraffinerede lette naphthen, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået som raffinatet fra en solventekstraktionsproces. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$  og danner en færdig olie med en viskositet på mindre end 19 cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE** Destillate (Erdöl), Lösungsmittel-aufbereitete leichte naphthenhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen erhalten als Raffinat aus einem Lösungsmittel-extraktionsverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von wenigstens 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL** αποσταγμάτα (πετρελίου), ελαφρά ναφθενικά εξυ/ενισμένα με διαλυτή. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το εκχυλισμένο προϊόν εκχύλισης με διαλυτή. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$  και παρανει τελικό έλαιο με ιξώδες μικρότερο από 19 cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN** Distillates (petroleum), solvent-refined light naphthenic, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.]
- FR** distillats naphthéniques légers (pétrole), raffinés au solvant, Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue comme raffinat lors d'une extraction au solvant. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ ,  $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT** distillati (petrolio), frazione naftenica leggera raffinata con solvente, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta come raffinato da un processo di estrazione con solvente. È costituita prevalentemente da idrocarburi saturi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ ,  $C_{30}$  e produce un olio finito di viscosità inferiore a 19 cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL** destillaten (aardolie), solventgeraffineerde lichte naftenhoudende, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als het raffinaat uit een solventextractieproces. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$  en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT** destilados (petroleo), naftenicos leves refinados com solvente, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como o refinado de um processo de extração com solvente. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19 cSt a 40 °C. Tem um teor relativamente baixo em parafinas normais.]

*Clasificación, Klasifisering, Einstufung Ταξινόμηση Classification, Classifikation Classificazione Indeling Classificatie*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura Kenmerken Rotulagem*

<p>T</p> 	R 45
	S 3-45

*Limites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentrație*


Cas No 64742-01-4

LEC No 265 101-6

No 649-459-00-4

NOTA H  
NOTA L

- ES** aceites residuales (petroleo), refinados con disolvente , Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida como la fraccion insoluble en el disolvente del refino con disolvente de un residuo utilizando un disolvente organico polar como fenol o furfural. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte superior a  $C_{11}$ , y con un punto de ebullicion aproximado por encima de 400 °C]
- DA** restolier (råolie), solventraffinerede , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået som den solventuopløselige fraktion fra solventraffinering af en remanens, ved at anvende et polært organisk solvent, såsom phenol eller furfural. Den består af carbonhydrider overvejende  $C_{11}$ , og koger omtrent over 400 °C]
- DE** Rückstandsole (Erdöl), Lösungsmittel-aufbereitete , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Lösungsmittel-unlösliche Fraktion aus Lösungsmittel-Aufbereiten eines Rückstandes mit einem polaren organischen Lösungsmittel wie Phenol oder Furfural. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend höher als  $C_{11}$ , und siedet über etwa 400 °C]
- EL** υπολειμματικά έλαια (πετρελαίου), εξευγενισμένα με διαλυτή Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το αδιάλυτο σε διαλύτη κλάσμα από εξευγενισμό με διαλυτή υπολείμματος, με χρήση πολικού οργανικού διαλύτη όπως φαινόλη και φουρφουράλη. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{11}$ , και βράζει πάνω από 400 °C περίπου]
- EN** Residual oils (petroleum,) solvent-refined , Baseoil — unspecified  
[A complex combination by hydrocarbons obtained as the solvent insoluble fraction from solvent refining of a residuum using a polar organic solvent such as phenol or furfural. It consists of hydrocarbons having carbon numbers predominantly higher than  $C_{11}$  and boiling above approximately 400 °C (752 °F)]
- FR** huiles résiduelles (petrole), raffinées au solvant , Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue comme fraction insoluble lors du raffinage d'un residu avec un solvant organique polaire tel que phenol ou furfural. Se compose d'hydrocarbures dont le nombre de carbones est en majorite superieur a  $C_{11}$ , et dont le point d'ebullition est approximativement superieur a 400 °C]
- IT** olii residui (petrolio), raffinati con solvente ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta come frazione insolubile in solventi dalla raffinazione con solvente di un residuo, con l'impiego di un solvente organico polare quale il fenolo o il furfurolo. È costituita prevalentemente da idrocarburi a numero di atomi di carbonio prevalentemente superiore a  $C_{11}$ , e a punto di ebollizione superiore a 400 °C ca]
- NL** residu-olien (aardolie), solvent-geraffineerd , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen als de in solvent onoplosbare fractie van solvent-raffinering van een residu met behulp van een polair organische solvent zoals fenol of furfural. Bestaat uit koolwaterstoffen overwegend groter dan  $C_{11}$ , kokend boven ongeveer 400 °C]
- PT** oleos residuais (petróleo), refinados com solvente , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como a fracção insolúvel em solvente de refinação com solvente de um residuo usando um solvente orgânico polar como fenol ou furfural. É constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente superiores a  $C_{11}$ , e destila acima de aproximadamente 400 °C]



*Classification Klassifizierung Einstufung Ταξινόμηση Classification, Classification Classificazione Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentraziegrenzen, Limites de concentração*


Cas No 64742 36-5

EEC No 265 137-2

No 649-460-00-X

NOTA H

NOTA L

- ES** destilados (petroleo), fraccion parafinica pesada tratada con arcilla, Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos resultante del tratamiento de una fraccion de petroleo con arcilla natural o modificada en cualquiera de los procesos de contacto o percolacion para separar las trazas presentes de compuestos polares e impurezas. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{30}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 19cSt a 40 °C (100 SUS a 100 °F). Contiene una proporcion relativamente grande de hidrocarburos saturados.]
- DA** destillater (råolie), lerbehandlede tunge paraffin-, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider fremkommet ved behandling af en råoliefraktion med naturligt eller modificeret ler, enten en kontakt- eller perkoleringsproces, til fjernelse af spormængder af polære forbindelser og tilstedeværende urenheder. Den består af carbonhydrider, overvejende  $C_{30}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder en forholdsvis stor del mættede carbonhydrider.]
- DE** Destillate (Erdöl), Ton-behandelte schwere paraffinhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, entsteht durch Behandeln einer Erdölfraktion mit natürlichem oder modifiziertem Ton in entweder einem Kontakt- oder Perkulationsverfahren zum Entfernen von Spuren polarer Verbindungen und von vorhandenen Verunreinigungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{30}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19 cSt bei 40 °C. Enthält eine relativ große Menge gesättigter Kohlenwasserstoffe.]
- EL** αποσταγµατα (πετρελαιου), βαρεα παραφινικα κατεργασµενα µε αρνιλλο Βασικό ορυκτελαιο — µη προδιαγεγραµµενο  
[Πολυπλοκος συνδυασµος υδρογονανθρακων που προκυπτει απο κατεργασια κλασµατος πετρελαιου µε φυσικη η τροποποιηµενη αρνιλλο. Ειτε µε διεργασια επαφης, ειτε µε διηθηση για να απομακρυνθουν ιχνοποσοτητες πολικων ενωσεων και υπαρχουσες προσµειξεις. Συνισταται απο υδρογονανθρακες µε αριθµο ατοµων ανθρακα κυριως στην περιοχη απο  $C_{30}$  εως και  $C_{40}$  και παραγει τελικο ελαιο µε ιξωδες τουλαχιστον 19cSt σε 40 °C. Περιεχει σχετικα µεγαλη αναλογια κορεσµενων υδρογονανθρακων.]
- EN** Distillates (petroleum), clay-treated paraffinic, Baseoil — unspecified  
[A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{30}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
- FR** distillats paraffiniques lourds (petrole), traites a la terre, Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures résultant du traitement d'une fraction pétrolière avec de l'argile naturelle ou modifiée, par contact ou par percolation, destinée à éliminer les traces de composés polaires et les impuretés. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{30}$ - $C_{40}$  et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures saturés.]
- IT** distillati (petrolio), frazione paraffinica pesante trattata con argilla, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di una frazione di petrolio con argilla naturale o modificata, in un processo di contatto o di percolazione per eliminare le tracce di composti polari e impurezze presenti. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{30}$ - $C_{40}$  e produce un olio finito con viscosità di almeno 19cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi saturi.]
- NL** destillaten (aardolie), met klei behandelde zware paraffinehoudende, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardoliefractie met natuurlijke of gemodificeerde klei in een contact- of een filtratieproces waarbij sporen van polaire verbindingen en aanwezige onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_{30}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die minstens 19 cSt is bij 40 °C. Bevat een relatief grote hoeveelheid verzadigde koolwaterstoffen.]
- PT** destilados (petroleo), parafinicos pesados tratados com argila, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de uma fracção petrolífera com argila natural ou modificada quer por mistura quer por percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{30}$  ate  $C_{40}$  e produz um óleo acabado com uma viscosidade minima de 19cSt a 40 °C. Contem uma proporção relativamente elevada de hidrocarbonetos saturados.]

*Classification Klassifisering Einstufung Ταξινόμηση Classification Classification Classificazione Inbelyng Classificação*

Carc Cat 2 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzierte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742 37 6

EEC No 265 138-8

No 649-461-00-5

NOTA H

NOTA L

- ES** destilados (petroleo), fraccion parafinica ligera tratada con arcilla. Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos resultante del tratamiento de una fraccion de petroleo con arcilla natural o modificada en cualquiera de los procesos de contacto o percolacion para separar las trazas presentes de compuestos polares e impurezas. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{16}$ , y produce un aceite final con una viscosidad de menos 19 cSt a 40 °C (100 SUS a 100 °F). Contiene una proporcion relativamente grande de hidrocarburos saturados.]
- DA** destillater (råolie), lerbehandlede lette paraffin-, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider fremkommet ved behandling af en råoliefraktion med naturligt eller modificeret ler i enten en kontakt- eller perkoleringsproces, til fjernelse af spormængderne af polære forbindelser og tilstedeværende urenheder. Den består af carbonhydrider overvejende  $C_{11}$  til og med  $C_{16}$ , og danner en færdig olie med en viskositet på mindre end 19 cSt ved 40 °C. Den indeholder en forholdsvis stor del mættede carbonhydrider.]
- DE** Destillate (Erdöl), Ton-behandelte leichte paraffinhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen entsteht durch Behandeln einer Erdölfraktion mit natürlichem oder modifiziertem Ton in entweder einem Kontakt- oder Perkulationsverfahren zum Entfernen von Spuren polarer Verbindungen und von vorhandenen Verunreinigungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{16}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40 °C. Enthält eine relativ große Menge gesättigter Kohlenwasserstoffe.]
- EL** αποσταγμάτα (πετρελαιοί), ελαφρά παραφινικά κατεργασμένα με αργίλλο. Βασικό ορυκτέλαιο — μη προδιανυγνόμενα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που προκύπτει από κατεργασία κλασμάτος πετρελαίου με φυσική ή τροποποιημένη αργίλλο, είτε με διήθηση ελαφώς, είτε με διήθηση για να απομακρυνθούν ιζητογενή πολικά ενώσεις και υπαρκτές προσμίξεις. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{16}$  και παράγεται τελικό έλαιο με ιξώδες μικρότερο από 19 cSt σε 40 °C. Περιέχει σχετικά μεγάλη αναλογία κορεσμένων υδρογονανθράκων.]
- EN** Distillates (petroleum), clay-treated light paraffinic, Baseoil — unspecified  
[A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{16}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
- FR** distillats paraffiniques légers (pétrole), traités à la terre, Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures résultant du traitement d'une fraction pétrolière avec de l'argile naturelle ou modifiée par contact ou par percolation destinée à éliminer les traces de composés polaires et les impuretés. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$  à  $C_{16}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures saturés.]
- IT** distillati (petrolio), frazione paraffinica leggera trattata con argilla, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di una frazione di petrolio con argilla naturale o modificata, in un processo di contatto o di percolazione per eliminare le tracce di composti polari e impurezze presenti. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  a  $C_{16}$  e produce un olio finito con viscosità inferiore a 19 cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi saturi.]
- NL** destillaten (aardolie), met klei behandelde lichte paraffinehoudende, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardoliefractie met een natuurlijke of gemodificeerde klei in een contact- of een filtratieproces waarbij sporen van polaire verbindingen en aanwezige onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen overwegend  $C_{11}$  tot en met  $C_{16}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat een relatief grote hoeveelheid verzadigde koolwaterstoffen.]
- PT** destilados (petróleo), parafínicos leves tratados com argila, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de uma fracção petrolífera com argila natural ou modificada quer por mistura quer por percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{16}$  e produz um óleo acabado com uma viscosidade inferior a 19 cSt a 40 °C. Contem uma proporção relativamente elevada de hidrocarbonetos saturados.]

*Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificasjon*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering Kennzeichnung, Επισήμανση Labelling Etiquetage Etichettatura Kenmerken, Rotulagem*

T	
	R 45
	S 53-45

*Limites de concentration Konzentrationsgrænser Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentração*


Cas No 64742-41-2

EEC No 265-143-5

No 649-462-00-0

NOTA H

NOTA L

- ES aceites residuales (petroleo), tratados con arcilla . Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenidos por tratamiento de un aceite residual con arcilla natural o modificada en cualquiera de los procesos de contacto o percolación para separar las trazas presentes de compuestos polares e impurezas . Compuesta de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{11}$  y con un punto de ebullición aproximado por encima de 400 °C]
- DA restolier (råolie), lerbehandlede , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider fremkommet ved behandling af en restolie med naturligt eller modificeret ler, i enten en kontakt- eller perkoleringsproces, til fjernelse af spormængderne af polære forbindelser og tilstedeværende urenheder . Den består af carbonhydrider, overvejende større end  $C_{11}$ , og koger omtrent over 400 °C]
- DE Rückstandsole (Erdöl), Ton-behandelt , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln eines Rückstandöles mit natürlichem oder modifiziertem Ton in entweder einem Kontakt- oder einem Perkulationsverfahren zum Entfernen der Spuren polarer Verbindungen und von vorhandenen Verunreinigungen . Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschen höher als  $C_{11}$ , und siedet über etwa 400 °C]
- EL υπολειμματικά ελαία (πετρελαίου), κατεργασμένα με αργίλλο . Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία υπολειμματός ελαίου με φυσική ή τροποποιημένη αργίλλο, είτε με διεργασία επαφής είτε διήθησης για να απομακρυνθούν ιχνοποσοτητές πολικών ενώσεων και υπάρχουσες προσμίξεις . Συνίσταται από υδρογονανθράκες, με αριθμό ατόμων ανθράκα σημαντικά μεγαλύτερους από  $C_{11}$  και που βράζουν πάνω από 400 °C περίπου]
- EN Residual oils (petroleum), clay-treated , Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by treatment of a residual oil with a natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present . It consists of hydrocarbons having carbon numbers predominantly higher than  $C_{11}$  and boiling above approximately 400 °C (752 °F)]
- FR huiles résiduelles (pétrole), traitées à la terre , Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures résultant du traitement d'une huile résiduelle avec de l'argile naturelle ou modifiée, par contact ou par percolation, destinée à éliminer les traces de composés polaires et les impuretés . Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{11}$  et dont le point d'ébullition est approximativement supérieur à 400 °C]
- IT oli residui (petrolio), trattati con argilla , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per trattamento di un olio residuo con un'argilla naturale modificata, in un processo di contatto o percolazione per rimuovere le tracce di composti polari e impurezze presenti . È costituita da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{11}$ , e punto di ebollizione superiore a 400 °C ca.]
- NL residu-olie(n) (aardolie), met klei behandeld , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een residu-olie met een natuurlijke of gemodificeerde klei in een contact- of een filtratieproces om sporen van polaire verbindingen en aanwezige onzuiverheden te verwijderen . Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{11}$ , kokend boven ongeveer 400 °C]
- PT oleos residuais (petroleo), tratados com argila , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de um óleo residual com uma argila natural ou modificada quer por precolação para remoção de vestígios de compostos polares e impurezas presentes . É constituída por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{11}$ , e destila acima de aproximadamente 400 °C]

*Classification* *Klasifisering* *Eintheilung* *Ταξινόμηση* *Classificazione* *Classificazione* *Indeling* *Κlassificazioe*

Carc. Cat. 2, R. 45

*Etiquetado* *Etikettering* *Kennzeichnung* *Επισήμανση* *Labelling* *Etiquetage* *Etichettatura* *Kenmerken* *Rotulagem*

T	
	R. 45
	S: 53-45

*Limite de concentration* *Konzentrationsgrenzen* *Konzentrationsgrenzwerte* *Όρια συγκέντρωσης* *Concentration limits*  
*Limites de concentration* *Limiti di concentrazione* *Concentratiegrenzen* *Limites de concentraçao*


Cas No 64742 44 5

E.C. No 265 146 1

No 649 463 00 6

NOTA H

NOTA L

- ES** destilados (petroleo), fraccion naftenica pesada tratada con arcilla. Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos resultante del tratamiento de una fracción de petróleo con arcilla natural o modificada en cualquiera de los procesos de contacto o percolación para separar las trazas presentes de compuestos polares e impurezas. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$ , y produce un aceite final con una viscosidad de al menos 19 cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA** destillater (råolie), lerbehandlede tunge naphthen-, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider fremkommet ved behandling af en råoliefraktion med naturligt eller modificeret ler i enten en kontakt- eller perkoleringsproces, til fjernelse af spormængderne af polære forbindelser og tilstedeværende urenheder. Den består af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19 cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE** Destillate (Erdöl), Ton-behandelte schwere naphthenhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen erhalten durch Behandeln einer Erdölfraktion mit natürlichem oder modifiziertem Ton in entweder einem Kontakt- oder einem Perkulationsverfahren zum Entfernen der Spuren polarer Verbindungen und von vorhandenen Verunreinigungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$ , und ergibt ein Fertigöl mit einer Viskosität von mindestens 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL** αποσταγμάτα (πετρελαιο), βαρεα ναφθενικά κατεργασμένα με αργίλλο. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που προκύπτει από κατεργασία κλασμάτος πετρελαιο με φυσική ή τροποποιημένη αργίλλο, είτε με διεργασία επαφής, είτε διήθησης για να απομακρυνθούν ιχνοποσοτητές πολικών ενώσεων και υπορριυσεις προσμειξεις. Συνίσταται από υδρογονάνθρακες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$ , και παράγεται τελικό έλαιο με ιξώδες τουλάχιστον 19 cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN** Distillates (petroleum), clay-treated heavy naphthenic, Baseoil — unspecified  
[A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.]
- FR** distillats naphtheniques lourds (petrole), traites a la terre, Huile de base — non specifique  
[Combinaison complexe d'hydrocarbures resultant du traitement d'une fraction petroliere avec de l'argile naturelle ou modifiee, par contact ou par percolation, destinee a eliminer les traces de composés polaires et les impuretes. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{20}$  -  $C_{40}$ , et donne une huile produit fini de viscosite superieure a 19 cSt a 40 °C. Contient relativement peu de paraffines normales.]
- IT** distillati (petrolio), frazione naftenica pesante trattata con argilla, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di una frazione di petrolio con argilla naturale o modificata, in un processo di contatto o di percolazione per eliminare le tracce di composti polari e impurezze presenti. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$  -  $C_{40}$  e produce un olio finito con viscosità di almeno 19 cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL** destillaten (aardolie), met klei behandeld zware naftenhoudende tractie, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen verkregen uit de behandeling van een aardoliefractie met een natuurlijke of gemodificeerde klei in een contact- of een filtratieproces waarbij sporen van polaire verbindingen en aanwezige onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit van minstens 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT** destilados (petroleo), naftenicos pesados tratados com argila, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de uma fracção petrolífera com argila natural ou modificada quer por mistura quer por percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19 cSt a 40 °C. Contem relativamente poucas parafinas normais.]



*Classificação Kλάσσηση Einstufung Ταξινόμηση, Classification Classificazione Classificação Indeling, Classificação*

Carc. Cat. 2, R. 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742 45 6

I EC No 263 147 7

No 649-464-00-1

NOTA H

NOTA L

- ES destilados (petroleo), fraccion naftenica ligera tratada con arcilla, Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos resultante del tratamiento de una fraccion de petroleo con arcilla natural o modificada en cualquiera de los procesos de contacto o percolacion para separar las trazas presentes de compuestos polares e impurezas. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA destillater (råolie), lerbehandlede lette naphthen-, Uspecificeret baseolie  
[En sammensat blanding af carbonhydroider fremkommet ved behandling af en råoliefraktion med naturligt eller modificeret ler i enten en kontakt eller perkoleringsproces, til fjernelse af spormængderne af polære forbindelser og tilstedeværende urenheder. Den består af carbonhydroider overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en lærdig olie med en viskositet på mindre end 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE Destillate (Erdöl), Ton behandelte leichte naphthenhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen erhalten durch Behandeln einer Erdölfraktion mit natürlichem oder modifiziertem Ton in entweder einem Kontakt oder einem Perkulationsverfahren zum Entfernen der Spuren polarer Verbindungen und von vorhandenen Verunreinigungen. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL αποσταγµατα (πετρελαιο), ελαφρα ναφθενικα, κατεργασµενα µε αργιλλο Βασικο ορυκτελαιο — µη προδιανε-  
γγραµµενο  
[Πολυπλοκος συνδυασµος υδρογονανθρακων που προκυπτει απο κατεργασια κλασµατος πετρελαιου µε φυσικη η τροποποιηµενη αργιλλο, ειτε µε διεργασια επαφης, ειτε διηθησης για να απομακρυνθουν ιχνοποσοτητες ενωσεων και υπαρχουσες προσµειξεις. Συνισταται απο υδρογονανθρακες µε αριθµο ατοµων ανθρακα κυριως στην περιοχη απο  $C_{11}$  εως και  $C_{30}$  και παραγει τελικο ελαιο µε ισως, µικροτερο απο 19cSt σε 40 °C. Περιχει σχετικως λιγες κανονικες παραφινες.]
- EN Distillates (petroleum), clay-treated light naphthenic Baseoil — unspecified  
[A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR distillats naphtheniques legers (petrole), traites a la terre, Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures resultant du traitement d'une fraction petroliere avec de l'argile naturelle ou modifiée, par contact ou par percolation, destinée à éliminer les traces de composés polaires et les impuretés. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{11}$  à  $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT distillati (petrolio), frazione naftenica leggera trattata con argilla, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta dal trattamento di una frazione di petrolio con argilla naturale o modificata, in un processo o di percolazione per eliminare le tracce di composti polari e impurezze presenti. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  -  $C_{30}$  e produce un olio finito con viscosità di almeno 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL destillaten (aardolie), met klei behandelde lichte naftenhoudende, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door behandeling van een aardoliefractie met een natuurlijke of gemodificeerde klei in een contact- of een filtratieproces waarbij sporen van polaire verbindingen en aanwezige onzuiverheden worden verwijderd. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT destilados (petroleo), naftenicos leves tratados com argila, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de uma fracção petrolífera com argila natural ou modificada quer por mistura quer por percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{30}$  e produz um oleo acabado com uma viscosidade inferior a 19cSt a 40 °C. Contem relativamente poucas parafinas normais.]

*Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação*

Carc. Cat. 2 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling Etiquetage Etichettatura Kenmerken Rotulagem*

T	
	R 45
	S 53 45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentração*


Cas No 64742 52 5

FIC No 263 155 0

No 649 465 00-7

NOIA H  
NOIA L

- ES** destilados (petroleo), fraccion nalténica pesada tratada con hidrogeno, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrogeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{30}$ , y produce un aceite final de al menos 19 cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA** destillater (raolie), hydrogenbehandlede tunge naphthen- Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle en raoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, overvejende  $C_{10}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindst 19 cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE** Destillate (Erdöl), mit Wasserstoff behandelte schwere naphthenhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL** αποσταγματα (πετρελίου) βαρέα υδρογονικά κατεργασμένα με υδρογόνο. Βασικό ορυκτέλαιο — μη προσυγκεκριμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία καυσίματος πετρελίου με υδρογόνο παρουσία καταλύτη. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων ανθράκα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{30}$  και παράγει τελικό έλαιο τουλάχιστο 19 cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παρυφίνες.]
- EN** Distillates (petroleum) hydrotreated heavy naphthenic Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{30}$  and produces a finished oil of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.]
- FR** distillats naphtheniques lourds (petrole), hydrotreatés, Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$  à  $C_{30}$ , et donne une huile produite finie de viscosité supérieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT** distillati (petrolio) nalténici pesanti • hydrotreating • Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$  -  $C_{30}$ , e produce un olio finito con viscosità di almeno 19 cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL** destillaten (ardolie) met waterstof behandelde zware nalténhoudende Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen overwegend  $C_{10}$  tot en met  $C_{30}$  en vormt een afgekoelde olie met een viscositeit die minstens 19 cSt is bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT** destilados (petróleo) nalténicos pesados tratados com hidrogenio, Oleo base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fração petrolífera com hidrogenio na presença de um catalisador. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{30}$ , e produz um óleo acabado com uma viscosidade mínima de 19 cSt a 40 °C. Contem relativamente poucas parafinas normais.]

*Classification, Kλάσση, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R · 45</p> <p>S · 53-45</p>
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*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 64742-53-6

EEC No 265-156-6

No 649-466-00-2

NOTA H

NOTA L

- ES destilados (petróleo), fracción nafténica ligera tratada con hidrógeno, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrógeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19 cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales]
- DA destillater (råolie), hydrogenbehandlede lette naphthen-, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19 cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner]
- DE Destillate (Erdöl), mit Wasserstoff behandelte leichte naphthenhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine]
- EL αποσταγµατα (πετρελαιο) ελαφρα ναφθενικά κατεργασµενα με υδρογόνο· Βασικό ορυκτέλαιο — μη προδιαγεγραµµένο  
[Πολυπλοκός συνδυασµός υδρογονανθρακων που λαµβανεται με κατεργασία κλασµατος πετρελαιο με υδρογόνο παρουσία καταλυτη. Συνιστάται από υδρογονανθρακες με αριθµό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$  και παραγει τελικό ελαιο με ιξώδες µικρότερο από 19 cSt σε 40 °C. Περιεχει σχετικά λίγες κανονικες παραφινες]
- EN Distillates (petroleum), hydrotreated light naphthenic Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins]
- FR distillats naphthéniques légers (pétrole), hydrotraités, Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales]
- IT distillati (petrolio), naftenici leggeri • hydrotreating •, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito con viscosità inferiore a 19 cSt a 40 °C. Contiene relativamente poche paraffine normali]
- NL destillaten (aardolie), met waterstof behandelde lichte naftenhoudende, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen]
- PT destilados (petróleo), nafténicos leves tratados com hidrógeno, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$ , e produz um óleo acabado com uma viscosidade inferior a 19 cSt a 40 °C. Contem relativamente poucas parafinas normais]

*Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Case, Cat. 2, R. 45.

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Las No 64742-54-7

DEC No 265-157-1

No 649-467-00-8

NOTA H

NOTA I.

destilados (petróleo), fracción parafínica pesada tratada con hidrógeno ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrógeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final de al menos 19cSt a 40 °C (100 US a 100 °F). Contiene una proporción relativamente grande de hidrocarburos saturados.]

- DA : destillater (råolie), hydrogenbehandlede tunge paraffin- ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrier, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder en forholdsvis stor del mættede carbonhydrier.]
- DE : Destillate (Erdöl), mit Wasserstoff behandelte schwere paraffinhaltige ; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl von mindestens 19 cSt bei 40 °C. Enthält eine relativ große Menge gesättigter Kohlenwasserstoffe.]
- EL : αποσταγµατα (πετρελαιο), βαρέα παραφινικά κατεργασµένα µε υδρογόνο· Βασικό ορυκτέλαιο — µη προδιαγεγραµµένο  
[Πολύπλοκος συνδυασµός υδρογονανθράκων που λαµβάνεται µε κατεργασία κλάσµατος πετρελαιο µε υδρογόνο παρουσία καταλυτή. Συνίσταται από υδρογονάνθρακες µε αριθµό ατόµων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$  και παράγει τελικό έλαιο µε τουλάχιστο 19cSt σε 40 °C. Περιέχει σχετική µεγάλη αναλογία κορεσµένων υδρογονανθράκων.]
- EN : Distillates (petroleum), hydrotreated heavy paraffinic ; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
- FR : distillats paraffiniques lourds (pétrole), hydrotraités ; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures saturés.]
- IT : distillati (petrolio), paraffinici pesanti • hydrotreating • ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito con viscosità di almeno 19cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi saturi.]
- NL : destillaten (aardolie), met waterstof behandelde zware paraffinehoudende ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die minstens 19 cSt is bij 40 °C. Bevat een relatief grote hoeveelheid verzadigde koolwaterstoffen.]
- PT : destilados (petróleo), parafínicos pesados tratados com hidrogénio ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  ate  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C. Contém uma proporção relativamente elevada de hidrocarbonetos saturados.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificacao*

Carb. Cat. 2, K 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraço*


Cas No. 64742-35-6

EEC No 265-158-7

No 649-468-00-3

NOTA H

NOTA L

- ES: destilados (petróleo), fracción parafínica ligera tratada con hidrógeno; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por tratamiento de una fracción de petróleo con hidrógeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19 cSt a 40 °C (100 SUS a 100 °C). Contiene una proporción relativamente grande de hidrocarburos saturados.]
- DA: destillater (råolie), hydrogenbehandlede lette paraffin-, Unspecifiseret baseolie  
[En sammensat blanding af carbonhydinder opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydinder, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en lærdig olie med en viskositet på mindre end 19 cSt ved 40 °C. Den indeholder en forholdsvis stor del mættede carbonhydinder.]
- DE: Destillate (Erdöl), mit Wasserstoff behandelte leichte paraffinhaltige; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40 °C. Enthält eine relativ große Menge gesättigter Kohlenwasserstoffe.]
- EL: αποσταγμάτα (πετρελαίου), ελαφρά παραφινικά κατεργασμένα με υδρογόνο· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία κλάσματος πετρελαίου με υδρογόνο παρουσία καταλύτη. Συνίσταται από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$  και παράγει τελικό έλαιο με ισχύος μικρότερο από 19 cSt σε 40 °C. Περιέχει σχετικά μεγάλη αναλογία κορεσμένων υδρογονανθράκων.]
- EN: Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
- FR: distillats paraffiniques légers (pétrole), hydrotraités; Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures saturés.]
- IT: distillati (petrolio), paraffinici leggeri di «hydrotreating»; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito avente viscosità inferiore a 19 cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi saturi.]
- NL: destillaten (aardolie), met waterstof behandelde lichte paraffinehoudende; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat een relatief grote hoeveelheid verzadigde koolwaterstoffen.]
- PT: destilados (petróleo), parafínicos leves tratados com hidrogénio; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19 cSt a 40 °C. Contém uma proporção relativamente elevada de hidrocarbonetos saturados.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Clasificación, Classificazione, Indeling, Classificacão*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-56-9

EEC No 265-159-2

No 649-469-00-9

NOTA H

NOTA L

- ES : destilados (petróleo), fracción parafínica ligera desparafinada con disolvente ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por separación de parafinas normales de una fracción de petróleo por cristalización en disolvente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40 °C (100 SUS a 100 °F).]
- DA : destillater (råolie), solventafvoksede lette paraffin- ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved fjernelse af normalparaffiner fra en råoliefraktion ved solvenkrystallisation. Den består overvejende af carbonhydrider, overvejende  $C_{14}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C.]
- DE : Destillate (Erdöl), Lösungsmittel-entwachsene leichte paraffinhaltige ; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Entfernen von normalen Paraffinen aus einer Erdölfraktion durch Lösungsmittelkristallisation. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40 °C.]
- EL : αποσταγμάτα (πετρελαίου), ελαφρά παραφινικά αποκηρωμένα με διαλύτη ; Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με απομάκρυνση κανονικών παραφινών από κλάσμα πετρελαίου με κρυστάλλωση με διαλύτη. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  έως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C.]
- EN : Distillates (petroleum), solvent-dewaxed light paraffinic ; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C).]
- FR : distillats paraffiniques légers (pétrole), déparaffinés au solvant ; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue en éliminant les paraffines normales d'une fraction pétrolière par cristallisation au solvant. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{14}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C.]
- IT : distillati (petrolio), paraffinici leggeri decerati con solvente ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ - $C_{30}$  e produce un olio finito avente viscosità inferiore a 19cSt a 40 °C.]
- NL : destillaten (aardolie), met solvent van was ontdane lichte paraffinehoudende ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de verwijdering van normale paraffinen uit een aardoliefractie door solventkristallisatie. Bestaat uit koolwaterstoffen, overwegend  $C_{14}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C.]
- PT : destilados (petróleo), parafínicos leves desparafinados com solvente ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por remoção de parafinas normais de uma fracção petrolífera por cristalização com solvente. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{14}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C.]

*Classification Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificatie*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limites de concentration, Konzentrationsgrenzen, Konzentration-grenzwerte, Όρια συγκεντρώσεως, Concentration limits*  
*Limites de concentration; Limiti di concentrazione, Concentratiegrenzen, Limites de concentra,ão*


Cas No 64742-57-0

EEC No 265-160-8

No 649-470-00-4

NOTA H

NOTA L

- ES aceites residuales (petróleo), fracción de tratamiento con hidrógeno ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenidos por tratamiento de la fracción del petróleo con hidrógeno en presencia de un catalizador. Compuesta de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{25}$  y ebullición aproximadamente por encima de 400 °C.]
- DA restolier (rålie), hydrogenbehandlede ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator. Den består af carbonhydrider, overvejende større end  $C_{25}$ , og koger omtrent over 400 °C.]
- DE Rückstandsöle (Erdöl), mit Wasserstoff behandelte ; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln einer Erdölfraktion mit Wasserstoff in Gegenwart eines Katalysators. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{25}$  und siedet über etwa 400 °C.]
- EL υπολειμματικά ελαία (πετρελαίου), κατεργασμένα με υδρογόνο· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με κατεργασία κλάσματος πετρελαίου με υδρογόνο παρουσία καταλυτή. Συνίσταται από υδρογονάνθρακες με αριθμό ατομών άνθρακα σημαντικά μεγαλύτερο από  $C_{25}$  και που δράζει πάνω από 400 °C περίπου.]
- EN Residual oils (petroleum), hydrotreated ; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{25}$  and boiling above approximately 400 °C (752 °F).]
- FR huiles résiduelles (pétrole), hydrotraitées ; Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogène en présence d'un catalyseur. Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{25}$ , et dont le point d'ébullition est approximativement supérieur à 400 °C.]
- IT olii residui (petrolio), « hydrotreating » ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente maggiore di  $C_{25}$  e punto di ebollizione di 400 °C ca.]
- NL residu-olien (aardolie), met waterstof behandeld ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door behandeling van een aardoliefractie met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{25}$ , kokend boven ongeveer 400 °C.]
- PT oleos residuais (petróleo), tratados com hidrogénio ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera com hidrogénio na presença de um catalisador. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{25}$  e destila acima de aproximadamente 400 °C.]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indelning, Klassifikation*

Carb. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Ετικετοποίηση, Labelling, Etiquetage, Etichettatura, Kennmerken, Rotulagem*

T	
	<div data-bbox="991 506 1070 533">R : 45</div> <div data-bbox="991 557 1102 584">S : 53-45</div>

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


No 64742-62-7

EC No 265-156-9

No 649-471-00-X

NOTA H  
NOTA L

- ES aceites residuales (petróleo), desparafinados con disolvente. Aceite de base, sin especificar.  
[Combinación compleja de hidrocarburos obtenida por la separación de hidrocarburos de cadena ramificada, larga del aceite residual por cristalización en disolvente. Compuesta de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{25}$  y un punto de ebullición aproximadamente por encima de 400 °C.]
- DA restolie (råolie), solventavoksede; Uspeciferet baseolie.  
[En sammensat blanding af carbonhydrier opnået ved fjernelse af lange, forgrenede carbonhydrier fra en restolie ved solventkrySTALLISATION. Den består af carbonhydrier, overvejende større end  $C_{25}$ , og koger omtrent over 400 °C.]
- DE Rückstandsolö (Erdöl), Lösungsmittel-entwachte, Grundöl — nicht spezifiziert.  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Entfernen von Kohlenwasserstoffen mit langer, verzweigter Kette aus einem Rückstandsol durch Lösungsmittelkristallisation. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend größer als  $C_{25}$  und siedet über etwa 400 °C.]
- EL υπολειμματικά έλαια (πετρελαιο), αποκρῶμενα με διαλύτη. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο.  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απομάκρυνση υδρογονανθράκων μακράς διακλαδισμένης αλυσίδας υπολειμματικά έλαια με κρυστάλλωση από διαλύτη. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{25}$  και που βράζει πάνω από 400 °C περίπου.]
- EN Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified.  
[A complex combination of hydrocarbons obtained by removal of long, branched chain hydrocarbons from a residual oil by solvent crystallization. It consists of hydrocarbons having carbon numbers predominantly greater than  $C_{25}$  and boiling above approximately 400 °C (752 °F).]
- FR huiles résiduelles (pétrole), déparaffinées au solvant; Huile de base — non spécifique.  
[Combinaison complexe d'hydrocarbures obtenue par élimination des hydrocarbures longs à chaîne ramifiée d'une huile résiduelle par cristallisation au solvant. Se compose d'hydrocarbures dont le nombre de carbones est en majorité supérieur à  $C_{25}$  et dont le point d'ébullition est approximativement supérieur à 400 °C.]
- IT oli residui (petrolio), decerati con solvente; Olio base — non specificato.  
[Combinazione complessa di idrocarburi ottenuta separando gli idrocarburi a catena lunga ramificata da un olio residuo mediante cristallizzazione con solvente. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente superiore a  $C_{25}$  e punto di ebollizione maggiore di 400 °C ca.]
- NL residu-olien (aardolie), met solvent van was ontdaan; Basisolie — niet gespecificeerd.  
[Een complexe verzameling koolwaterstoffen, verkregen door de verwijdering van lange koolwaterstoffen met vertakte ketens uit een residu-olie door middel van solventkristallisatie. Bestaat uit koolwaterstoffen, overwegend groter dan  $C_{25}$ , kokend boven ongeveer 400 °C.]
- PT óleos residuais (petróleo), desparafinados com solvente; Oleo-base não especificado.  
[Uma combinação complexa de hidrocarbonetos obtida por remoção de hidrocarbonetos de cadeia ramificada longa de um óleo residual por cristalização com solvente. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{25}$  e destila acima de aproximadamente 400 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etiketfatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-63-8

EEC No 265-167-6

No 649-472-00-5

NOTA H

NOTA L

- ES** destilados (petróleo), fracción nafténica pesada desparafinada con disolvente; Aceite de base, sin especificar. Combinación compleja de hidrocarburos obtenida por separación de parafinas normales de una fracción de petróleo por cristalización en disolvente. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final de no menos de 100 SUS (19cSt a 40 °C). Contiene relativamente pocas parafinas normales.]
- DA** destillater (råolie), solventafvoksede tunge naphthen; Uspecificeret baseolie  
En sammensat blanding af carbonhydrider opnået ved fjernelse af normalparaffiner fra en råoliefraktion ved solventkristallisation. Den består af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet ikke mindre end 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE** Destillate (Erdöl), Lösungsmittel-entwachte schwere naphthenhaltige; Grundöl — nicht spezifiziert  
Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Entfernen von normalen Paraffinen aus einer Erdölfraktion durch Lösungsmittelkristallisation. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von nicht weniger als 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL** αποσταγμάτα (πετρελαίου), βαρέα ναφθενικά αποκηρωμένα με διαλύτη. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με απομάκρυνση κανονικών παραφινών από κλάσμα πετρελαίου με κρυστάλλωση από διαλύτη. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$  και παράγει τελικό έλαιο με όχι μικρότερο από 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN** Distillates (petroleum), solvent-dewaxed heavy naphthenic; Baseoil — unspecified  
A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil of not less than 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR** distillats naphthéniques lourds (pétrole), déparaffinés au solvant; Huile de base — non spécifiée  
Combinaison complexe d'hydrocarbures obtenue par élimination des paraffines normales d'une fraction pétrolière par cristallisation au solvant. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT** distillati (petrolio), nattenici pesanti decerati con solvente; Olio base — non specificato  
Combinazione complessa di idrocarburi ottenuta separando le paraffine normali da una frazione di petrolio mediante cristallizzazione con solvente. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito di viscosità non inferiore a 19cSt a 40 °C. Contiene relativamente poche paraffine.]
- NL** destillaten (aardolie), met solvent van was ontdane zware naftenhoudende; Basisolie — niet gespecificeerd  
Een complexe verzameling koolwaterstoffen die wordt verkregen door verwijdering van normale paraffinen uit een aardoliefractie door solventkristallisatie. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die niet minder is dan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT** destilados (petróleo), nafténicos pesados desparafinados com solvente; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por remoção de parafinas normais de uma fração petrolífera por cristalização com solvente. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, indeling, Classificação*

Carc. Cat. 2. R. 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 64742-64-9

EEC No 265-168-1

No 649-473-00-0

NOTA H

NOTA L

- ES destilados (petróleo), fracción nafténica ligera desparafinada con disolvente ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por separación de parafinas normales de una fracción de petróleo por cristalización en disolvente. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 100 SUS (19cSt a 40 °C). Contiene relativamente pocas parafinas normales.]
- DA destillater (råolie), solventafvoksede lette naphthen- ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået ved fjernelse af normalparaffiner fra en råoliefraktion ved solventkristallisation. Den består af carbonhydrier, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE Destillate (Erdöl), Lösungsmittel-entwachsene leichte naphthenhaltige ; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Entfernen von normalen Paraffinen aus einer Erdölfraktion durch Lösungsmittelkristallisation. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL αποσταγμάτα (πετρελαίου), ελαφρά ναφθενικά αποκηρωμένα με διαλύτη· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με απομάκρυνση κανονικών παραφινών από κλάσμα πετρελαίου με κρυστάλλωση από διαλύτη. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN : Distillates (petroleum), solvent-dewaxed light naphthenic ; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists of hydrocarbons having carbon numbers predominantly in the range  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR distillats naphthéniques légers (pétrole), déparaffinés au solvant ; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par élimination des paraffines normales d'une fraction pétrolière par cristallisation au solvant. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT distillati (petrolio), naftenici leggeri decerati con solvente ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta separando le paraffine normali da una frazione di petrolio mediante cristallizzazione con solvente. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito di viscosità inferiore a 19cSt a 40 °C. Contiene relativamente poche paraffine.]
- NL : destillaten (aardolie), met solvent van was ontdane lichte naftenhoudende ; Basolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door verwijdering van normale paraffinen uit een aardoliefractie door solventkristallisatie. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT : destilados (petróleo), nafténicos leves desparafinados com solvente ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por remoção de parafinas normais de uma fracção petrolífera por cristalização com solvente. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzuerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-65-0

EEC No 265-169-7

No 649-474-00-6

NOTA H

NOTA L

destilados (petróleo), fracción parafínica pesada desparafinada con disolvente ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por separación de parafinas normales de una fracción de petróleo por cristalización en disolvente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de no menos de 100 SUS (19cSt a 40 °C).]

DA destillater (råolie), solventafvoksede tunge paraffin- ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået ved fjernelse af normalparaffiner fra en råoliefraktion ved solventkrystallisation. Den består overvejende af carbonhydrier, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet ikke mindre end 19cSt ved 40 °C.]

DE Destillate (Erdöl), Lösungsmittel-entwachsene schwere paraffinhaltige ; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Entfernen von normalen Paraffinen aus einer Erdölfraktion durch Lösungsmittelkristallisation. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von nicht weniger als 19 cSt bei 40 °C.]

EL αποσταγμάτα (πετρελαίου), θαρέα παραφινικά αποκυρωμένα με διαλύτη· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με απομάκρυνση κανονικών παραφινών από κλάσμα πετρελαίου με κρυστάλλωση από διαλύτη. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$  και παραγεί τελικό έλαιο με ιξώδες όχι μικρότερο από 19cSt σε 40 °C.]

EN Distillates (petroleum), solvent-dewaxed heavy paraffinic ; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization — it consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity not less than 100 SUS at 100 °F ( 19cSt at 40 °C).]

FR distillats paraffiniques lourds (pétrole), déparaffinés au solvant ; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par élimination des paraffines normales d'une fraction pétrolière par cristallisation au solvant. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C.]

IT distillati (petrolio), frazione paraffinica pesante decerata con solvente ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta separando le paraffine normali da una frazione di petrolio mediante cristallizzazione con solvente. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito di viscosità non inferiore a 19cSt a 40 °C.]


NL destillaten (aardolie), met solvent van was ontdane paraffinehoudende ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door verwijdering van normale paraffinen uit een aardoliefractie door solventkristallisatie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die niet minder is dan 19 cSt bij 40 °C.]

PT destilados (petróleo), parafínicos pesados desparafinados com solvente ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por remoção de parafinas normais de uma fracção petrolífera por cristalização com solvente. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentração*


Cas No 64742-68-3

EEC No 263/172-3

No 649-475-00-1

NOTA H

NOTA L

- ES : aceites nafténicos (petróleo), fracción pesada desparafinada catalíticamente ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida de un proceso de desparafinación catalítica. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 100 SUS (19cSt a 40 °C). Contiene relativamente pocas parafinas normales.]
- DA : naphthenolier (råolie), katalytisk afvoksede tunge ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved en katalytisk afvoksningsproces. Den består overvejende af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE : Naphthenhaltige Öle (Erdöl), katalytisch entwachsene schwere ; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem katalytischen Entwachsverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL : ναφθενικά έλαια (πετρελαιο), βαρέα καταλυτικά αποκηρωμένα· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από καταλυτική αποκήρωση. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες τουλάχιστο 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN : Naphthenic oils (petroleum), catalytic dewaxed heavy ; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR : huiles naphthéniques lourdes (pétrole), déparaffinage catalytique ; Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par un procédé de déparaffinage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT : olii naftenici (petrolio), pesanti decerati cataliticamente ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta da un processo di deparaffinazione catalitica. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito avente viscosità pari ad almeno 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL : naftenhoudende oliën (aardolie), katalytisch van was ontdane zware ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een katalytisch wasverwijderend proces. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die minstens 19 cSt is bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT : óleos nafténicos (petróleo), pesados desparafinados catalíticamente ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de desparafinação catalítica. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T		R : 45
		S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limit, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-69-4

EEC No 265-173-9

No 649-476-00-7

NOTA H

NOTA L

- ES** Aceites nattenicos (petroleo), fraccion ligera, desparafinada cataliticamente ; Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida de un proceso de desparafinación catalítica. Compuesta de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 100 SUS (19cSt a 40 °C). Contiene relativamente pocas parafinas normales.]
- DA** Naphthenolier (råolie), katalytisk afvoksede lette ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved en katalytisk afvoksningsproces. Den består af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet mindre end 19cSt ved 40 °C. Den indeholder forholdsvis få normaleparaffiner.]
- DE** Naphthenhaltige Ole (Erdöl), katalytisch entwachsste leichte ; Grundöl — nicht spezifiziert  
[Eine komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem katalytischen Entwachsverfahren. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL** Ελαφθένικα έλαια (πετρελαίου), ελαφρά καταλυτικά αποκηρωμένα· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται από καταλυτική αποκήρωση. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN** Naphthenic oils (petroleum), catalytic dewaxed light ; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity less than 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR** huiles naphthéniques légères (pétrole), déparaffinage catalytique ; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par un procédé de déparaffinage catalytique. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT** olii naftenici (petrolio), frazioni leggeri decerati cataliticamente ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta da un processo di deparaffinazione catalitica. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito avente viscosità inferiore a 19cSt a 40 °C. Contiene relativamente poche paraffine.]
- naalteenhoudende olien (aardolie), katalytisch van was ontdane lichte ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een katalytisch wasverwijderend proces. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT** Oleos naftenicos (petróleo), leves desparafinados cataliticamente ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de desparafinação catalítica. É constituída por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C. Contem relativamente poucas parafinas normais.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-70-2

EEC No 265-174-4

No 649-477-00-2

NOTA H

NOTA L

- ES aceites de parafina (petróleo), fracción pesada desparafinada catalíticamente ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida de un proceso de desparafinación catalítica. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 100 SUS (19cSt a 40 °C)]
- DA paraffinolie (råolie), katalytisk afvoksede tunge ; Unspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved en katalytisk afvoksningsproces. Den består overvejende af carbonhydrider, overvejende  $C_{20}$  til og ned  $C_{40}$ , og danner en lærdig olie med en viskositet på mindst 19cSt ved 40 °C ]
- DE Paraffinöle (Erdöl), katalytisch entwachte schwere , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem katalytischen Entwachsverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von wenigstens 19 cSt bei 40 °C ]
- EL παραφινικά έλαια (πετρέλαιου), βαρέα καταλυτικά αποκηρωμένα· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από καταλυτική αποκήρωση. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$  και παράγεται τελικό έλαιο με ιξώδες τουλάχιστον 19cSt σε 40 °C.]
- EN Paraffin oils (petroleum), catalytic dewaxed heavy ; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).]
- FR huiles de paraffine lourdes (pétrole), déparaffinage catalytique ; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par un procédé de déparaffinage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C.]
- IT olii di paraffina (petrolio), pesanti decerati cataliticamente ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta da un processo di deparaffinazione catalitica. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito avente viscosità di almeno 19cSt a 40 °C.]
- NL paraffinehoudende oliën (aardolie), katalytisch van was ontdane zware ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een katalytisch wasverwijderend proces. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die minstens 19 cSt is bij 40 °C ]
- PT oleos parafínicos (petróleo), pesados desparafinados catalíticamente ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de desparafinação catalítica. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C.]

*Clasificación, Klassificering, Anordning, Ταξινόγηση, Classification, Classificazione, Classificazione, Etiketierung, Classificação*

Carc. Cat. 2 R + S

*Etiquetado, Etikettering, Kennzeichnung, Ετικετογράφηση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Límites de concentración, Konzentrationsgrenzen, Konzentration-grenzwerte, Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 64742-71-8

EEC No 265-176-5

No 649-478-00-8

NOTA H

NOTA L

- ES: aceites de parafina (petróleo), fracción ligera desparafinada catalíticamente; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida de un proceso de desparafinación catalítica. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 100 SUS (19cSt a 40 °C).]
- DA: paraffinolie (råolie), katalytisk afvoksede lette; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved en katalytisk afvoksningsproces. Den består overvejende af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19cSt ved 40 °C.]
- DE: Paraffinöle (Erdöl), katalytisch entwachste leichte; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus einem katalytischen Entwachsverfahren. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40 °C.]
- EL: παραφινέλαια (πετρελαίου), ελαφρά καταλυτικά, αποκηρωμένα· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με μέθοδο καταλυτικής αποκήρωσης. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$  και παράγει τελικό έλαιο με ιξώδες μικρότερο από 19cSt σε 40 °C.]
- EN: Paraffin oils (petroleum), catalytic dewaxed light; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C).]
- FR: huiles de paraffine légères (pétrole), déparaffinage catalytique; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par un procédé de déparaffinage catalytique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure à 19 cSt à 40 °C.]
- IT: olii di paraffina (petrolio), frazioni leggeri decerati cataliticamente; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta da un processo di deparaffinazione catalitica. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito avente viscosità inferiore a 19cSt a 40 °C.]
- NL: paraffineoliën (aardolie), katalytisch van was ontdane lichte; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een katalytisch wasverwijderend proces. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit die kleiner is dan 19 cSt bij 40 °C.]
- PT: oleos parafínicos (petróleo), leves desparafinados catalíticamente; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida de um processo de desparafinação catalítica. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma viscosidade inferior a 19cSt a 40 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificatie*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="422 459 438 481" style="text-align: center;">T</div> <div data-bbox="391 504 478 604" style="text-align: center;">  </div>	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742-75-2

EEC No 265-179-1

No 649-479-00-3

NOTA H

NOTA L

- ES aceites nafténicos (petróleo), fracción pesada compleja desparafinada; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por separación de hidrocarburos parafínicos de cadena lineal como un sólido por tratamiento con un agente como urea. Compuesta de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de al menos 100 SUS (19cSt a 40 °C). Contiene relativamente pocas parafinas normales.]
- DA naphthenolier (råolie), sammensatte afvoksede tunge; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved at fjerne ligekædede paraffincarbonhydrider som et fast stof ved behandling med et reagens, såsom urinstof. Den består af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på mindst 19cSt ved 40 °C. Den indeholder forholdsvis få normalparaffiner.]
- DE Naphthenhaltige Öle (Erdöl), komplexe entwachte schwere; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Entfernen von Paraffinkohlenwasserstoffen mit gerader Kette als Feststoff durch Behandeln mit einem Mittel wie Harnstoff. Besteht aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von mindestens 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]
- EL ναφθενικά έλαια (πετρελαίου), βαρέα πολύπλοκα αποκηρωμένα· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με απομάκρυνση παραφινικών υδατανθράκων με ευθεία αλυσίδα ως στερεών με κατεργασία με μέσο όπως η ουρία. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες τουλάχιστον 19cSt σε 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]
- EN Naphthenic oils (petroleum), complex dewaxed heavy; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by removing straight chain paraffin hydrocarbons as a solid by treatment with an agent such as urea. It consists of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil having a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR huiles naphthéniques lourdes complexes (pétrole), déparaffinées; Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par l'élimination des hydrocarbures paraffiniques à chaîne droite sous forme solide, par traitement avec un agent tel que l'urée. Se compose d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C. Contient relativement peu de paraffines normales.]
- IT olii naftenici (petrolio), pesanti complessi decerati; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta separando in forma solida gli idrocarburi paraffinici a catena lineare mediante trattamento con un agente chimico come l'urea. È costituita da idrocarburi a numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un olio finito avente viscosità di almeno 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL naftenhoudende oliën (aardolie), complexe van was ontdane zware; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door verwijdering van niet-vertakte paraffinekoolwaterstoffen als vaste stof door behandeling met een agens zoals ureum. Bestaat uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit die minstens 19 cSt is bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT oleos nafténicos (petróleo), pesados desparafinados especiais; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por remoção de hidrocarbonetos parafínicos de cadeia linear como um sólido por tratamento com agente tal como a ureia. É constituída por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade mínima de 19cSt a 40 °C. Contém relativamente poucas parafinas normais.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


IS No 649-480-00-9

IEC No 480-180-7

No 649-480-00-9

NOTA H

NOTA L

antes naitenticos (petroleo), fraccion ligera compleja desparafinada. Aceite de base, sin especificar  
 Combination compleja de hidrocarburos obtenida de un proceso de desparafinacion catalitica. Compuesta de hidrocarburos con  
 un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos  
 de 100 SUS (19cSt a 40 °C). Contiene relativamente pocas parafinas normales.]

naphthenolier (råolie), komplekse afvoksede lette. Uspecificeret baseolie  
 En sammensat blanding af carbonhydrider opnået fra en katalytisk afvoksningsproces. Den består af carbonhydrider, overvejende  
 $C_{11}$  til  $C_{30}$ , og danner en lædige olie med en viskositet på mindre end 19cSt ved 40 °C. Den indeholder relativt få  
 normalparaffiner.]

11. Napthenhaltige Öle (Erdöl), komplex entwachste leichte. Grundöl — nicht spezifiziert  
 Eine komplexe Kombination von Kohlenwasserstoffen erhalten aus einem katalytischen Entwachsungsverfahren. Besteht aus Kohlen-  
 wasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein fertiggestelltes Öl mit einer Visko-  
 sität von weniger als 19 cSt bei 40 °C. Enthält relativ wenig normale Paraffine.]

12. Υδρογονάνθρακα (πετρελαιο), πολυπλοκά αποκηρώμενα ελαφρά. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
 Συμπλοκά, συνδυασμός υδρογονάνθρακων που λαμβάνεται από καταλυτική αποκήρωση. Συνίσταται από υδρογονάνθρακες με  
 αριθμούς ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως  $C_{30}$  και παράγει τελικό έλαιο ιξώδους μικρότερου από 19cSt στους  
 40 °C. Περιέχει σχετικά λίγες κανονικές παραφίνες.]

Synthetic oils (petroleum), complex dewaxed light. Baseoil — unspecified  
 A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists of hydrocarbons having carbon  
 numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil having a viscosity less than 100 SUS at 100 °F  
 (38 °C). It contains relatively few normal paraffins.]

huiles naphtheniques legeres complexes (pétrole), déparaffinées; Huile de base — non spécifique  
 Combinaison complexe d'hydrocarbures obtenue par un procédé de déparaffinage catalytique. Se compose d'hydrocarbures dont le  
 nombre des carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ , et donne une huile-produit fini de viscosité inférieure a 19 cSt a  
 40 °C. Contient relativement peu de paraffines normales.]

oli naitentici (petrolio), complesso decerato leggero. Olio base — non specificato  
 Combinazione complessa di idrocarburi ottenuta dal processo catalitico di eliminazione delle cere. È costituita da idrocarburi  
 aventi numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e fornisce un olio avente viscosità minore di 19cSt a  
 40 °C. Contiene poche paraffine relativamente normali.]

13. naittenolien (aardoilie), complexe van was ontdane lichte. Basisolie — niet gespecificeerd  
 Een complexe verzameling koolwaterstoffen die wordt verkregen uit een katalytisch wasverwijderingsproces. Bestaat uit koolwater-  
 stoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooide olie met een viscositeit lager dan 19 cSt bij 40 °C. Bevat naar  
 verhouding weinig gewone paraffinen.]

14. oleis naiténicos (petrolieni), leves desparafinados especiais. Óleo-base não especificado  
 Uma combinação complexa de hidrocarbonetos obtida de um processo de desparafinação catalítica. É constituída por hidrocarbo-  
 netos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$  e produz um óleo acabado com uma  
 viscosidade inferior a 19cSt a 40 °C. Contem relativamente poucas parafinas normais.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 72623-85-9

EEC No 276-736-3

No 649-481-00-4

NOTA H

NOTA L

- ES aceites lubricantes (petroleo),  $C_{20-40}$ , basados en aceite neutro tratado con hidrógeno, elevada viscosidad ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por tratamiento con hidrogeno de gasóleo ligero obtenido a vacío, gasóleo pesado obtenido a vacío y aceite residual desasfaltado con disolvente en presencia de un catalizador en un proceso en dos etapas efectuando un desparafinado entre ambas etapas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad de aproximadamente 112cSt a 40 °C. Contiene una proporción relativamente grande de hidrocarburos saturados.]
- DA smørelier (råolie),  $C_{20-40}$ ; hydrogenbehandlede olie baseret, høj viskositet ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle let vakuumgasolie, tung vakuumgasolie og solvent afasfalteret restolie med hydrogen, i tilstedeværelse af en katalysator, i en to trinproces med afvoksning udført mellem de to trin. Den består overvejende af carbonhydrider, overvejende  $C_{20}$  til  $C_{40}$  og med  $C_{20}$  og danner en færdig olie med en viskositet på omtrent 112cSt ved 40 °C. Den indeholder en relativ stor mængde af mættede carbonhydrider.]
- DE Schmieröle (Erdöl),  $C_{20-40}$ , mit Wasserstoff behandelte neutrale aus Öl, hohe Viskosität ; Grundöl-nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln von leichtem Vakuumgasöl, schwerem Vakuumgasöl und durch Lösungsmittel desasphaltiertem Rückstandsöl mit Wasserstoff in Gegenwart eines Katalysators in zwei Stufen, mit Entwachsen zwischen beiden Stufen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von etwa 112 cSt bei 40 °C. Enthält eine relativ große Menge gesättigter Kohlenwasserstoffe.]
- EL λιπαντικά ελαία (πετρελαιο),  $C_{20-40}$ , υδρογονοκατεργασμένα βάσης ουδέτερου ελαίου, υψηλού ιξώδους. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία με υδρογόνο παρουσία καταλύτη, ελαφρού ακαθάρτου πετρελαίου κενού, βαρέος ακαθάρτου πετρελαίου κενού και υπολειμματικού ελαίου απασφαλωμένου με διαλύτη σε δύο στάδια με την αποκρήση να γίνεται μεταξύ των δύο σταδίων. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες 112cSt σε 40 °C. Περιλαμβάνει σχετικά μεγάλη αναλογία κορεσμένων υδρογονανθράκων.]
- EN Lubricating oils (petroleum),  $C_{20-40}$ , hydrotreated neutral oil-based, high-viscosity ; Baseoil-unspecified  
[A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil, and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil having a viscosity of approximately 112cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.]
- FR huiles lubrifiantes (pétrole),  $C_{20-40}$ , base huile neutre, hydrotraitement, viscosité élevée ; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue, à partir de gazole sous-vide, léger et lourd, et d'huile résiduelle désasphaltée au solvant, par traitement à l'hydrogène en présence d'un catalyseur, en deux étapes entrecoupées d'un déparaffinage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{40}$  et donne une huile-produit fini de viscosité approximativement égale à 112 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures saturés.]
- IT oli lubrificanti (petrolio),  $C_{20-40}$ , a base di olio neutro, alto viscosità, idrotreatati ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuto trattando con idrogeno in presenza di un catalizzatore un gasolio leggero e un gasolio pesante ottenuti sotto vuoto e un olio residuo desasfaltato con solvente, in due fasi, interponendo fra esse la deparaffinazione. E costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{40}$  e produce un'olio finito con viscosità di circa 112cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi saturi.]
- NL smeeroliën (aardolie),  $C_{20-40}$ , met waterstof behandelde uit neutrale olie verkregen, hoge viscositeit ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door de behandeling van lichte vacuümgasolie, zware vacuümgasolie en solvent-gedeasfalterde residu-olie met waterstof in de aanwezigheid van een katalysator in een proces met twee fasen met tussen de fasen in verwijdering van was. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ , en vormt een voltooide olie met een viscositeit van ongeveer 112 cSt bij 40 °C. Bevat een relatief grote hoeveelheid verzadigde koolwaterstoffen.]
- PT oleos lubrificantes (petróleo),  $C_{20-40}$ , óleo base neutro tratado com hidrogénio, de viscosidade elevada ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento com hidrogénio na presença de um catalisador, em duas etapas, de gasóleo leve de vácuo, gasóleo pesado de vácuo e residuo desasfaltado com solvente, sendo submetidos a uma operação de desparafinação entre as duas etapas. É constituído predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade de aproximadamente 112cSt a 40 °C. Contém uma proporção relativamente elevada de hidrocarbonetos saturados.]

*Classification, Klassifizierung, Ein teilung, Ταξινόμηση, Classification, Classificazione, Classificação, Indeling, Classificação*

Carc Cat 2, R 45

*Etiqueta lo, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratsegrenzen, Limites de concentraçào*


Cas No 72623-86-0

EEC No 276-737-9

No 649-482-00-X

NOTA H

NOTA L

- ES aceites lubricantes (petroleo),  $C_{11-30}$ , basados en aceite neutro tratado con hidrógeno, Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por tratamiento con hidrógeno de gasóleo ligero obtenido a vacío y gasóleo pesado obtenido a vacío en presencia de un catalizador en un proceso en dos etapas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad de aproximadamente 15 cSt a 40 °C. Contiene una proporción relativamente grande de hidrocarburos saturados.]
- DA smørelier (råolie),  $C_{11-30}$ , hydrogenbehandlede neutral olie baserede, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået ved at behandle let vakuumgasolie og solvent afasfalteret restolie med hydrogen, i tilstedeværelse af en katalysator, i en to trinproces med afvoksning udført mellem de to trin. Den består overvejende af carbonhydrier, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på omtrent 15 cSt ved 40 °C. Den indeholder en relativ stor mængde mættede carbonhydrier.]
- DE Schmierole (Erdöl)  $C_{11-30}$  mit Wasserstoff behandelte neutrale aus Öl, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln von leichtem Vakuumgasöl und schwerem Vakuumgasöl mit Wasserstoff in Gegenwart eines Katalysators in einem Zweistufenverfahren, mit Entwachsen zwischen beiden Stufen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von etwa 15 cSt bei 40 °C. Enthält eine relativ große Menge gesättigter Kohlenwasserstoffe.]
- EL λιπαντικά ελαία (πετρελαίου),  $C_{11-30}$ , υδρογονοκατεργασμένα βασής ουδέτερου ελαίου. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από κατεργασία με υδρογόνο παρουσία καταλύτη ελαφρού ακαθάρτου πετρελαίου κενού και βαρέος ακαθάρτου πετρελαίου κενού με υδρογόνο σε παρουσία καταλύτη σε δυο στάδια με αποκηρωση να γίνεται μεταξύ των δυο σταδίων. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$  και παράγει τελικό ελαιο με ιξώδες 15 cSt σε 40 °C. Περιέχει σχετικά μεγάλη αναλογία κορεσμένων υδρογονάνθρακων.]
- EN Lubricating oils (petroleum),  $C_{11-30}$ , hydrotreated neutral oil-based, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by treating light vacuum gas oil and heavy vacuum gas oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil having a viscosity of approximately 15 cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.]
- FR huiles lubrifiantes (pétrole), base  $C_{11-30}$ , base huile neutre, hydrotraitement, Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue, à partir de gazole sous vide, léger et lourd, par traitement à l'hydrogène en présence d'un catalyseur en deux étapes entrecoupées d'un déparaffinage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ ,  $C_{30}$  et donne une huile-produit fini de viscosité approximativement égale à 15 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures saturés.]
- IT olii lubrificanti (petrolio)  $C_{11-30}$ , a base di olio neutro, idrotrattati, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta trattando con idrogeno in presenza di un catalizzatore un gasolio leggero e un gasolio pesante ottenuti sotto vuoto in due fasi, interponendo fra esse la deparaffinazione. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito con viscosità di circa 15 cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi saturi.]
- NL smeerolien (aardolie),  $C_{11-30}$ , met waterstof behandelde uit neutrale olie verkregen, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen verkregen door de behandeling van lichte vacuumgasolie en zware vacuumgasolie met waterstof in de aanwezigheid van een katalysator in een proces met twee fasen met tussen de fasen in verwijdering van was. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_{11}$  tot en met  $C_{30}$ , en vormt een voltooid olie met een viscositeit van ongeveer 15 cSt bij 40 °C. Bevat een relatief grote hoeveelheid verzadigde koolwaterstoffen.]
- PT oleos lubricantes (petroleo),  $C_{11-30}$ , oleo base neutro tratado com hidrogenio, Oleo base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento com hidrogenio na presença de um catalisador, em duas etapas de gasoleo leve de vacuo e gasoleo pesado de vacuo, com uma operação de desparafinagem entre as duas etapas. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{30}$  e produz um oleo acabado com uma viscosidade de aproximadamente 15 cSt a 40 °C. Contem uma proporção relativamente elevada de hidrocarbonetos saturados.]

*Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classification Classificação Classificação*

Cite Cat 4 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R 45
	S: 53-45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκεντρώσεως Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentratiegrenzen Limites de concentração*


Cas No 72623 87-1

EFC No 276 738-4

No 649-483-00-5

NOTA H

NOTA L

- ES aceites lubricantes (petroleo),  $C_{20-50}$ , basados en aceite neutro tratado con hidrógeno, Aceite de base, sin especificar [Combinación compleja de hidrocarburos obtenida por tratamiento con hidrogeno de gasoleo ligero obtenido a vacío, gasóleo pesado obtenido a vacío y aceite residual desasfaltado con disolvente en presencia de un catalizador en un proceso en dos etapas efectuando un desparafinado entre ambas etapas. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro de intervalo  $C_{20}$  a  $C_{50}$  y produce un aceite final con una viscosidad de aproximadamente 32cSt a 40 °C. Contiene una proporción relativamente grande de hidrocarburos saturados.]
- DA smørelier (råolie),  $C_{20-50}$ , hydrogenbehandlede neutral olie baserede, Uspecificeret baseolie [En sammensat blanding af carbonhydrier opnået ved at behandle let vakuumbasolie, tung vakuumbasolie og solvent afasfalteret restolie med hydrogen, i tilstedeværelse af en katalysator i en to trinproces med afvoksning udført mellem de to trin. Den består overvejende af carbonhydrier, overvejende  $C_{20}$  til og med  $C_{50}$ , og danner en færdig olie med en viskositet på omtrent 32cSt ved 40 °C. Den indeholder en relativ stor mængde mættede carbonhydrier.]
- DE Schmieröle (Erdöl),  $C_{20-50}$ , mit Wasserstoff behandelte neutrale aus Öl, Grundöl — nicht spezifiziert [Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Behandeln von leichtem Vakuumgasöl, schwerem Vakuumgasöl und durch Lösungsmittel deasphaltiertem Rückstandsol mit Wasserstoff in Gegenwart eines Katalysators in einem Zweistufenverfahren mit Entwachsen zwischen beiden Stufen. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{50}$  und ergibt ein Fertigöl mit einer Viskosität von etwa 32 cSt bei 40 °C. Enthält eine relativ große Menge gesättigter Kohlenwasserstoffe.]
- EL λιπαντικά ελαία (πετρελαιο),  $C_{20-50}$ , υδρογονοκατεργασμένα βασής ουδέτερα ελαίου. Βασικό ορυκτέλαιο — μη προδιανεγραμμένο [Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από κατεργασία με υδρογόνο παρουσία καταλυτή ελαφρού ακαθάρτου πετρελαιο, βαρέος ακαθάρτου πετρελαιο, και υπολειμματικού ελαίου απασφαλτωμένου με διαλυτή, σε δυο στάδια με την αποκρυστάλλωση να γίνεται μεταξύ των δυο σταδίων. Συνίσταται από υδρογονάνθρακες με αριθμό ατόμων ανθράκα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{50}$  και παράγει τελικό ελαιο με ιξώδες περίπου 32cSt σε 40 °C. Περιέχει σχετικά μεγάλη αναλογία κορεσμένων υδρογονανθράκων.]
- EN Lubricating oils (petroleum),  $C_{20-50}$ , hydrotreated neutral oil based, Baseoil — unspecified [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{50}$  and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.]
- FR huiles lubrifiantes (pétrole),  $C_{20-50}$ , base huile neutre, hydrotraitement, Huile de base — non spécifique [Combinaison complexe d'hydrocarbures obtenue à partir de gazole sous vide, léger et lourd, et d'huile résiduelle desasphaltée au solvant, par traitement à l'hydrogène en présence d'un catalyseur en deux étapes entrecoupées d'un déparaffinage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{50}$  et donne une huile produite finale de viscosité approximativement égale à 32 cSt à 40 °C. Contient une proportion relativement importante d'hydrocarbures saturés.]
- IT oli lubrificanti (petrolio),  $C_{20-50}$ , a base di olio neutro, idrotrattati, Olio base — non specificato [Combinazione complessa di idrocarburi ottenuta trattando con idrogeno in presenza di un catalizzatore un gasolio leggero e un gasolio pesante ottenuti sotto vuoto e un olio residuo deasfaltato con solvente in due fasi, interponendo fra esse la deparaffinazione. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{50}$  e produce un olio finito con viscosità di circa 32cSt a 40 °C. Contiene una percentuale relativamente alta di idrocarburi saturi.]
- NL smeerolien (aardolie),  $C_{20-50}$ , uit met waterstof behandelde neutrale olie verkregen, Basisolie — niet gespecificeerd [Een complexe verzameling koolwaterstoffen, verkregen door de behandeling van lichte vacuumbasolie, zware vacuumbasolie en solvent-gedeasfalterde residu-olie met waterstof in de aanwezigheid van een katalysator in twee fasen met tussen de fasen in verwijdering van was. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{50}$ , en vormt een voltooide olie met een viscositeit van ongeveer 32 cSt bij 40 °C. Bevat een relatief grote hoeveelheid verzadigde koolwaterstoffen.]
- PT oleos lubrificantes (petróleo),  $C_{20-50}$ , óleo base neutro tratado com hidrogenio, Óleo-base não especificado [Uma combinação complexa de hidrocarbonetos obtida por tratamento com hidrogenio na presença de um catalizador, em duas etapas, de gasóleo leve de vácuo, gasóleo pesado de vácuo e resíduo desasfaltado com solvente com uma operação de desparafinação entre as duas etapas. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{50}$  e produz um óleo acabado com uma viscosidade de aproximadamente 32cSt a 40 °C. Contem uma proporção relativamente elevada de hidrocarbonetos saturados.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificacão*

Carc. Cat. 2 : R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentraci3n, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraç3o*


Cas No 74869-22-0

EEC No 278-012-2

No 649-484-00-0

NOTA H


NOTA L

- ES: aceites lubricantes; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida de procesos de desparafinado y extracción con disolvente. Compuesta en su mayor parte de hidrocarburos saturados con un número de carbonos dentro del intervalo de  $C_{11}$  a  $C_{30}$ ]
- DA: smørelier; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved solventekstraktion og afvoksningsprocesser. Den består overvejende af mættede carbonhydrider,  $C_{11}$  til og med  $C_{30}$ ]
- DE: Schmieröle; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten aus Lösungsmittlextraktion und Entwachsungsverfahren. Besteht vorrangig aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen im Bereich von  $C_{11}$  bis  $C_{30}$ ]
- EL: λιπαντικά έλαια· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από διεργασίες εκχύλισης με διαλύτη και αποκήρωσης σταδίων. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα στην περιοχή από  $C_{11}$  έως και  $C_{30}$ ]
- EN: Lubricating oils; Baseoil — unspecified  
[A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range  $C_{11}$  through  $C_{30}$ ]
- FR: huiles lubrifiantes; Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant et déparaffinage. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe dans la gamme  $C_{11}$ - $C_{30}$ ]
- IT: olii lubrificanti; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta dall'estrazione con solventi e dai processi di decerazione. È costituita prevalentemente da idrocarburi saturi con numero di atomi di carbonio nell'intervallo  $C_{11}$ - $C_{30}$ ]
- NL: smeeroliën; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit solventextractie- en wasverwijderingsprocessen. Bestaat voornamelijk uit verzadigde  $C_{11}$ - $C_{30}$ -koolwaterstoffen.]
- PT: oleos lubricantes; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida de processos de extração com solventes e desparafinagem. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono na gama de  $C_{11}$  até  $C_{30}$ ]

*Clasificación, Klassificering, Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 90640-91-8

EEC No 292-613-7

No 649-485-00-6

NOTA H

NOTA L

- ES destilados (petroleo), fraccion compleja parafinica pesada desparafinada , Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por desparafinación del destilado parafinico pesado. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final con una viscosidad igual o mayor a 19cSt a 40 °C (100 SUS a 100 °F). Contiene relativamente pocas parafinas normales.]
- DA destillater (råolie), sammensatte afvoksede tunge paraffin-, Uspecificeret baseolie  
[En sammensat blanding af carbonhydnder opnået ved afvoksning af et tungt paraffindestillat. Den består overvejende af carbonhydneder, overvejende  $C_{20}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet på 19cSt eller mere ved 40°C. Den indeholder forholdsmæssigt få normalparaffiner.]
- DE Destillate (Erdoöl), komplexe entwachste schwere paraffinhaltige , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, hergestellt durch Entwachsen von schwerem paraffinhaltigen Destillat. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität von oder größer als 19 cSt bei 40 °C.]
- EL αποσταγµατα (πετρελαιου), πολυπλοκα αποκηρωµενα βαρεα παραφινικα βασικο ορυκτελαιο — μη προδιαγεγραµµενο  
[Πολυπλοκος συνδυασµός υδρογονανθρακων που λαμβανεται µε αποκηρωση βαρεως παραφινικου αποσταγµατος. Συνισταται κυριως από υδρογονανθρακες µε αριθµο ατόµων ανθρακα κυριως στην περιοχή από  $C_{20}$  ως και  $C_{40}$  και παραγει τελικο ελαιο µε ιξωδες ίσο ή µεγαλυτερο απο 19cSt σε 40 °C. Περιεχει σχετικως λιγες κανονικες παραφινες.]
- EN Distillates (petroleum), complex dewaxed heavy paraffinic , Baseoil -- unspecified  
[A complex combination of hydrocarbons obtained by dewaxing heavy paraffinic distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil with a viscosity of equal to or greater than 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins.]
- FR distillats paraffiniques lourds complexes (petrole), deparaffines , Huile de base — non specifique  
[Combinaison complexe d'hydrocarbures obtenue par deparaffinage d'un distillat paraffinique lourd. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{20}$  -  $C_{40}$  et donne une huile-produit fini de viscosite egale ou superieure a 19 cSt a 40 °C. Contient relativement peu de paraffines normales.]
- IT distillati (petrolio), paraffinici pesanti deparaffinati complessi , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta dalla deparaffinazione di un distillato paraffinico pesante. Costituito prevalentemente da idrocarburi con un numero di atomi di carbonio nell'intervallo  $C_{20}$  -  $C_{40}$  e produce un olio finito con una viscosita uguale o maggiore di 19cSt a 40 °C. Contiene relativamente poche paraffine normali.]
- NL destillaten (aardolie), complexe van was ontdane zware paraffinehoudende , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het verwijderen van was uit een zwaar paraffinehoudend destillaat. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$  en vormt een voltooide olie met een viscositeit groter dan of gelijk aan 19 cSt bij 40 °C. Bevat relatief weinig normale paraffinen.]
- PT destilados (petroleo), parafinicos pesados desparafinados complexos , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por desparafinação de um destilado parafinico pesado. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{20}$  ate  $C_{40}$  e produz um oleo acabado com uma viscosidade igual ou superior a 19 cSt a 40 °C. Contem relativamente poucas parafinas normais.]

*Clasificación Klassificering Einstufung Ταξινόηση Classification Classification Classificazione Indetiny Classificação*

Carc Cat 2 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labeling, Étiquetage, Etichettatura, Kennmerken, Kotulagem*

T	R - 45
	S 53-45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentrationgrenzen Limites de concentraçao*


Cas No 90640-92-9

EEC No 292-614-2

No 649-486-00-1

NOTA H

NOTA L

- ES destilados (petroleo), fraccion compleja parafinica ligera desparafinada , Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por desparafinación del destilado parafinico ligero. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{12}$  a  $C_{30}$  y produce un aceite final con una viscosidad de menos de 19cSt a 40°C (100 SUS a 100 °F) Contiene relativamente pocas parafinas normales]
- DA destillater (råolie), sammensatte afvoksede lette paraffin- , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået ved afvoksning af et let paraffindestillat. Det består overvejende af carbonhydrier, overvejende  $C_{12}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet på mindre end 19cSt ved 40°C. Den indeholder forholdsvis få normalparaffiner]
- DE Destillate (Erdöl), komplexe entwachste leichte paraffinhaltige , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen hergestellt durch Entwachsen von leichtem paraffinhaltigen Destillat. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{12}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität von weniger als 19 cSt bei 40°C. Enthält relativ wenig normale Paraffine]
- EL αποστανματα (πετρελαιου), πολυπλοκα αποκηρωμενα ελαφρα παραφινικά Βασικο ορυκτελαιο — μη προδιαγεγραμμενο  
[Πολυπλοκος συνδυασμός υδρογονανθρακων που λαμβανεται με αποκηρωση ελαφρου παραφινικου αποστάγματος. Συνισταται κυριως από υδρογονάνθρακες με αριθμό ατομων ανθρακα κυριως στην περιοχη από  $C_{12}$  έως και  $C_{30}$  και παράγει τελικό ελαιο με ιξώδες μικρότερο από 19cSt σε 40 °C. Περιεχει σχετικως λιγες κανονικες παραφινες]
- EN Distillates (petroleum), complex dewaxed light paraffinic , Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by dewaxing light paraffinic distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{12}$  through  $C_{30}$  and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains relatively few normal paraffins]
- FR distillats paraffiniques légers complexes (petrole), déparaffinés , Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par déparaffinage d'un distillat paraffinique léger. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{12}$ - $C_{30}$ , et donne une huile-produit fini de viscosite inférieure a 19 cSt a 40°C. Contient relativement peu de paraffines normales]
- IT distillati (petrolio), paraffinici leggeri deparaffinati complessi , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta dalla deparaffinazione di un distillato paraffinico leggero. Costituito prevalentemente da idrocarburi con numero di atomi di carbonio nell'intervallo  $C_{12}$ ,  $C_{30}$  e produce un olio finito con una viscosità minore di 19cSt a 40°C. Contiene relativamente poche paraffine normali]
- NL destillaten (aardolie), complexe van was ontdane lichte paraffinehoudende , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door het verwijderen van was uit een licht paraffinehoudend destillaat. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{12}$  tot en met  $C_{30}$  en vormt een voltooide olie met een viscositeit kleiner dan 19 cSt bij 40°C. Bevat relatief weinig normale paraffinen]
- PT destilados (petroleo), parafinicos leves desparafinados complexos , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por desparafinagem de destilados parafinicos leves. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{12}$  ate  $C_{30}$  e produz um oleo acabado com uma viscosidade inferior a 19cSt a 40°C. Contem relativamente poucas parafinas normais]

*Classification Klassifizierung Einstufung Τξ. σήμανση Classification Classification Classificazione Indeling Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R 45
	S 52+53

*Limits of concentration Konzentrationsgrenzen, Konzentrationsgrenzwerte Όρια συγκεντρώσεων, Concentration limits  
límites de concentración Límites de concentração Concentratiegrenzen Limites de concentração*






*Classification Klassificering, Einstufung Ταξινόμηση Classification, Classification Classificazione Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : S3-45

*Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 90640 95 2

EEC No 292-617-9

No 649-488-00-2

NOTA H


NOTA L

- ES. hidrocarburos,  $C_{20-30}$ , fracción parafínica pesada desparafinada con disolventes, tratada con hidrógeno; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos producida por tratamiento con hidrógeno en presencia de un catalizador del destilado parafínico pesado desparafinado. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{30}$ ]
- DA carbonhydrider,  $C_{20-30}$ , solventafvoksede tunge paraffin-, hydrogenbehandlede, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider fremstillet ved at behandle et afvokset tungt paraffindestillat med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af carbonhydrider, overvejende  $C_{20}$  til og med  $C_{30}$ ]
- DE Kohlenwasserstoffe  $C_{20-30}$ , durch Lösungsmittel entwachste schwere paraffinhaltige, mit Wasserstoff behandelt, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln von entwachstem schwerem paraffinhaltigen Destillat mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{30}$ ]
- EL υδρογονάνθρακες  $C_{20-30}$ , αποκηρωμένοι με διαλυτή βαρέως παραφινικοί, υδρογονοκατεργασμένοι. Βασικό ορυκτέλαιο — μη τροποποιημένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παρανίεται με κατεργασία αποκηρωμένου βαρέως παραφινικού αποσταγμάτος με υδρογόνο παρουσία καταλύτη. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{30}$ ]
- EN Hydrocarbons,  $C_{20-30}$ , solvent dewaxed heavy paraffinic, hydrotreated; Baseoil — unspecified  
[A complex combination of hydrocarbons produced by treating dewaxed heavy paraffinic distillate with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{30}$ ]
- FR hydrocarbures paraffiniques lourds en  $C_{20-30}$  (pétrole), deparaffinage au solvant et hydrotraitement, Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures résultant du traitement à l'hydrogène, en présence d'un catalyseur, d'un distillat paraffinique lourd deparaffiné. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$ - $C_{30}$ ]
- IT idrocarburi,  $C_{20-30}$ , paraffinici pesanti deparaffinati con solvente, idrotrattati, Olio base — non specificato  
[Combinazione complessa di idrocarburi prodotta trattando un distillato paraffinico pesante deparaffinato con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$ - $C_{30}$ ]
- NL. koolwaterstoffen  $C_{20-30}$ , met solvent van was ontdane zware paraffinehoudende, met waterstof behandeld, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de behandeling van van was ontdaan zwaar paraffinehoudend destillaat met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{30}$ ]
- PT: hidrocarbonetos,  $C_{20-30}$ , parafínicos pesados desparafinados com solvente, tratados com hidrogénio, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos produzida tratando um destilado parafínico pesado desparafinado com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente de  $C_{20}$  até  $C_{30}$ ]

*Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte Όρια συγκέντρωσης, Concentration limits*  
*Limites de concentration, Limiti di concentrazione Concentrazionegrenzen, Limites de concentraçao*


Cas No 90640-96-3

EEC No 292-618-4

No 649-489-00-8

NOTA H

NOTA L

- ES destilados (petroleo), fraccion parafínica ligera desparafinada con disolventes, tratada con arcilla ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos que resulta del tratamiento del destilado parafínico ligero desparafinado con arcilla natural o modificada en un proceso por contacto o por percolación. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$ ]
- DA destillater (råolie), solventafvoksede lette paraffin-, lerbehandlede, Uspecificeret baseolie  
[En sammensat blanding af carbonhydnder fremkommet ved behandling af et afvokset let paraffindestillat med naturligt eller modificeret ler i enten en kontakt- eller perkoleringsproces. Den består overvejende af carbonhydnder, overvejende  $C_{11}$  til og med  $C_{30}$ ]
- DE Destillate (Erdöl), durch Lösungsmittel entwachste leichte paraffinhaltige, Ton-behandelt, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln von entwachstem leichtem paraffinhaltigen Destillat mit natürlichem oder modifiziertem Ton entweder in einem Kontakt- oder Perkulationsverfahren erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$ ]
- EL αποσταγματα (πετρελαίου), αποκηρωμένα με διαλυτή ελαφρά παραφινικά, κατεργασμένα με άργιλο· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που προκύπτει από την κατεργασία αποκηρωμένου ελαφρού παραφινικού αποστάγματος με φυσική ή τρυποποιημένη άργιλο είτε με μέθοδο επαφής είτε με μέθοδο διήθησης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$ ]
- EN Distillates (petroleum), solvent dewaxed light paraffinic, clay-treated ; Baseoil - unspecified  
[A complex combination of hydrocarbons resulting from treatment of dewaxed light paraffinic distillate with natural or modified clay in either a contacting or percolation process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$ ]
- FR distillats paraffiniques légers (petrole), déparaffinés au solvant et traités à la terre ; Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures résultant du traitement d'un distillat paraffinique léger déparaffiné avec de l'argile naturelle ou modifiée, par contact ou par percolation. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ ]
- IT Distillati (petrolio), paraffinici leggeri deparaffinati con solvente, trattati con argilla, Olio base — non specificato  
[Combinazione complessa di idrocarburi prodotta trattando un distillato paraffinico leggero deparaffinato con argilla naturale o modificata mediante un processo di contatto o di percolazione. Costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$ ]
- NL destillaten (aardolie), met solvent van was ontdane lichte paraffinehoudende, met klei behandeld ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die overblijft uit de behandeling van van was ontdaan licht paraffinehoudend destillaat met natuurlijke of gemodificeerde klei in hetzij een contact- dan wel een filtratieproces. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ ]
- PT destilados (petroleo), parafínicos leves desparafinados com solvente, tratados com argila ; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de um destilado parafínico leve desparafinado com argila natural ou modificada quer por mistura quer por um processo de percolação. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{30}$ ]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : S3-45

*Limites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 90640-97-4

EEC No 292-620-5

No 649-490-00-3

NOTA H  
NOTA L

- ES: destilados (petróleo), fracción parafínica ligera desparafinada con disolventes, tratada con hidrógeno, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos producida por tratamiento con hidrógeno en presencia de un catalizador del destilado parafínico ligero desparafinado. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$ ]
- DA: destillater (råolie), solventafvoksede lette paraffin-, hydrogenbehandlede; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier fremskillet ved at behandle et afvokset let paraffindestillat med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af carbonhydrier, overvejende  $C_{11}$  til og med  $C_{30}$ ]
- DE: Destillate (Erdöl), durch Lösungsmittel entwachte leichte paraffinhaltige, mit Wasserstoff behandelt; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die durch Behandeln eines entwachten leichten paraffinhaltigen Destillates mit Wasserstoff in Gegenwart eines Katalysators entsteht. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$ ]
- EL: αποσταγματα (πετρελαίου), αποκηρωμένα με διαλύτη ελαφρά παραφινικά, υδρογονοκατεργασμένα Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παραγεται με κατεργασία αποκηρωμένου ελαφρού παραφινικού αποστάγματος με υδρογόνο παρουσία καταλύτη. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{30}$ ]
- EN: Distillates (petroleum), solvent dewaxed light paraffinic, hydrotreated; Baseoil — unspecified  
[A complex combination of hydrocarbons produced by treating a dewaxed light paraffinic distillate with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$ ]
- FR: distillats paraffiniques légers (pétrole), déparaffines au solvant et hydrotraités; Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures résultant du traitement à l'hydrogène, en présence d'un catalyseur, d'un distillat paraffinique léger déparaffiné. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$ ]
- IT: Distillati (petrolio), paraffinici leggeri deparaffinati con solvente idrotratti; Olio base — non specificato  
[Combinazione complessa di idrocarburi prodotta trattando un distillato paraffinico leggero deparaffinato con idrogeno in presenza di un catalizzatore. Costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$ ]
- NL: destillaten (aardolie), met solvent van was ontdane lichte paraffinehoudende, met waterstof behandeld; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de behandeling van een van was ontdaan licht paraffinehoudend destillaat met waterstof in de aanwezigheid van een katalysator. Bestaat uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$ ]
- PT: destilados (petróleo), parafínicos leves desparafinados com solvente, tratados com hidrogénio; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos produzida por tratamento de um destilado parafínico leve desparafinado com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{30}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rosulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgränser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 90669-74-2

EEC No 292-656-1

No 649-491-00-9

NOTA H  
NOTA L

- ES aceites residuales (petroleo), tratados con hidrogeno desparafinados con disolvente , Aceite de base, sin especificar
- DA restolier (olie), hydrogenbehandlede solventafvoksede Uspecificeret baseolie
- DE Rückstandsöl (Erdöl) mit Wasserstoff behandelt durch Lösungsmittel entwachst , Grundöl — nicht spezifiziert
- EL υπολειμματικά έλαια (πετρελαίου), υδρογονοκλιτρωσμένα αποκηρωμένα με διαλυτή Βασικό ορυκτέλαιο — μη προεισγεγραμμένο
- EN Residual oils (petroleum) hydrotreated solvent dewaxed , Baseoil — unspecified
- FR huiles residuelles (petrole), deparaffinees au solvant, hydrotraitees , Huile de base — non specifié
- IT residui (petrolio) idrotrattati decerati con solvente , Olio base — non specificato
- NL residue-olien (aardolie), met water behandeld en met oplosmiddel van was ontdaan , Basisolie — niet gespecificeerd
- PT oleos residuais (petroleo), desparafinados com solvente tratados com hidrogenio ; Óleo-base não especificado

*Classification, Klasificering, Einstufung, Ταξινόηση, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*




Cas No 91770-57-9

EEC No 294-843-3

No 649-492-00-4


NOTA H  
NOTA L

- ES aceites residuales (petroleo), desparafinado cataliticamente , Aceite de base, sin especificar
- DA restolier (råolie) katalytisk afvoksede , Uspecificeret baseolie
- DE Restölle (Erdöl), katalytisch entwachst Grundöl — nicht spezifiziert
- EL υπολειμματικά έλαια (πετρελαίου), καταλυτικώς αποκηρωμένα· Βασικο ορυκτέλαιο — μη προδιαγεγραμμενο
- EN Residual oils (petroleum), catalytic dewaxed , Baseoil — unspecified
- FR huiles résiduelles (petrole), déparaffinage catalytique ; Huile de base — non spécifique
- IT olii residui (petrolio), decerati cataliticamente ; Olio base — non specificato
- NL . residu-olien (aardolie), katalytisch van was ontdaan , Basisolie — niet gespecificeerd
- PT oleos-residuais (petroleo), desparafinados cataliticamente , Óleo-base não especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc Cat. 2 , R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45
	S : 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 91995-39-0

EEC No 295-300-3

No 649-493-00-X

NOTA H

NOTA L

- ES destilados (petroleo), fraccion parafinica pesada desparafinada, tratada con hidrógeno, Aceite de base, sin especificar [Combinación compleja de hidrocarburos obtenida de un tratamiento intensivo del destilado desparafinado por hidrogenación en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_{21}$  a  $C_{34}$  y produce un aceite final con una viscosidad aproximada de 44 cSt a 50 °C]
- DA destillater (råolie), afvoksede tunge paraffin-, hydrogenbehandlede; Uspecificeret baseolie [En sammensat blanding af carbonhydrier opnået fra en intensiv hydrogenbehandling af afvokset destillat i tilstedeværelse af en katalysator. Den består overvejende af mættede carbonhydrier, overvejende  $C_{21}$  til og med  $C_{34}$ , og danner en færdig olie med en viskositet på omtrent 44 cSt ved 50 °C]
- DE Destillate (Erdöl): entwachste schwere paraffinhaltige, mit Wasserstoff behandelt, Grundöl — nicht spezifiziert [Komplexe Kombination von Kohlenwasserstoffen, die man aus intensiver Behandlung von entwachstem Destillat durch Hydrierung in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{21}$  bis  $C_{34}$  und ergibt ein Fertigöl mit einer Viskosität von etwa 44 cSt bei 50 °C.]
- EL αποσταγμάτα (πετρελίου), βαριά παραφινικά αποκρυσμασμένα, υδρογονοκατεργασμένα. Βασικό ορυκτέλαιο — μη προδιανυγναιμμένο [Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται από εντονη κατεργασία αποκρυσμασμένου αποσταγμάτος με υδρογόνωση παρουσία καταλύτη. Συνίσταται κυρίως από κορεσμένους υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{21}$  έως και  $C_{34}$  και παράγει τελικό έλαιο με ιξώδες περίπου 44 cSt σε 50 °C]
- EN Distillates (petroleum), dewaxed heavy paraffinic, hydrotreated, Baseoil — unspecified [A complex combination of hydrocarbons obtained from an intensive treatment of dewaxed distillate by hydrogenation in the presence of a catalyst. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{21}$  through  $C_{34}$  and produces a finished oil with a viscosity of approximately 44 cSt at 50 °C]
- FR distillats paraffiniques lourds (petrole), deparaffines, hydrotraités, Huile de base — non spécifié [Combinaison complexe d'hydrocarbures obtenue par traitement intensif d'un distillat deparaffiné consistant en une hydrogenation en présence d'un catalyseur. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{21}$  -  $C_{34}$  et donne une huile-produit fini de viscosité voisine de 44 cSt à 50 °C]
- IT distillati (petrolio), paraffinici pesanti deparaffinati, idrotrattati, Olio base — non specificato [Combinazione complessa di idrocarburi ottenuta da un trattamento intensivo di distillato deparaffinato per idrogenazione in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{21}$  -  $C_{34}$  e produce un olio finito con viscosità di 44 cSt a 50 °C ca.]
- NL destillaten (aardolie), van was ontdane zware paraffinehoudende, met waterstof behandeld, Basisolie — niet gespecificeerd [Een complexe verzameling koolwaterstoffen die wordt verkregen uit de intensieve behandeling van een van was ontdaan destillaat door hydrogenering in de aanwezigheid van een katalysator. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_{21}$  tot en met  $C_{34}$ , en vormt een voltooide olie met een viscositeit van ongeveer 44 cSt bij 50 °C]
- PT destilados (petroleo), parafinicos pesados desparafinados, tratados com hidrogenio, Óleo-base não especificado [Uma combinação complexa de hidrocarbonetos obtida de um tratamento intensivo de um destilado desparafinado por hidrogenação na presença de um catalisador. É constituída predominantemente por hidrocarbonetos saturados com numeros de átomos de carbono predominantemente na gama de  $C_{21}$  ate  $C_{34}$ , e produz um óleo acabado com uma viscosidade de aproximadamente 44 cSt a 50 °C]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R: 45

S 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Gas No 91995-40-3

EEC No 295.301-9

No 649-494-00-5

NOTA H

NOTA L

- ES** destilados (petroleo), fracción parafínica ligera desparafinada, tratada con hidrogeno, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida de un tratamiento intensivo del destilado desparafinado por hidrogenación en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos saturados con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{16}$ , y produce un aceite final con una viscosidad aproximada de 13 cSt a 50 °C]
- DA** destillater (råolie), afvoksede lette paraffin-, hydrogenbehandlede, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået fra en intensiv hydrogenbehandling af afvoksede destillater i tilstedeværelse af en katalysator. Den består overvejende af mættede carbonhydrider, overvejende  $C_{11}$  til og med  $C_{16}$ , og danner en færdig olie med en viskositet på omtrent 13 cSt ved 50 °C]
- DE** Destillate (Erdöl), erwachste leichte paraffinhaltige, mit Wasserstoff behandelt, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen die man aus intensiver Behandlung von erwachstem Destillat durch Hydrierung in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus gesättigten Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{16}$  und ergibt ein Fertigöl mit einer Viskosität von etwa 13 cSt bei 50 °C]
- EL** αποσταγµατα (πετρελαιου), ελαφρα παραφινικα αποκηρωµενα, υδρογονοκατεργασµενα· Βασικο ορυκτέλαιο — μη προδιαγεγραµµένο  
[Πολυπλοκος συνδυασµός υδρογονανθρακων που λαμβανεται από εντονη κατεργασία αποκηρωµένου αποσταγµατος με υδρογόνωση παρουσία καταλύτη. Συνιστάται κυρίως από κορεσµένους υδρογονανθρακες με αριθµό ατόμων ανθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{16}$  και παραγει τελικό έλαιο με ιξώδες περίπου 13 cSt σε 50 °C]
- EN** Distillates (petroleum), dewaxed light paraffinic, hydrotreated, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained from an intensive treatment of dewaxed distillate by hydrogenation in the presence of a catalyst. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{16}$ , and produces a finished oil with a viscosity of approximately 13 cSt at 50 °C]
- FR** distillats paraffiniques légers (petrole), deparaffinés, hydrotraités, Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par traitement intensif d'un distillat deparaffiné consistant en une hydrogenation en présence d'un catalyseur. Se compose principalement d'hydrocarbures saturés dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ ,  $C_{16}$ , et donne une huile-produit fini de viscosité voisine de 13 cSt a 50 °C]
- IT** distillati (petrolio), paraffinici leggeri deparaffinati, idrotrattati, Olio base — non specificato  
[Combinazione complessa di idrocarburi da un trattamento intensivo di distillato deparaffinato per idrogenazione in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{16}$ , e produce un olio finito con viscosità di 13 cSt a 50 °C ca.]
- NL** destillaten (aardolie), van was ontdane paraffinehoudende lichte, met waterstof behandeld, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een intensieve behandeling van een van was ontdaan destillaat door hydrogenering in de aanwezigheid van een katalysator. Bestaat voornamelijk uit verzadigde koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{16}$ , en vormt een voltooide olie met een viscositeit van ongeveer 13 cSt bij 50 °C]
- PT** destilados (petróleo), parafínicos leves desparafinados, tratados com hidrogenio, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida de um tratamento intensivo de um destilado desparafinado por hidrogenação na presença de um catalisador. É constituída predominantemente por hidrocarbonetos saturados com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{16}$ , e produz um óleo acabado com uma viscosidade de aproximadamente 13 cSt a 50 °C]

*Clasificación Klassificering, Einstufung Ταξινόηση, Classification Classification Classificazione Indeling Classificatie*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45 S : 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentration*


Com No 91995-45-8

EEC No 295-306-6

No 649-495-00-0

NOTA H  
NOTA L

- ES:** destilados (petróleo), refinado con disolvente hidrocraqueado, desparafinado; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos líquidos obtenida por recristalización de destilados de petróleo refinados con disolvente hidrocraqueados y desparafinados.]
- DA:** destillater (råolie), hydrokrakkede solventraffinerede, afvoksede; Uspecificeret baseolie  
[En sammensat blanding af flydende carbonhydnder opnået ved rekrySTALLISATION af afvoksede, hydrokrakkede, solventraffinerede råoliedestillater.]
- DE:** Destillate (Erdöl), hydrogekrackte durch Lösungsmittel aufbereitete, entwachst; Grundöl — nicht spezifiziert  
[Komplexe Kombination von flüssigen Kohlenwasserstoffen, die man durch RekrySTALLISATION von entwachsenen hydrogekrackten durch Lösungsmittel aufbereiteten Erdöldestillaten erhält.]
- EL:** αποστάγματα (πετρελαίου), υδρογονοπυρολυμένα διυλισμένα με διαλύτη, αποκηρωμένα· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υγρών υδρογονανθράκων που λαμβάνεται με ανακρυστάλλωση αποκηρωμένων υδρογονοπυρολυμένων διυλισμένων με διαλύτη αποσταγμάτων πετρελαίου.]
- EN:** Distillates (petroleum), hydrocracked solvent-refined, dewaxed; Baseoil — unspecified  
[A complex combination of liquid hydrocarbons obtained by recrystallization of dewaxed hydrocracked solvent-refined petroleum distillates.]
- FR:** distillats (pétrole), raffinage au solvant et hydrocraquage, déparaffinage; Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures liquides obtenue par recrystallisation de distillats pétroliers ayant subi raffinage au solvant, hydrocraquage et déparaffinage.]
- IT:** distillati (petrolio), raffinati con solvente idrocrackizzati, deparaffinati; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per ricristallizzazione di distillati di petrolio raffinati con solvente deparaffinati e idrocrackizzati.]
- NL:** destillaten (aardolie), waterstofgekraakte solventgeraffineerde, van was ontdaan; Basisolie — niet gespecificeerd  
[Een complexe verzameling van vloeibare koolwaterstoffen die wordt verkregen door herkristallisatie van van was ontdane waterstofgekraakte solventgeraffineerde aardoliedestillaten.]
- PT:** destilados (petróleo), refinados com solvente do hidrocracking, desparafinados; Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos líquidos obtida por recristalização de destilados petrolíferos refinados com solvente do hidrocracking desparafinados.]

*Classification Klassifizierung Einstufung, Ταξινόμηση, Classification Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Limites de concentration, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 91995-54-9

FEC No 295-316-0

No 649-496-00-6

NOTA H

NOTA L

- ES: destilados (petroleo), traccion naftenica ligera refinada con disolvente, tratada con hidrógeno. Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de una fracción del petróleo con hidrógeno en presencia de un catalizador y separando los hidrocarburos aromaticos por extracción con disolvente. Compuesta fundamentalmente de hidrocarburos naftenicos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{20}$  y produce un aceite final con una viscosidad entre 13-15 cSt a 40 °C]
- DA: destillater (råolie), solventraffinerede lette naphthen- hydrogenbehandlede; Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved at behandle en råoliefraktion med hydrogen i tilstedeværelse af en katalysator og fjerne de aromatiske carbonhydrider ved solventekstraktion. Den består overvejende af naphthencarbonhydrider, overvejende  $C_{11}$  til og med  $C_{20}$ , og danner en færdig olie med en viskositet på mellem 13 cSt og 15 cSt ved 40 °C]
- DE: Destillate (Erdöl), durch Lösungsmittel aufbereitete leichte naphthenhaltige, mit Wasserstoff behandelt, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln einer Erdöl-Fraktion mit Wasserstoff in Gegenwart eines Katalysators und Entfernen der aromatischen Kohlenwasserstoffe durch Lösungsmittlextraktion erhält. Besteht vorherrschend aus naphthenhaltigen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{20}$  und ergibt ein Fertigöl mit einer Viskosität zwischen 13 und 15 cSt bei 40 °C]
- EL: αποσταγµατα (πετρελαιο), διυλισµένα µε διαλυτή ελαφρα ναφθενικά· Βασικό ορυκτέλαιο — µη προδιαγεγραµµένο  
[Πολυπλοκός συνδυασµός υδρογονανθράκων που λαµβάνεται µε κατεργασία κλάσµατος πετρελαιο µε υδρογόνο παρουσία καταλύτη και αποµακρυνση των αρωµατικών υδρογονανθράκων µε εκχύλιση µε διαλύτη. Συνίσταται κυρίως από ναφθενικούς υδρογονανθράκες µε αριθµό ατοµων ανθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{20}$  και παράγει τελικό έλαιο µε ιξώδες µεταξύ 13-15 cSt στους 40 °C]
- EN: Distillates (petroleum), solvent-refined light naphthenic, hydrotreated, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst and removing the aromatic hydrocarbons by solvent extraction. It consists predominantly of naphthenic hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{20}$  and produces a finished oil with a viscosity of between 13-15 cSt at 40 °C]
- FR: distillats naphthéniques legers (pétrole), raffinés au solvant, hydrotraités, Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une fraction pétrolière à l'hydrogene en presence d'un catalyseur et par elimination des hydrocarbures aromatiques par extraction au solvant. Se compose principalement d'hydrocarbures naphthéniques dont le nombre de carbones se situe en majorite dans la gamme  $C_{11}$ - $C_{20}$  et donne une huile-produit fini de viscosite comprise entre 13 cSt et 15 cSt a 40 °C]
- IT: distillati (petrolio), naftenici leggeri raffinati con solvente, idrotrattati, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta trattando una frazione di petrolio con idrogeno in presenza di un catalizzatore e rimuovendo gli idrocarburi aromatici mediante estrazione con solvente. È costituita prevalentemente da idrocarburi naftenici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{20}$  e produce un olio finito con viscosità compresa tra 13-15 cSt a 40 °C ca]
- NL: destillaten (aardolie), solventgeraffineerde naftenhoudende lichte, waterstofbehandeld; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een aardoliefractie met waterstof in aanwezigheid van een katalysator en verwijdering van de aromatische koolwaterstoffen door solventextractie. Bestaat voornamelijk uit naftenische koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{20}$  en vormt een voltooide olie met een viscositeit tussen 13 en 15 cSt bij 40 °C]
- PT: destilados (petroleo), naftenicos leves refinados com solvente, tratados com hidrogenio. Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de uma fracção petrolífera na presença de um catalisador e remoção dos hidrocarbonetos aromáticos por extração com solvente. É constituída predominantemente por hidrocarbonetos naftenicos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{20}$  e produz um óleo acabado com uma viscosidade entre 13 e 15 cSt a 40 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


CAS No 92045-42-6

EEC No 295-423-2

No 649-497-00-1

NOTA H

NOTA L

- ES aceites lubricantes (petroleo), C<sub>1-10</sub>, extraídos con disolvente, desparafinados, tratados con hidrógeno . Aceite de base, sin especificar
- DA smøreløier (råolie), C<sub>1-10</sub>, solvent-ekstraherede, afvoksede, hydrogenbehandlede ; Uspecificeret baseolie
- DE : Schmieröle (Erdöl), C<sub>1-10</sub>, Lösungsmittel-extrahiert, entwachst, Wasserstoff-behandelt ; Grundöl — nicht spezifiziert
- EL λιπαντικά έλαια (πετρελαιο), C<sub>1-10</sub>, εκχυλισμένα με διαλυτή, αποκηρωμένα, υδρογονοκατεργασμένα· Βασικό ορυκτέλαιο — μη προοιανεγραμμένο
- EN Lubricating oils (petroleum), C<sub>1-10</sub>, solvent-extd . dewaxed, hydrotreated , Baseoil — unspecified
- FR huiles lubrifiantes en C<sub>1-10</sub> (petrole), extraction au solvant, deparaffinées, hydrotraitées ; Huile de base — non spécifique
- IT olii lubrificanti (petrolio), C<sub>1-10</sub>, estratti con solvente, decerati, idrotrattati . Olio base — non specificato
- NL : smeeroliën (aardolie), C<sub>1-10</sub>, solvent-geextraheerd, van was ontdaan, met water behandeld ; Basisolie — niet gespecificeerd
- PT oleos lubricantes (petróleo), C<sub>1-10</sub>, extraídos com solvente, desparafinados, tratados com hidrogenio ; Óleo-base não especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificasjon, Classificazione, Indeling, Classificação

Carc Cat. 2 ; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45
	S : 53-45

Limites de concentration, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 92045-43-7

EEC No 295-424-8

No 649-498-00-7

NOTA H  
NOTA L

- ES aceites lubricantes (petroleo), hidrocraqueados no aromaticos desparafinados con disolvente , Aceite de base, sin especificar
- DA smøreolier (råolie), hydrokrakkede ikke-aromatiske solvent-afparaffinerede , Uspecificeret baseolie
- DE Schmierole (Erdöl), hydrogekrackt durch nichtaromatisches Lösungsmittel entparaffiniert , Grundöl — nicht spezifiziert
- EL λιπαντικά έλαια (πετρελαιο), υδρογονοπυρολυμένα ηη αρωματικά αποπαραφινωμένα με διαλυτή· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Lubricating oils (petroleum), hydrocracked nonarom solvent deparaffined , Baseoil — unspecified
- FR huiles lubrifiantes deparaffinees au solvant (petrole), non aromatiques, hydrocraquage , Huile de base — non specific
- IT olii lubrificanti (petrolio), non-aromatici idro-crackizzati deparaffinati con solvente , Olio base — non specificato
- NL smeerolien (aardolie), met waterstof gekraakte niet-aromatische met solvent gedeparaffineerde , Basisolie — niet gespecificeerd
- PT oleos lubricantes (petroleo), desparafinados com solvente não aromatico tratados com hidrogenio ; Óleo-base não especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση Classification Classification, Classificazione, Indeling, Classificação

Carc Cat 2 , R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	R · 45
	S 53-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits  
Limites de concentration, Limiti di concentrazione Concentratiegrenzen, Limites de concentração


Cas No 92061 86 4

E.C. No 295 499 7

No 649-499-00-2

NOTA H

NOTA L

- ES aceites residuales (petroleo) desparatinado con disolvente tratado con acido e hidrocraqueado , Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos producida por separacion con disolvente de parafinas del residuo de destilacion de parafinas pesadas hidrocraqueadas tratadas con acido y con un punto de ebullicion aproximado por encima de 380 °C]
- DA restolier (råolie), hydrokrakkede syrebehandlede solventafvoksede Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider, fremstillet ved solventjernelse af paraffiner fra resten fra destillationen af syrebehandlede hydrokrakkede tunge paraffiner og kogt omtrent over 380 °C]
- DE Rückstandsole (Erdöl), hydrogekrackte mit Saure behandelte durch Lösungsmittel entwachste , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen hergestellt durch Entfernen von Lösungsmittel aus Paraffinen aus dem Destillationsrückstand von mit Saure behandelten hydrogekrackten schweren Paraffinen und siedet etwa über 380 °C]
- EL υπολειμματικά ελαία (πετρελαιο), υδρογονοπυρολυμένα κατεργασμένα με οξύ αποκηρωμένα με διαλύτη· Βασικό ορυκτέλαιο — μη προδιατεταγμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παράγεται με απομάκρυνση με διαλύτη των παραφινών από το υπολείμμα της αποστάξης, κατεργασμένων με οξύ υδρογονοκατεργασμένων βαρέων παραφινών και που βράζει από τους 380 °C περίπου]
- EN Residual oils (petroleum), hydrocracked acid treated solvent-dewaxed , Baseoil — unspecified  
[A complex combination of hydrocarbons produced by solvent removal of paraffins from the residue of the distillation of acid treated, hydrocracked heavy paraffins and boiling approximately above 380 °C (716 °F)]
- FR huiles residuelles (petrole), hydrocraquage traitement a l'acide et deparaffinage au solvant , Huile de base — non specifie  
[Combinaison complexe d'hydrocarbures obtenue par elimination au solvant des paraffines dans le residu de distillation de paraffines lourdes ayant subi hydrocraquage et traitement a l'acide son point d'ebullition est approximativement superieur a 380 °C]
- IT oli residui (petrolio), idrocrackizzati trattati con acido deparaffinati con solventi , Olio base — non specificato  
[Combinazione complessa di idrocarburi prodotti per eliminazione con solvente delle paraffine dal residuo di distillazione di paraffine pesanti idrocrackizzate e trattate con acido e con punto di ebollizione superiore a 360 °C ca]
- NL residu-olien (aardolie), met waterstof gekraakt met zuur behandeld met solvent van was ontdaan , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de verwijdering van paraffinen met solvent uit het residu van de destillatie van met zuur behandelde met waterstof gekraakte zware paraffinen, kokend ongeveer boven 380 °C]
- PT oleos residuais (petroleo), desparafinados com solvente tratados com acido do hidrocracking , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos produzida por remoção com solvente de parafinas do residuo da destilação de parafinas pesadas no hidrocracking tratadas com acido e destila acima de aproximadamente 380 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Ετικετοποίηση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T



R : 45

S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 92129-09-4

EEC No 295-810-6

No 649-500-00-6

NOTA H

NOTA L

- ES . aceites de parafina (petroleo), productos pesados desparafinados refinados con disolvente , Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida de petróleo parafínico con azufre Compuesta en su mayor parte de aceite lubricante desparafinado refinado con disolvente con una viscosidad de 65cSt a 50 °C ]
- DA . paraffinolie (råolie), solventraffinerede afvoksede tunge , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået fra svovlholdig paraffinråolie Den består overvejende af en solventraffineret, afparaffineret smørelie med en viskositet på 65cSt ved 50 °C ]
- DE Paraffinöl (Erdöl), durch Lösungsmittel aufbereitete entwachte schwere , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus Schwefel-enthaltendem paraffinhaltigem Rohöl erhält Besteht vorherrschend aus einem durch Lösungsmittel aufbereiteten entparaffinierten Schmieröl mit einer Viskosität von 65 cSt bei 50 °C ]
- EL παραφινέλαια (πετρέλαιου), θαρέα αποκρηωμένα διυλισμένα με διαλυτή Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται από παραφινικό αργό πετρέλαιο που περιέχει θείο Συνίσταται κυρίως από αποπαραφινωμένο διυλισμένο με διαλυτή λιπαντικό έλαιο ιξώδους 65cSt στους 50 °C ]
- EN Paraffin oils (petroleum), solvent-refined dewaxed heavy , Baseoil — unspecified  
[A complex combination of hydrocarbons obtained from sulfur-containing paraffinic crude oil It consists predominantly of a solvent refined deparaffinated lubricating oil with a viscosity of 65cSt at 50 °C ]
- FR huiles de paraffine lourdes (petrole), déparaffinees et raffinées au solvant , Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures tirée d'une huile brute paraffinique contenant du soufre Se compose principalement d'une huile lubrifiante déparaffinée et raffinée au solvant, de viscosité égale à 65 cSt à 50 °C ]
- IT oli paraffinici (petrolio), pesanti decerati raffinati con solvente , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta da olio paraffinico grezzo contenente zolfo È costituita prevalentemente da olio lubrificante deparaffinato raffinato con solvente con viscosità di 65cSt a 50 °C ]
- NL paraffineolien (aardolie), solvent-geraffineerde van was ontdane zware , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit zwavelhoudende paraffinehoudende ruwe olie Bestaat voornamelijk uit een solvent geraffineerde gedeparaffineerde smeerolie met een viscositeit van 65 cSt bij 50 °C ]
- PT oleos parafinicos (petroleo), pesados desparafinados refinados com solvente , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida de petróleo bruto parafínico contendo enxofre É constituída predominante mente por um óleo lubrificante desparafinado refinado com solvente com uma viscosidade de 65cSt a 50 °C ]

*Classification Klassifizierung Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificacao*

Carc. Cat. 2, R. 45

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken, Rotulagem*



*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzuerte Όρια συγκεντρώσεως Concentration limits*  
*Limites de concentration Limiti di concentrazione Concentrationgrenzen Limites de concentraçao*


Cas No 93572 43 I

EEC No 297 474-6

No 649-501-00-1

NOTA H

NOTA L

- ES aceites lubricantes (petroleo), aceites base, parafinicos , Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenidos por el refinado de petroleo crudo. Compuesta en su mayor parte de aromaticos naltenicos y parafinicos y produce un aceite final con una viscosidad de 120 SUS (23cSt a 40 °C)]
- DA smørelier (råolie), basisolier, paraffinske , Uspecificered baseolie  
[En sammensat blanding af carbonhydrider opnået ved raffinering af råolie. Den består overvejende af aromater, naphthener og paraffiner, og danner en lædig olie med en viskositet på 23cSt ved 40 °C]
- DE Schmierole (Erdöl), Basisole, paraffinhaltig , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Aufbereiten von Rohöl erhält. Besteht vorherrschend aus Aromaten- Naphthenen- und Paraffinen-enthaltenden Stoffe und ergibt ein Fertigöl mit einer Viskosität von 23 cSt bei 40 °C]
- EL λιπαντικά έλαια (πετρελαίου), έλαια βάσης, παραφινικά Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με την διύλιση αργού πετρελαίου. Συνίσταται κυρίως από αρωματικά, ναφθένικά και παραφινικά και παράγει έτοιμο έλαιο με ιξώδες 23cSt στους 40 °C]
- EN Lubricating oils (petroleum), base oils, paraffinic , Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by refining of crude oil. It consists predominantly of aromatics, naphthenics and paraffinics and produces a finished oil with a viscosity of 120 SUS at 100 °F (23cSt at 40 °C)]
- FR huiles lubrifiantes paraffiniques (pétrole), huiles de base , Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par raffinage du pétrole brut. Se compose principalement d'hydrocarbures aromatiques, naphthéniques et paraffiniques, et fournit une huile-produit fini dont la viscosité est de 23 cSt à 40 °C]
- IT olii lubrificanti (petrolio), olii di base, paraffinici , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per raffinazione di petrolio grezzo. È costituita prevalentemente da aromatici, nattenici e paraffinici e produce un olio finito con viscosità di 23cSt a 40 °C]
- NL smeerolien (aardolie), basisolien, paraffine-houdende , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door raffinage van ruwe olie. Bestaat voornamelijk uit aromaten, nattenen en paraffinen en vormt een voltooide olie met een viscositeit van 23cSt bij 40 °C]
- PT oleos lubrificantes (petroleo), oleos base, parafinicos , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por refinação de petróleo bruto. É constituída predominantemente por aromaticos, naltenicos e parafinicos e produz um óleo acabado com uma viscosidade de 23cSt a 40 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificati, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 93763 38-3

FEC No 297-857-8

No 649-502-00-7

NOTA H

NOTA L

- ES hidrocarburos, residuos de destilación parafínicos hidrocrackeados, desparafinados con disolvente , Aceite de base, no especificar
- DA carbonhydrider, hydrokrakkede paraffiniske destillationsrester, solventafvoksede , Uspecificeret baseolie
- DE Kohlenwasserstoffe, hydrogekrackte paraffinhaltige Destillationsrückstände, Lösungsmittel-entwacht ; Grundöl — nicht spezifiziert
- EL υδρογονάνθρακων υδρογονοπυρολυμένων παραφινικών, υπολείμματα απόσταξης αποκηρωμένα με διαλύτη: βασικό ορυκτέλαιο — μη επεξεργασμένο
- EN Hydrocarbons hydrocracked paraffinic disto. residues solvent dewaxed Baseoil — unspecified
- FR hydrocarbures, résidus de distillation paraffiniques, hydrocraquage, deparaffinage au solvant , Huile de base — non spécifiée
- IT idrocarburi, residui paraffinici idrocrackizzati della distillazione, decerati con solvente , Olio base — non specificato
- NL koolwaterstoffen met waterstof gekraakte paraffine houdende destillatieresiduen, met solvent van was ontdaan , Basisolie — niet gespecificeerd
- PT hidrocarbonetos, resíduos da destilação de parafínicos do cracking com desparafinados com solvente , Óleo-base não especificado

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Étiquetage, Etichettatura, Kenmerken, Rotulagem



Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 93924-61-9

EEC No 300-257-1

No 649-503-00-2

NOTA H  
NOTA L

- ES. hidrocarburos,  $C_{20-50}$ , destilado obtenido a vacío de la hidrogenación de aceite residual. Aceite de base, sin especificar
- DA carbonhydrider,  $C_{20-50}$ , restolie-hydrogenerings-vacuumdestillat, Uspecificeret baseolie
- DE Kohlenwasserstoffe,  $C_{20-50}$ , Restöl-Hydrierung Vakuumdestillat, Grundöl — nicht spezifiziert
- EL υδρογονάνθρακες,  $C_{20-50}$ , αποσταγμα κενού υδρογόνωσης υπολειμματικού ελαίου. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Hydrocarbons,  $C_{20-50}$ , residual oil hydrogenation vacuum distillate, Baseoil — unspecified
- FR hydrocarbures en  $C_{20-50}$ , hydrogenation d'huile résiduelle, distillat sous vide, Huile de base — non spécifique
- IT idrocarburi,  $C_{20-50}$ , distillato sotto vuoto dell'idrogenazione dell'olio residuo, Olio base — non specificato
- NL koolwaterstoffen,  $C_{20-50}$ , residuolie hydrogenering vacuumdestillaat, Basisolie — niet gespecificeerd
- PT. hidrocarbonetos,  $C_{20-50}$ , destilado de vácuo da hidrogenação do óleo residual, Óleo-base não especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc Cat. 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45
	S : 53-45

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 94733-08-1

EEC No 305-588-5

No 649-504-00-8

NOTA H  
NOTA L

- ES destilados (petróleo), fracción pesada tratada con hidrógeno refinada con disolvente, hidrogenados, Aceite de base, sin especificar
- DA destillater (råolie), solvent-raffinerede hydrogenbehandlede tunge, hydrogenerede, Uspecificeret baseolie
- DE Destillate (Erdöl), durch Lösungsmittel gereinigte mit Wasserstoff behandelte schwere, hydriert, Grundöl — nicht spezifiziert
- EL αποσταγματα(πετρελαίου), βαρέα υδρογονοπεξευγισμένα διυλισμένα με διαλύτη υδρογονωμένα Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Distillates (petroleum), solvent-refined hydrotreated heavy, hydrogenated, Baseoil — unspecified
- FR distillats lourds (pétrole), hydrotraités, raffinés au solvant, hydrogènes, Huile de base — non spécifique
- IT distillati (petrolio), pesanti idrotrattati raffinati con solvente, idrogenati, Olio base — non specificato
- NL destillaten (aardolie), solvent-geraffineerde met waterstof behandelde zware fracties, gehydrogeneerd, Basisolie — niet gespecificeerd
- PT destilados (petróleo), pesados tratados com hidrogenio refinados com solvente, hidrogenados, Óleo-base não especificado

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Carb. Cat. 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R : 45
	S : 53-45

Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 94733-09-2

EEC No 305-589-0

No 649-505-00-3

NOTA H  
NOTA L

- ES. destilados (petróleo), fracción ligera hidrocraqueada refinada con disolvente ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por desaromatización con disolvente del residuo de petróleo hidrocraqueado. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{27}$ , y con un intervalo de ebullición aproximado de 370 °C a 450 °C]
- DA. destillater (råolie), solventraffinerede hydrokrakkede lette, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved solvent dearomatisering af resten fra hydrokrakket råolie. Den består overvejende af carbonhydrider, overvejende  $C_{14}$  til og med  $C_{27}$ , med koginterval omtrent fra 370 °C til 450 °C]
- DE. Destillate (Erdöl), durch Lösungsmittel aufbereitete hydrogekrackte leichte ; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittel-Dearomatisierung des Rückstandes von hydrogekracktem Erdöl erhält. Besteht vorherrschend aus Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{27}$ , und siedet im Bereich von etwa 370 °C bis 450 °C]
- EL. αποσταγματα (πετρελαίου), υδροπυρολυμένα ελαφρα εξευγενισμένα με διαλύτη. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με απομακρυνση αρωματικών με διαλύτη από το υπόλειμμα υδρογονοπυρολυμένου πετρελαίου. Συνιστάται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  έως και  $C_{27}$ , και με περιοχή θρασμού από 370 °C έως 450 °C περίπου]
- EN. Distillates (petroleum), solvent-refined hydrocracked light, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by solvent dearomatization of the residue of hydrocracked petroleum. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{27}$ , and boiling in the range of approximately 370 °C to 450 °C (698 °F to 842 °F)]
- FR. distillats legers (pétrole), hydrocraquage, raffines au solvant, Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par désaromatisation au solvant du résidu d'hydrocraquage du pétrole. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{14}$ - $C_{27}$ , et dont le point d'ébullition est compris approximativement entre 370 °C et 450 °C]
- IT. distillati (petrolio), frazione leggera idrocrackizzata raffinata con solvente ; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta mediante dearomatizzazione del residuo di petrolio idrocrackizzato con solvente. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ - $C_{27}$ , e con un intervallo di ebollizione 370 °C-450 °C ca.]
- NL. destillaten (aardolie), met solvent gezuiverd met waterstof gekraakt lichte, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door dearomatisering met solvent van het residu van met waterstof gekraakte aardolie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{14}$  tot en met  $C_{27}$ , met een kooktraject van ongeveer 370 °C tot 450 °C.]
- PT. destilados (petróleo), leves do hidrocracking refinados com solvente, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por desaromatização com solvente do residuo do hidrocracking do petróleo. É constituída predominantemente por hidrocarbonetos com numeros de átomos de carbono predominantemente na gama de  $C_{14}$  até  $C_{27}$ , e destila no intervalo de aproximadamente 370 °C a 450 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação,*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 94733-15-0

EEC No 305-594-8

No 649-506-00-9

NOTA H

NOTA L

- ES. aceites lubricantes (petróleo),  $C_{18-40}$ , basados en el destilado hidrocraqueado desparafinado con disolvente ; Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por desparafinación con disolvente del residuo de destilación de petróleo hidrocraqueado. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{18}$  a  $C_{40}$  y con un intervalo de ebullición aproximado de 370 °C a 550 °C]
- DA. smørelier (råolie),  $C_{18-40}$ , solventafvoksede hydrokrakkede destillat-baserede ; Uspecificeret baseolie  
[En sammensat blanding af carbonhydnder opnået ved solventparaffinering af destillationsresten fra hydrokrakket råolie. Den består overvejende af carbonhydnder, overvejende  $C_{18}$  til og med  $C_{40}$ , med koginterval omtrent fra 370 °C til 550 °C]
- DE. Schmieröle (Erdöl),  $C_{18-40}$ , durch Lösungsmittel entwachte hydrogekrackte aus Destillatbasis, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittelentparaffinierung des Destillationsrückstandes von hydrogekracktem Erdöl erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{18}$  bis  $C_{40}$  und siedet im Bereich von etwa 370 °C bis 550 °C]
- EL. αποστάγματα (πετρελαιο),  $C_{18-40}$ , αποκηρωμένα με διαλύτη προερχόμενα από αποστάγματα υδρογονοπυρόλυσης Βασικό ορυκτελαίο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με αποπαραφίνωση με διαλύτη υπολειμμάτων απόσταξης υδροπυρόλυμένου πετρελαιο. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{18}$  έως και  $C_{40}$  και περιοχή θρασμού από 370 °C έως 550 °C περίπου]
- EN. Lubricating oils (petroleum),  $C_{18-40}$ , solvent-dewaxed hydrocracked distillate-based, Baseoil unspecified  
[A complex combination of hydrocarbons obtained by solvent deparaffination of the distillation residue from hydrocracked petroleum. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{18}$  through  $C_{40}$  and boiling in the range of approximately 370 °C to 550 °C (698 °F to 1 022 °F)]
- FR. huiles lubrifiantes en  $C_{18-40}$  (pétrole), base distillat d'hydrocraquage déparaffiné au solvant, huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par déparaffinage au solvant du résidu de distillation du produit d'hydrocraquage du pétrole. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{18}$ - $C_{40}$ , et dont le point d'ébullition est compris approximativement entre 370 °C et 550 °C]
- IT. olii lubrificanti (petrolio),  $C_{18-40}$ , a base distillato decerati con solvente idrocrackizzati, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta mediante deparaffinazione con solvente del residuo della distillazione di petrolio idrocrackizzato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{18-40}$  e con un intervallo di ebollizione 370 °C-550 °C ca.]
- NL. smeerolien (aardolie),  $C_{18-40}$ , met solvent van was ontdaan waterstofgekraakt uit destillaat verkregen, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door deparaffinering met solvent van het destillatieresidu van waterstofgekraakte aardolie. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{18}$  tot en met  $C_{40}$ , met een kooktraject van ongeveer 370 °C tot 550 °C]
- PT. oleos lubricantes (petróleo),  $C_{18-40}$ , a base de destilado do hidrocracking desparafinado com solvente, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por desparafinação com solvente do residuo da destilação do hidrocracking do petróleo. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{18}$  até  $C_{40}$  e destila no intervalo de aproximadamente 370 °C a 550 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 94733 16-1

EEC No 305-595-3

No 649-507-00-4

NOTA H

NOTA L

- ES aceites lubricantes (petroleo),  $C_{18-40}$ , basados en el refinado hidrogenado desparafinado con disolvente ; Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por desparafinacion con disolvente del refinado hidrogenado obtenido por extraccion con disolvente de un destilado de petroleo tratado con hidrogeno. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{18}$  a  $C_{40}$  y con un intervalo de ebullición aproximado de 370 °C a 550 °C]
- DA smøreløier (råolie),  $C_{18-40}$ , solventafvoksede hydrogenerede raffinatbaserede , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved solventafparaffinering af det hydrogenerede raffinat, opnået ved solventekstraktion af et hydrogenbehandlet råoliedestillat. Den består overvejende af carbonhydrider, overvejende  $C_{18}$  til og med  $C_{40}$ , med kogepunktinterval omtrent fra 370 °C til 550 °C]
- DE Schmierole (Erdöl),  $C_{18-40}$ , durch Lösungsmittel entwachte hydrierte aus Raffinatbasis , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittelentparaffinierung des hydrierten Raffinates aus der Lösungsmittelextraktion eines mit Wasserstoff behandelten Erdöldestillates erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{18}$  bis  $C_{40}$  und siedet im Bereich von etwa 370 °C bis 550 °C]
- EL λιπαντικά ελαία (πετρελαίου),  $C_{18-40}$ , αποκηρωμένα με διαλύτη προερχόμενα από υδρογονωμένο εκχυλισμένο προϊόν βασικού ορυκτέλαιου — μη προδιαγεγραμμένο  
[Πομπητικός συνδυασμός υδρογονανθράκων που λαμβάνεται με αποπαραφίνωση με διαλύτη του υδρογονωμένου εκχυλισμένου προϊόντος, που λαμβάνεται με εκχύλιση αποσταγμένου πετρελαίου κατεργασμένου με υδρογόνο. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{18}$  έως και  $C_{40}$  και περιοχή βρασμού από 370 °C έως 550 °C περίπου]
- EN Lubricating oils (petroleum),  $C_{18-40}$ , solvent-dewaxed hydrogenated raffinate-based , Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by solvent deparaffination of the hydrogenated raffinate obtained by solvent extraction of a hydrotreated petroleum distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{18}$  through  $C_{40}$  and boiling in the range of approximately 370 °C to 550 °C (698 °F to 1 022 °F)]
- FR huiles lubrifiantes en  $C_{18-40}$  (petrole), base raffinat hydrogene déparaffiné au solvant ; Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par deparaffinage au solvant du raffinat hydrogéné obtenu par extraction au solvant d'un distillat pétrolier hydrotreaté. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{18}-C_{40}$  et dont le point d'ébullition est compris approximativement entre 370 °C et 550 °C.]
- IT olii lubrificanti (petrolio),  $C_{18-40}$ , a base raffinato decerati con solvente idrogenati , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta mediante deparaffinazione con solvente del raffinato idrogenato ottenuto per estrazione con solvente di un distillato di petrolio idrotreatato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{18}-C_{40}$  e con un intervallo di ebollizione 370 °C-550 °C ca.]
- NL smeerolien (aardolie),  $C_{18-40}$ , met solvent van was ontdaan verkregen uit gehydrogeneerd raffinaat ; Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen, verkregen door de deparaffinering met solvent van het gehydrogeneerde raffinaat dat wordt verkregen door solvent-extractie van een met waterstof behandeld aardoliedestillaat. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{18}$  tot en met  $C_{40}$ , met een kooktraject van ongeveer 370 °C tot 550 °C.]
- PT oleos lubrificantes (petroleo),  $C_{18-40}$  a base de refinado hidrogenado desparafinado com solvente , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por desparafinação com solvente do refinado hidrogenado obtido por extracção com solvente de um destilado petrolífero tratado com hidrogénio. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{18}$  até  $C_{40}$  e destila no intervalo de aproximadamente 370 °C a 550 °C.]

*Classification, Klassifisering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 95371-04-3

EEC No 305-971-7

No 649-508-00-X

NOTA H  
NOTA L

- ES : hidrocarburos,  $C_{13-30}$ , ricos en aromáticos, destilado nafténico extraído con disolvente ; Aceite de base, sin especificar
- DA : carbonhydrider,  $C_{13-30}$ , aromatrige, solvent-ekstraherede naphthenske destillater ; Uspecificeret baseolie
- DE : Kohlenwasserstoffe,  $C_{13-30}$ , Aromaten-reich, durch Lösungsmittel extrahierte naphthenhaltige Destillate ; Grundöl — nicht spezifiziert
- EL : υδρογονάνθρακες,  $C_{13-30}$ , πλούσιοι σε αρωματικά, ναφθενικό απόσταγμα εκχυλισμένο με διαλύτη· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN : Hydrocarbons,  $C_{13-30}$ , arom.-rich, solvent-extd. naphthenic distillate ; Baseoil — unspecified
- FR : hydrocarbures en  $C_{13-30}$ , riches en aromatiques, distillat naphthénique extrait au solvant ; Huile de base — non spécifié
- IT : idrocarburi  $C_{13-30}$ , ricchi di aromatici, distillato naftenico estratto con solvente ; Olio base — non specificato
- NL : koolwaterstoffen,  $C_{13-30}$ , rijk aan aromaten, met solvent geextraheerd naftenisch destillaat ; Basisolie — niet gespecificeerd
- PT : hidrocarbonetos,  $C_{13-30}$ , ricos em aromaticos nafténico extraído com solvente ; Óleo-base não especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação

Carc. Cat 2 ; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

T	R : 45
	S : 53-45

Límites de concentración, Koncentrationsgrenser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 95371-05-4

EEC No 305-972-2

No 649-509-00-5

NOTA H  
NOTA L

- ES hidrocarburos,  $C_{16-12}$ , ricos en aromaticos, destilado nafténico extraído con disolvente ; Aceite de base, sin especificar
- DA carbonhydrider,  $C_{16-12}$ , aromatrige, solvent-ekstraherede naphthenske destillater ; Uspecificeret baseolie
- DE Kohlenwasserstoffe,  $C_{16-12}$ , Aromaten-reich, durch Lösungsmittel extrahierte naphthenhaltige Destillate ; Grundöl — nicht spezifiziert
- EL υδρογονανθρακες,  $C_{16-12}$ , πλουσιωι σε αρωματικά, ναφθενικό απόσταγμα εκχυλισμένο με διαλύτη· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Hydrocarbons,  $C_{16-12}$ , arom rich, solvent-extd naphthenic distillate , Baseoil — unspecified
- FR hydrocarbures en  $C_{16-12}$ , riches en aromatiques, distillat naphtenique extrait au solvant ; Huile de base — non specific
- IT idrocarburi,  $C_{16-12}$ , ricchi di aromatici, distillato naftenico estratto con solvente , Olio base — non specificato
- NL koolwaterstoffen,  $C_{16-12}$ , rijk aan aromaten, met solvent geextraheerd naftenisch destillaat , Basisolie — niet gespecificeerd
- PT hidrocarbonetos,  $C_{16-12}$ , ricos em aromaticos, destilados naftenico extraído com solvente ; Óleo-base não especificado

(classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação)

Carc. Cat 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

	R : 45
	S : 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 25371-07-6

EEC No 305-974-3

No 649-510-00-0

NOTA H


NOTA L

- ES hidrocarburos,  $C_{17-40}$ , residuos de destilación obtenidos a vacío tratados con hidrogeno desasfaltados desparafinados, Aceite de base, sin especificar
- DA carbonhydrider,  $C_{17-40}$ , atvoksede deasfalterede hydrogenbehandlede vakuumdestillationsrester, Uspecificeret baseolie
- DE Kohlenwasserstoffe,  $C_{17-40}$ , entwachste entasphaltierte mit Wasserstoff behandelte Vakuumdestillationsruckstände, Grundöl — nicht spezifiziert
- EL υδρογονάνθρακες,  $C_{17-40}$ , αποκρωμένοι απασφαλιζόμενοι κατεργασμένοι με υδρογόνο υπολείμματα αποσταξης κενού. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Hydrocarbons,  $C_{17-40}$ , dewaxed deasphalted hydrotreated vacuum distn. residues, Baseoil — unspecified
- FR hydrocarbures en  $C_{17-40}$ , résidu de distillation sous-vide hydrotraités, désasphaltés, déparaffinés; Huile de base — non spécifié
- IT idrocarburi  $C_{17-40}$ , residui della distillazione sotto vuoto decerati deasfaltati idrotrattati, Olio base — non specificato
- NL koolwaterstoffen,  $C_{17-40}$ , van was en asfalt ontdane met waterstof behandelde vacuümdestillatieresiduen, Basisolie — niet gespecificeerd
- PT hidrocarbonetos,  $C_{17-40}$ , residuos da destilação de vácuo tratados com hidrogénio desasfaltados desparafinados; Óleo-base não especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


C. 45 No 95371 08-7

EEC No 305-975-9

No 649-511-00-6

NOTA H


NOTA L

- ES hidrocarburos,  $C_{10-60}$ , residuos de destilación obtenidos a vacío tratados con hidrógeno desasfaltados ; Aceite de base, sin especificar
- DA carbonhydrider,  $C_{10-60}$ , hydrogenbehandlede afasfalterede vakuumdestillationsrester ; Uspecificeret baseolie
- DE Kohlenwasserstoffe,  $C_{10-60}$ , mit Wasserstoff behandelte entasphaltierte Vakuumdestillationsrückstände ; Grundöl — nicht spezifiziert
- EL υδρογονάνθρακες,  $C_{10-60}$ , κατεργασμένοι με υδρογόνο απασφαλτωμένοι, υπολείμματα απόσταξης κενού· Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Hydrocarbons,  $C_{10-60}$ , hydrotreated deasphalted vacuum distn. residues ; Baseoil — unspecified
- FR hydrocarbures en  $C_{10-60}$ , résidus de distillation sous-vide désasphaltés, hydrotraités ; Huile de base — non spécifié
- IT idrocarburi,  $C_{10-60}$ , residui della distillazione sotto vuoto idrotrattati deasfaltati ; Olio base — non specificato
- NL koolwaterstoffen,  $C_{10-60}$ , met waterstof behandelde van asfalt ontdane vacuümdestillatieresiduen ; Basisolie — niet gespecificeerd
- PT hidrocarbonetos,  $C_{10-60}$ , resíduos da destilação de vacuo desasfaltados tratados com hidrógeno , Óleo-base não especificado

*Clasificación, Klassifizierung, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="336 1417 427 1559"> <p>T</p>  </div> <div data-bbox="938 1464 1011 1494">R : 45</div> <div data-bbox="938 1518 1043 1547">S : 53-45</div>
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*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97488-73-8

EEC No 307-010-7

No 649-512-00-1

NOTA H

NOTA L

- ES : destilados (petróleo), tracción ligera refinada con disolvente hidrocrackeado, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por el tratamiento con disolvente de un destilado de destilados de petróleo hidrocrackeados. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{22}$ , y con un intervalo de ebullición aproximado de 370 °C a 450 °C.]
- DA : destillater (råolie), hydrokrakkede solventrefinerede lette, Uspecificeret baseolie  
[En sammensat blanding af carbonhydnder opnået ved solventbehandling af et destillat fra hydrokrakkede råoliedestillater. Den består overvejende af carbonhydnder, overvejende  $C_{14}$  til og med  $C_{22}$ , med koginterval omtrent fra 370 °C til 450 °C.]
- DE : Destillate (Erdöl), hydrogekrackte durch Lösungsmittel aufbereitete leichte, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittelbehandlung eines Destillates aus hydrogekrackten Erdöldestillaten erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{22}$ , und siedet im Bereich von etwa 370 °C bis 450 °C.]
- EL : αποσταγμάτα (πετρελαιο), ελαφρά κατεργασμένα με υδρογόνο εξευγενισμένα με διαλύτη. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία με διάλυτη αποσταγμάτων από τα υδρογονοπυρολυμένα αποσταγμάτα πετρελαίου. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  έως και  $C_{22}$ , και με περιοχή βρασμού από 370 °C έως 450 °C περίπου.]
- EN : Distillates (petroleum), hydrocracked solvent-refined light, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by the solvent treatment of a distillate from hydrocracked petroleum distillates. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{22}$ , and boiling in the range of approximately 370 °C to 450 °C (698 °F to 842 °F).]
- FR : distillats légers (pétrole), raffinés au solvant, hydrocraquage. Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par traitement au solvant d'un distillat tiré de distillats pétroliers ayant subi un hydrocraquage. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{14}$ - $C_{22}$ , et dont le point d'ébullition est compris approximativement entre 370 °C et 450 °C.]
- IT : distillati (petrolio), frazione leggera idrocrackizzata raffinata con solvente; Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta mediante trattamento con solvente di distillato da distillati di petrolio idrocrackizzato. Costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ - $C_{22}$ , e con un intervallo di ebollizione 370 °C-450 °C ca.]
- NL : destillaten (aardolie), waterstofgekraakte solventgezuiverde lichte fractie, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de solventbehandeling van een distillaat van met waterstof gekraakte aardolie destillaten. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{14}$  tot en met  $C_{22}$ , met een kooktraject van ongeveer 370 °C tot 450 °C.]
- PT : destilados (petróleo), leves do hidrocracking refinados com solvente, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento com solvente de um destilado de destilados petrolíferos do hidrocracking. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{14}$  ate  $C_{22}$ , e destila no intervalo de aproximadamente 370 °C a 450 °C.]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*




Cas No 97488-74-9

EEC No 307-011 2

No 649-513-00

NOTA H

NOTA L

- ES destilados (petróleo), fracción pesada hidrogenada y refinada con disolvente , Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por el tratamiento de un destilado de petróleo hidrogenado con un disolvente. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{30}$ , y con un intervalo de ebullición aproximado de 390 °C a 550 °C]
- DA destillater (råolie), solventraffinerede hydrogenerede tunge , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået ved behandlingen af et hydrogeneret råoliedestillat med et solvent. Den består overvejende af carbonhydrier, overvejende  $C_{14}$  til og med  $C_{30}$ , med kogesinterval omkring fra 390 °C til 550 °C]
- DE Destillate (Erdöl), durch Lösungsmittel aufbereitete hydrierte schwere , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittelbehandlung eines hydrierten Erdöldestillates erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{30}$  und siedet im Bereich von etwa 390 °C bis 550 °C]
- EL αποσταγμάτα (πετρέλαιου), θαρέα υδρογονωμένα εξευγενισμένα με διαλύτη Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με την κατεργασία υδρογονωμένου αποσταγμάτου πετρελαιο με διαλύτη. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  έως και  $C_{30}$  και περιοχή θρασμού από 390 °C έως 550 °C περίπου]
- EN Distillates (petroleum), solvent-refined hydrogenated heavy , Baseoil — unspecified  
[A complex combination of hydrocarbons, obtained by the treatment of a hydrogenated petroleum distillate with a solvent. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{30}$  and boiling in the range of approximately 390 °C to 550 °C (734 °F to 1 022 °F)]
- FR distillats lourds (pétrole), hydrogènes raffinés au solvant , Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par traitement au solvant d'un distillat pétrolier hydrogéné. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{14}$ ,  $C_{30}$  et dont le point d'ébullition est compris approximativement entre 390 °C et 550 °C]
- IT distillati (petrolio), frazione pesante idrogenata raffinata con solvente , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta mediante trattamento con solvente di distillato di petrolio idrogenato. Costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ ,  $C_{30}$  e con un intervallo di ebollizione 390 °C-550 °C ca]
- NL destillaten (aardolie), solventgezuiverde gehydrogeneerde zware fractie Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een gehydrogeneerd aardoliedestillaat met een solvent. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_{14}$  tot en met  $C_{30}$ , met een kooktraject van ongeveer 390 °C tot 550 °C]
- PT destilados (petróleo), pesados hidrogenados refinados com solvente , Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento com um solvente de um destilado petrolífero hidrogenado. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{14}$ , até  $C_{30}$ , e destila no intervalo de aproximadamente 390 °C a 550 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatiön, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 97488-95-4

EEC No 307 034-8

No 649-514-00-2

NOTA H  
NOTA L

- ES aceites lubricantes (petroleo),  $C_{18-27}$ , desparafinados con disolvente hidrocracados , Aceite de base, sin especificar
- DA smørelser (råolie),  $C_{18-27}$ , hydrokrakkede solvent-afvoksede , Uspecificeret baseolie
- DE Schmierole (Erdöl),  $C_{18-27}$ , hydrogekrackt durch Lösungsmittel von Wachs befreit , Grundöl — nicht spezifiziert
- EL λιπαντικά ελαία (πετρελαίου),  $C_{18-27}$ , υδρογονοπορoλυμένα αποκηρωμένα με διαλύτη Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Lubricating oils (petroleum),  $C_{18-27}$ , hydrocracked solvent-dewaxed , Baseoil — unspecified
- FR huiles lubrifiantes en  $C_{18-27}$  (petrole), hydrocraquées, deparaffinées au solvant , Huile de base — non spécifié
- IT olii lubrificanti (petrolio),  $C_{18-27}$ , idrocrackizzati decerati con solvente , Olio base — non specificato
- NL smeerolien (aardolie),  $C_{18-27}$ , waterstofgekraakt met solvent van was ontdaan , Basisolie — niet gespecificeerd
- PT oleos lubricantes (petroleo),  $C_{18-27}$ , do hidrocraking desparafinados com solvente , Óleo-base nao especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc Cat 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R 45
	S 53-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits, Limites di concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 97675-87-1

EEC No 307-661-7

No 649-515-00-8

NOTA H

NOTA L

- ES** hidrocarburos,  $C_{10}$ , residuo de destilación atmosférica desasfaltado con disolvente tratado con hidrogeno, fracciones ligeras de destilación, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida como primeros productos de la destilación a vacío de efluentes del tratamiento de un residuo pequeño desasfaltado con disolvente con hidrógeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{30}$  y con un intervalo de ebullición aproximado de 300 °C a 400 °C. Produce un aceite final con una viscosidad de 4cSt a aproximadamente 100 °C]
- DA** carbonhydrider,  $C_{10}$ , hydrogenbehandlet solvent-afasfalteret atmosfærisk destillationsrest, lette destillater, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået som forløb fra vakuumdestillationen af udløb fra behandlingen af en solvent-afasfalteret kort rest med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af carbonhydrider, overvejende fra  $C_{10}$  til og med  $C_{30}$ , med kogesinterval omtrent fra 300 °C til 400 °C. Den danner en færdig olie med en viskositet på 4cSt ved omtrent 100 °C]
- DE** Kohlenwasserstoffe,  $C_{10}$ , mit Wasserstoff behandelt durch Lösungsmittel deasphaltiert offene Destillation Rückstand leichte Destillate Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man als erste Laufe aus der Vakuumdestillation von Ausflüssen aus der Behandlung eines durch Lösungsmittel deasphaltierten Vakuumrückstandes mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{30}$  und siedet im Bereich von etwa 300 °C bis 400 °C. Ergibt ein Fertigöl mit einer Viskosität von 4cSt bei etwa 100 °C]
- EL** υδρογονάνθρακες,  $C_{10}$ , υπολειμματος ατμοσφαιρικής αποσταξης κατεργασμένου με υδρογόνο απασφιλτωμένου με οιαδήποτε γλαφρα προϊόντα αποσταξης Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν τα πρώτα αποστάγματα απόσταξης σε κενό, προέρχων από κατεργασία υπολειμματος μικρής περιοχής με υδρογόνο παρουσία κατ'αλήθεια. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{30}$  και με περιοχή βρασμού από 300 °C έως 400 °C περίπου. Το έτοιμο έλαιο έχει ιξώδες 4cSt στους 100 °C]
- EN** Hydrocarbons,  $C_{10}$ , hydrotreated solvent-deasphalted atm. distn. residue, distn. lights, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained as first runnings from the vacuum distillation of effluents from the treatment of a solvent deasphalted short residue with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{30}$  and boiling in the range of approximately 300 °C to 400 °C (572 °F to 752 °F). It produces a finished oil having a viscosity of 4cSt at approximately 100 °C (212 °F)]
- FR** hydrocarbures en  $C_{10}$ , résidu de distillation atmosphérique desasphalte au solvant et hydrotraité, fraction légère de distillation, Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue comme premier écoulement lors de la distillation sous vide des effluents de traitement à l'hydrogène en présence d'un catalyseur, d'un résidu court desasphalte au solvant. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$  à  $C_{30}$  et dont le point d'ébullition est compris approximativement entre 300 °C et 400 °C. donne une huile produite finie de viscosité égale à 4 cSt à environ 100 °C]
- IT** idrocarburi,  $C_{10}$ , residuo della distillazione atmosferica deasfaltato con solvente idrotrattato, frazioni leggere della distillazione, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta come prime frazioni della distillazione sotto vuoto di effluenti dal trattamento di un residuo corto deasfaltato con solvente con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{30}$  e punto di ebollizione nell'intervallo 300 °C-400 °C ca. Produce un olio finito avente viscosità di 4cSt a 100 °C]
- NL** koolwaterstoffen,  $C_{10}$ , waterstofbehandeld solvent gedeasfalteerd residu van de atmosferische destillatie, lichte destillatiefracties, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als de eerste fracties uit de vacuumdestillatie van de vloeistoffen die worden verkregen bij de behandeling van een solvent gedeasfalteerd kleverig residu met waterstof in aanwezigheid van een katalysator. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{30}$ , met een kooktraject van ongeveer 300 °C tot 400 °C. Het vormt een voltooide olie met een viscositeit van 4cSt bij ongeveer 100 °C]
- PT** hidrocarbonetos,  $C_{10}$ , residuo atmosférico desasfaltado com solvente tratado com hidrogenio, frações leves da destilação, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como a fração inicial da destilação de vácuo de efluentes do tratamento de um residuo desasfaltado com solvente com hidrogenio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{30}$  e destila no intervalo de aproximadamente 300 °C a 400 °C. Produz um óleo acabado com uma viscosidade de 4cSt a cerca de 100 °C]

*Classification Klassifizierung Klassifikations-Επισημαιοποίηση Classification Classification Classificazione Inzeling Classificacao*

Car. Cat. 2, R 45

*Etiquetado Etikettering, Kennzeichnung, Επισημαιοποίηση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	R : 45
	S : 53-45

*Limits de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Όρια συγκέντρωσης, concentration limits, Limites de concentration, Limiti di concentrazione Concentratiegrenzen, Limites de concentraçào*


Cas No 97722 06 0

EEC No 307 755 8

No 649-516-00-3

NOTA H

NOTA L

- ES** hidrocarburos,  $C_{17-40}$ , residuo de destilación desasfaltado con disolvente tratado con hidrogeno y fracciones ligeras de destilación a vacío. Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida como primeros productos de la destilación a vacío de efluentes del tratamiento con hidrógeno catalítico de un residuo pequeño desasfaltado con disolvente con una viscosidad de 8cSt a aproximadamente 100 °C. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{17}$  a  $C_{40}$  y con un intervalo de ebullición aproximado de 300 °C a 500 °C]
- DA** carbonhydrider,  $C_{17-40}$ , hydrogenbehandlet solvent-afasfalteret destillationsrest, lette vakuumdestillater, Uspecificeret basisolie  
[En sammensat blanding af carbonhydrider opnået som forløb fra vakuumdestillationen af udløb fra den katalytiske hydrogenbehandling af en solvent afasfalteret kort rest, med en viskositet på 8cSt ved omtrent 100 °C. Den består overvejende af carbonhydrider, overvejende fra  $C_{17}$  til og med  $C_{40}$ , med koginterval omtrent fra 300 °C til 500 °C]
- DE** Kohlenwasserstoffe,  $C_{17-40}$ , mit Wasserstoff behandelte durch Lösungsmittel entwachte Destillationsrückstand, leichte Vakuumdestillate, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man als erste Laute aus der Vakuumdestillation von Ausflüssen aus der katalytischen Behandlung mit Wasserstoff eines durch Lösungsmittel deasphalitierten Vakuumrückstandes mit einer Viskosität von 8 cSt bei etwa 100 °C erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{17}$  bis  $C_{40}$  und siedet im Bereich von etwa 300 °C bis 500 °C]
- EL** υδρογονάνθρακες,  $C_{17-40}$ , υπολειμματος απόσταξης κατεργασμένο με υδρογόνο απασφαλτωμένου με διαλυτή, ελαφρά κλάσματα απόσταξης σε κενό. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται σαν τα πρώτα αποσταγμάτα, απόσταξης σε κενό απορροών από την καταλυτική κατεργασία με υδρογόνο υπολειμματος μικρής περιοχής απόσταξης απασφαλτωμένου με διαλυτή, με ιξώδες 8cSt περίπου σε 100 °C. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{17}$  έως και  $C_{40}$  και με περιοχή βρασμού από 300 °C έως 500 °C περίπου]
- EN** Hydrocarbons,  $C_{17-40}$ , hydrotreated solvent-deasphalted distn. residue, vacuum distn. lights, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained as first runnings from the vacuum distillation of effluents from the catalytic hydrotreatment of a solvent deasphalted short residue having a viscosity of 8cSt at approximately 100 °C (212 °F). It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{17}$  through  $C_{40}$  and boiling in the range of approximately 300 °C to 500 °C (592 °F to 932 °F)]
- FR** hydrocarbures en  $C_{17-40}$ , résidu de distillation hydrotraité et desasphalté au solvant, fraction légère de distillation sous vide, Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue comme premier écoulement lors de la distillation sous vide des effluents d'hydrotraitement catalytique d'un résidu court desasphalté au solvant et de viscosité égale à 8cSt à environ 100 °C. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{17}$ ,  $C_{40}$  et dont le point d'ébullition est compris approximativement entre 300 °C et 500 °C]
- IT** idrocarburi,  $C_{17-40}$ , residuo della distillazione idrotrattato deasfaltato con solvente, frazioni leggere della distillazione sotto vuoto, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta come prime frazioni della distillazione sotto vuoto di effluenti dall'idrotrattamento catalitico di un residuo corto deasfaltato con solvente avente viscosità di 8cSt a 100 °C ca. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{17}$ ,  $C_{40}$  e punto di ebollizione nell'intervallo 300 °C-500 °C ca.]
- NL** koolwaterstoffen,  $C_{17-40}$ , waterstofbehandeld solvent gedecasfalteerd destillatieresidu, lichte vakuumdestillatiefracties, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als de eerste fracties uit de vakuumdestillatie van de vloeistoffen die worden verkregen door de katalytische behandeling met waterstof van een met solvent gedecasfalteerd kleverig residu met een viscositeit van 8cSt bij ongeveer 100 °C. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{17}$ , tot en met  $C_{40}$ , met een kooktraject van ongeveer 300 °C tot 500 °C.]
- PT** hidrocarbonetos,  $C_{17-40}$ , residuo de destilação desasfaltado com solvente e tratado com hidrogénio, fracções leves da destilação de vácuo, Óleo base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida como fracção inicial da destilação de vácuo de efluentes do tratamento catalítico com hidrogénio de um residuo desfaltado com solvente com uma viscosidade de 8cSt a aproximadamente 100 °C. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{17}$  até  $C_{40}$ , e destila no intervalo de aproximadamente 300 °C a 500 °C.]

*Classification Klassifizierung Ταξινόμηση Classification Classification Classificazione Andetm, Classificação*

Carc. Cat. 2, R 45

*Etiquetado Etikettering Kennzeichnung Ετισημασση Labelling Etiquetage Etichettatura Kenmerken, Rotulagem*

T	
	R. 45 S. 53-45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte Ορια συγκέντρωσης, Concentration limits  
Limiti de concentratiōe Limiti di concentrazione Concentratiegrenzen, Limites de concentraçāo*


Cas No 97722 09 3

LEC No 307 58 4

No 649-517 00-9

NOTA H

NOTA L

- ES hidrocarburos,  $C_{11-14}$ , fracción nattenica ligera extraída con disolvente, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por extracción de los aromáticos de un destilado nattenico ligero con una viscosidad de 9,5 cSt a 40 °C. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{14}$ , y con un intervalo de ebullición aproximado de 240 °C a 400 °C]
- DA carbonhydrider,  $C_{11-14}$ , solvent ekstraherede lette naphthenske, Uspecificeret baseolie  
[En sammensæt blanding af carbonhydrider opnået ved ekstraktion af aromaterne fra et let naphthendestillat med en viskositet på 9,5 cSt ved 40 °C. Den består overvejende af carbonhydrider overvejende fra  $C_{11}$  til og med  $C_{14}$ , med kogesinterval omtrent fra 240 °C til 400 °C]
- DE Kohlenwasserstoffe,  $C_{11-14}$ , durch Lösungsmittel extrahierte leichte naphthenhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Extraktion der Aromaten aus einem leichten naphthenhaltigen Destillat mit einer Viskosität von 9,5 cSt bei 40 °C erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{14}$ , und siedet im Bereich von etwa 240 °C bis 400 °C]
- EL υδρογονάνθρακες,  $C_{11-14}$ , εκχυλίσμενοι με διαλύτη ελαφροί ναφθενικοί. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με εκχύλιση των αρωματικών από ελαφρό ναφθενικό απεσταγμά με ιξώδες 9,5 cSt σε 40 °C. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{14}$ , και με περιοχή βρασμού από 240 °C έως 400 °C περίπου]
- EN Hydrocarbons,  $C_{11-14}$ , solvent extd light naphthenic, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by extraction of the aromatics from a light naphthenic distillate having a viscosity of 9,5 cSt at 40 °C (104 °F). It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{14}$ , and boiling in the range of approximately 240 °C to 400 °C (464 °F to 752 °F)]
- FR hydrocarbures en  $C_{11-14}$ , naphthéniques légers, extraction au solvant. Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par extraction des aromatiques dans un distillat naphthénique léger de viscosité égale à 9,5 cSt à 40 °C. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$  -  $C_{14}$  et dont le point d'ébullition est compris approximativement entre 240 °C et 400 °C]
- IT idrocarburi,  $C_{11-14}$ , nattenici leggeri estratti con solvente. Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per estrazione degli aromatici da un distillato nattenico leggero avente viscosità di 9,5 cSt a 40 °C. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  -  $C_{14}$ , e punto di ebollizione nell'intervallo 240 °C - 400 °C]
- NL koolwaterstoffen,  $C_{11-14}$ , solvent-geextraheerde lichte nattenische. Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door extractie van de aromaten uit een licht nattenisch destillaat met een viscositeit van 9,5 cSt bij 40 °C. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_{11}$  tot en met  $C_{14}$  met een kooktraject van ongeveer 240 °C tot 400 °C]
- PT hidrocarbonetos,  $C_{11-14}$ , nattenicos leves extraídos com solvente. Óleo base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por extração dos aromáticos de um destilado nattenico leve com uma viscosidade de 9,5 cSt a 40 °C. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{14}$  e destila no intervalo de aproximadamente 240 °C a 400 °C]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 97722-10-6

FEC No 307-760-5

No 649 518 00-4

NOTA H

NOTA I

- ES hidrocarburos,  $C_{14-20}$ , fracción nafténica ligera extraída con disolvente, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por extracción de los aromáticos de un destilado nafténico ligero con una viscosidad de 16cSt a 40 °C. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{14}$  a  $C_{20}$ , y con un intervalo de ebullición aproximado de 250 °C a 425 °C.]
- DA carbonhydrider,  $C_{14-20}$ , solvent-ekstraherede lette naphthenske, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved ekstraktion af aromaterne fra et let naphthendestillat med en viskositet på 16cSt ved 40 °C. Den består overvejende af carbonhydrider overvejende fra  $C_{14}$  til og med  $C_{20}$  med koginterval omtrent fra 250 °C til 425 °C.]
- DE Kohlenwasserstoffe,  $C_{14-20}$ , durch Lösungsmittel extrahierte leichte naphthenhaltige, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Extraktion der Aromaten aus einem leichten naphthenhaltigen Destillat mit einer Viskosität von 16 cSt bei 40 °C erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{14}$  bis  $C_{20}$  und siedet im Bereich von etwa 250 °C bis 425 °C.]
- EL υδρογονανθράκες,  $C_{14-20}$ , ελαφροί ναφθενικοί εκχυλισμένοι με διάλυτη βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με εκχύλιση των αρωματικών από ελαφρό ναφθενικό απόσταγμα με ιξώδες 16cSt σε 40 °C. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{14}$  έως  $C_{20}$ , και βράζει στην περιοχή από 250 °C έως 425 °C περίπου.]
- EN Hydrocarbons,  $C_{14-20}$ , solvent-extd light naphthenic, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by extraction of the aromatics from a light naphthenic distillate having a viscosity of 16cSt at 40 °C (104 °F). It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{14}$  through  $C_{20}$  and boiling in the range of approximately 250 °C to 425 °C (482 °F to 797 °F).]
- FR : hydrocarbures en  $C_{14-20}$ , naphthéniques légers, extraction au solvant, Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par extraction des aromatiques dans un distillat naphthénique léger de viscosité égale à 16cSt à 40 °C. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{14}$  -  $C_{20}$  et dont le point d'ébullition est compris approximativement entre 250 °C et 425 °C.]
- IT idrocarburi,  $C_{14-20}$ , naftenici leggeri estratti con solvente, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per estrazione con solvente di un distillato naftenico leggero avente viscosità di 16cSt a 100 °C. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{14}$ - $C_{20}$  e punto di ebollizione nell'intervallo 250 °C-425 °C ca.]
- NL koolwaterstoffen,  $C_{14-20}$ , solvent-geextraeerde lichte naftenische, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door extractie van de aromaten uit een licht naftenisch destillaat met een viscositeit van 16cSt bij 40 °C. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{14}$  tot en met  $C_{20}$ , met een kooktraject van ongeveer 250 °C tot 425 °C.]
- PT hidrocarbonetos,  $C_{14-20}$ , nafténicos leves extraídos com solvente, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por extração dos aromáticos de um destilado nafténico leve com uma viscosidade de 16cSt a 40 °C. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{14}$  até  $C_{20}$ , e destila no intervalo de aproximadamente 250 °C a 425 °C.]

*Classification, klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 97862 81 2

EC No 308-131-8

No 649 519-00-X

NOTA H

NOTA L

- ES hidrocarburos,  $C_{17-42}$ , desaromatizados, Aceite de base, sin especificar
- DA carbonhydrider,  $C_{17-42}$ , dearomatiserede, Uspecificeret baseolie
- DE Kohlenwasserstoffe,  $C_{17-42}$ , dearomatisiert, Grundöl — nicht spezifiziert
- EL υδρογονάνθρακες,  $C_{17-42}$ , απευαρωματισμένοι από αρωματικά βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Hydrocarbons,  $C_{17-42}$ , dearomatized, Baseoil — unspecified
- FR hydrocarbures en  $C_{17-42}$ , desaromatisés, Huile de base — non spécifiée
- IT idrocarburi,  $C_{17-42}$ , dearomatizzati, Olio base — non specificato
- NL koolwaterstoffen,  $C_{17-42}$ , gedearomatiseerd, Basisolie — niet gespecificeerd
- PT hidrocarbonetos,  $C_{17-42}$ , desaromatizados, Óleo-base não especificado

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classificazione, Classificação, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>I</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 97862-82-3

FEC No 308-132-3

No 649-520-00-5

NOTA H  
NOTA L

- ES hidrocarburos,  $C_{17-20}$ , destilados tratados con hidrogeno, productos ligeros de destilación, Aceite de base, sin especificar
- DA carbonhydrier,  $C_{17-20}$ , hydrogenbehandelde destillater, lette destillationsfraktioner, Uspecificeret baseolie
- DE Kohlenwasserstoffe,  $C_{17-20}$ , mit Wasserstoff behandelte Destillate, Leichtdestillate; Grundöl — nicht spezifiziert
- EL υδρογονάνθρακες,  $C_{17-20}$ , αποσταγμάτων κατεργασμένων με υδρογόνο, ελαφρά προϊόντα απόσταξης- Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Hydrocarbons,  $C_{17-20}$ , hydrotreated distillates distn lights Baseoil — unspecified
- FR hydrocarbures en  $C_{17-20}$ , distillats hydrotraites, produits legers de distillation, Huile de base — non specifié
- IT idrocarburi,  $C_{17-20}$ , distillati idrottrattati, frazioni leggere della distillazione, Olio base — non specificato
- NL koolwaterstoffen  $C_{17-20}$ , met waterstof behandelde destillaten, lichte destillatiefracties, Basisolie — niet gespecificeerd
- PT hidrocarbonetos,  $C_{17-20}$ , destilados tratados com hidrogenio, fracções leves da destilação, Óleo-base não especificado

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc Cat 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 97862-83-4

EEC No 308 133-9

No 649-521-00-0

NOTA H

NOTA I

- ES hidrocarburos,  $C_{10}$ , fraccion nftenica de destilacion a vacio. Aceite de base, sin especificar
- DA carbonhydridet  $C_{10}$ , naphthenske vakuumdistingillations- Uspecificeret baseolie
- DE Kohlenwasserstoffe  $C_{10}$ , naphthenhaltige Vakuumdestillation, Grundol — nicht spezifiziert
- EL υδρογονάνθρακες,  $C_{10}$ , ναφθηνικοί αποσταγμά κενού. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN Hydrocarbons  $C_{10}$ , naphthenic vacuum distn. Baseoil — unspecified
- FR hydrocarbures en  $C_{10}$ , distillation naphtenique sous vide. Huile de base — non specific
- IT idrocarburi  $C_{10}$ , distillazione nftenica sotto vuoto. Olio base — non specificato
- NL koolwaterstoffen  $C_{10}$ , nftenische vacuumdestillatie. Basisolie — niet gespecificeerd
- PT hidrocarbonetos  $C_{10}$ , nftenico da destilação de vacuo. Oleo-base não especificado

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 2 R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Etiquetage, Etichettatura, Kenmerken, Rotulagem

	R 45
	S 53 45

Limites de concentration, Koncentrationsgrænser, Konzentrationsgrenzuerte, Όρια συγκεντρώσεως, Concentration limits

Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 97926-68-6

EEC No 308-287-7

No 649-522-00-6

NOTA H

NOTA L

- ES : hidrocarburos,  $C_{10-14}$ , desaromatizados ; Aceite de base, sin especificar
- DA : carbonhydrier,  $C_{10-14}$ , dearomatiserede ; Uspecificeret baseolie
- DE : Kohlenwasserstoffe,  $C_{10-14}$ , dearomatisiert ; Grundöl — nicht spezifiziert
- EL : υδρογονάνθρακες,  $C_{10-14}$ , αποαρωματισμένοι ; Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο
- EN : Hydrocarbons,  $C_{10-14}$ , dearomatized ; Baseoil — unspecified
- FR : hydrocarbures en  $C_{10-14}$ , desaromatisés ; Huile de base — non spécifié
- IT : idrocarburi,  $C_{10-14}$ , dearomatizzati ; Olio base — non specificato
- NL : koolwaterstoffen,  $C_{10-14}$ , gedearomatiseerd ; Basisolie — niet gespecificeerd
- PT : hidrocarbonetos,  $C_{10-14}$ , desaromatizados ; Oleo-base não especificado

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 97926-70-0

EEC No 308-289-8

No 649-523-00-1

NOTA H  
NOTA L

- ES hidrocarburos,  $C_{10-16}$ , tratados con hidrogeno. Aceite de base sin especificar
- DA carbonhydrider,  $C_{10-16}$ , hydrogenbehandiede. Uspecificeret baseolie
- DE Kohlenwasserstoffe,  $C_{10-16}$ , mit Wasserstoff behandelt. Grundöl — nicht spezifiziert
- EL υδρογονανθρακες,  $C_{10-16}$ , κατεργασμένοι με υδρογόνο. Βασικό ορυκτέλαιο —, ηη προδιαγεγραμμένο
- EN Hydrocarbons,  $C_{10-16}$ , hydrotreated. Baseoil — unspecified
- FR hydrocarbures en  $C_{10-16}$  hydrotraites; Huile de base — non specitie
- IT idrocarburi,  $C_{10-16}$ , idrotrattati. Olio base — non specificato
- NL koolwaterstoffen,  $C_{10-16}$ , met waterstof behandeld; Basisolie — niet gespecificeerd
- PT hidrocarbonetos,  $C_{10-16}$ , tratados com hidrogenio. Oleo-base não especificado

Classification, Klassifizierung, Einstufung, Ταξινόηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 2; R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem



Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limite de concentration, Limiti di concentrazione, Konzentrationsgrenzen, Limites de concentraçao




Cas No 97926-71-1

EEC No 308-290-3

No 649-524-00-7

NOTA H

NOTA L

- ES · hidrocarburos,  $C_{27-42}$ , naftenicos, Aceite de base, sin especificar  
 DA · carbonhydnder,  $C_{27-42}$ , naphthenske, Uspecificeret baseolie  
 DE · Kohlenwasserstoffe,  $C_{27-42}$ , naphthenhaltig, Grundöl — nicht spezifiziert  
 EL · υδρογονάνθρακες,  $C_{27-42}$ , ναφθενικοί Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
 EN · Hydrocarbons,  $C_{27-42}$ , naphthenic, Baseoil — unspecified  
 FR · hydrocarbures naphteniques en  $C_{27-42}$ , Huile de base — non spécifique  
 IT · idrocarburi,  $C_{27-42}$ , naftenici, Olio base — non specificato  
 NL · koolwaterstoffen,  $C_{27-42}$ , naftenisch, Basisolie — niet gespecificeerd  
 PT · hidrocarbonetos,  $C_{27-42}$ , naftenicos, Óleo-base não especificado

Classification, Klassifizierung, Einstufung, Ταξινόμηση, Classification (Classification, Classificazione, Indeling, Classificação

Carc Cat 2, R 45

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem

T	
	R · 45
	S · 53 45

Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao


Cas No 100684-37-5

FEC No 309 710 8

No 649-525-00 2

NOTA H

NOTA L

- ES aceites residuales (petróleo), desparafinados con disolvente tratados con carbón. Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por el tratamiento con carbón vegetal activado de aceites residuales de petróleo desparafinados con disolvente para separar constituyentes polares en trazas e impurezas]
- DA restolier (råolie), carbonbehandlede solventafvoksede, U specificeret baseolie  
[En sammensat blanding af carbonhydrier opnået ved behandlingen af solventafvoksede råolierestolier med aktivt kul, for at fjerne spor af polære bestanddele og urenheder]
- DE Rückstandsole (Erdöl), mit Kohlenstoff behandelt, durch Lösungsmittel entwachst, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von durch Lösungsmittel entwachsenen Erdölrückstandsolen mit Aktivkohle erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen]
- EL υπολειμματικά έλαια (πετρελαιο), αποκηρωμένα με διαλυτή κατεργασμένα με άνθρακα Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται με την κατεργασία αποκηρωμένων με διαλυτή υπολειμματικών ελαίων πετρελαιο με ενεργό άνθρακα, για να απομακρυνθούν ίχνη πολικών συστατικών και προσμίξεων]
- EN Residual oils (petroleum), carbon-treated solvent dewaxed Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by the treatment of solvent dewaxed petroleum residual oils with activated charcoal for the removal of trace polar constituents and impurities]
- FR huiles résiduelles (pétrole), déparaffinées au solvant et traitées au charbon, Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'huiles résiduelles déparaffinées au solvant avec du charbon actif afin d'éliminer les traces de constituants polaires et les impuretés]
- IT olii residui (petrolio), decerati con solvente trattati con carbone, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per trattamento di olii residui di petrolio decerati con solvente con carbone attivo per eliminare costituenti polari in tracce ed impurezze]
- NL residu-olie (aardolie), behandeld met koolstof en met solvent van was ontdaan, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van met solvent van was ontdane residu olie uit aardolie met geactiveerde kool teneinde sporen van polaire bestanddelen en onzuiverheden te verwijderen]
- PT oleos residuais (petróleo), desparafinados com solvente tratados com carvão activado, Oleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de oleos residuais petrolíferos desparafinados com solvente com carvão activado para remoção de vestígios de constituintes polares e impurezas]

*Classificacón, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificacón, Classificacón, Classificacón, Classificacón, Classificacón*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentracón, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 100684-18-6

EFC No 309 711 3

No 649-526-00-8

NOTA H

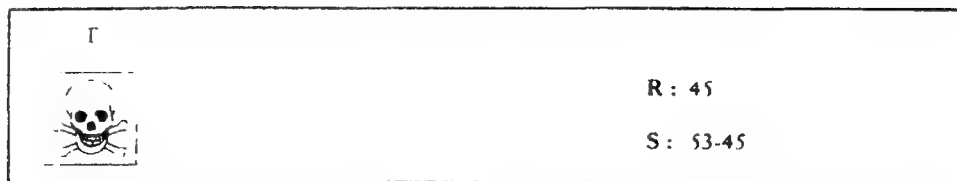
NOTA L

- ES aceites residuales (petroleo), desparafinados con disolvente tratados con arcilla , Aceite de base, sin especificar  
[Combinacion compleja de hidrocarburos obtenida por tratamiento con tierra para blanquear de aceites residuales de petroleo desparafinados con disolvente para separar constituyentes polares en trazas e impurezas ]
- DA restolier (råolie), lerbehandlede solventafvoksede , Uspecificeret baseolie  
[En sammensat blanding af carbonhydrier opnået ved behandling af solventafvoksede råolierestolier med blegejord, for at fjerne spor af polære bestanddele og urenheder] .
- DE Rückstandsole (Erdöl), mit Ton behandelt durch Lösungsmittel entwachst , Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandlung von durch Lösungsmittel entwachsenen Erdölrückstandsolen mit Bleicherde erhält, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen ]
- EL υπολειμματικά ελαία (πετρελαιο), κατεργασμένα με αργίλλο-αποκηρωμένα με διαλύτη βασικό ορυκτέλαιο — μη προοιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία αποκηρωμένων με διαλύτη υπολειμματικών ελαίων πετρελαίου με απογρωστική γη για να απομακρυνθούν ίχνη πολικών συστατικών και προσμίξεων ]
- EN Residual oils (petroleum), clay-treated solvent-dewaxed , Basenil — unspecified  
[A complex combination of hydrocarbons obtained by treatment of solvent dewaxed petroleum residual oils with bleaching earth for the removal of trace polar constituents and impurities ]
- FR huiles residuelles (petrole), deparaffinées au solvant et traitées a la terre , Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par traitement d huiles residuelles deparaffinées au solvant avec de la terre decolorante afin d'éliminer les traces de constituants polaires et les impuretes ]
- IT olii residui (petrolio), decerati con solvente trattati con argilla , Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per trattamento di olii residui di petrolio decerati con solvente con terra sbiancante per eliminare costituenti polari in tracce ed impurezze ]
- NL residu-olien (aardolie), behandeld met klei en met solvent van was ontdaan , Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van met solvent van was ontdane residu olien uit aardolie met bleekarde teneinde sporen van polaire bestanddelen en onzuiverheden te verwijderen ]
- PT oleos residuais (petroleo), desparafinados com solvente tratados com argila , Óleo base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de oleos residuais petrolíferos desparafinados com solvente com argila descorante para remoção de vestígios de constituintes polares e impurezas ]

*Classification Klassificering Färsättning Ταξινόμηση Classification Classification, Classificazione Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage, Etichettatura, Kenmerken, Rotulagem*



*Limites de concentration Konzentrationseränser Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentração*


Cas No 101316-69-2

EEC No 309-874-0

No 649-527-00-3

NOTA H

NOTA L

ES: aceites lubricantes (petroleo),  $C_{>25}$ , extraídos con disolvente, desasfaltados, desparafinados, hidrogenados. Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por extracción con disolvente e hidrogenación de residuos de destilación a vacío. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte superior a  $C_{25}$  y produce un aceite final con una viscosidad del orden de 32cSt a 37cSt a 100 °C]

DA: smørelier (råolie),  $C_{>25}$ , solventekstraherede, afasfalterede, afvoksede, hydrogenerede. Uspecificeret baseolie  
[En sammensat blanding af carbonhydnder opnået ved solventekstraktion og hydrogenering af vakuumdestillationsrester. Den består overvejende af carbonhydnder, overvejende større end  $C_{25}$ , og danner en færdig olie med en viskositet i området 32cSt til 37cSt ved 100 °C]

DE: Schmieröle (Erdöl),  $C_{>25}$ , durch Lösungsmittel extrahiert, deasphaltiert, entwachst, hydriert. Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittelextraktion und Hydrierung von Vakuumdestillationsrückständen erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vornehmlich größer als  $C_{25}$  und ergibt ein Fertigöl mit einer Viskosität im Bereich von 32 cSt bis 37 cSt bei 100 °C]

EL: λιπαντικά έλαια (πετρελαιο),  $C_{>25}$ , εκχυλισμένα με διαλυτή, απασφαλτωμένα, αποκηρωμένα, υδρογονωμένα. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από εκχύλιση με διαλυτή και υδρογόνωση υπολειμμάτων αποσταξης στο κενό. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα σημαντικά μεγαλύτερο από  $C_{25}$  και παράγει έτοιμο έλαιο που έχει ιξώδες της τάξης από 32cSt έως 37cSt στους 100 °C]

EN: Lubricating oils (petroleum),  $C_{>25}$ , solvent-extd, deasphalted, dewaxed, hydrogenated. Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of vacuum distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than  $C_{25}$  and produces a finished oil with a viscosity in the order of 32cSt to 37cSt at 100 °C (212 °F)]

FR: huiles lubrifiantes supérieures a  $C_{25}$  (petrole), extraction au solvant, desasphaltage, deparaffinage, hydrogenation. Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant et hydrogenation de residus de distillation sous vide. Se compose principalement d'hydrocarbures dont le nombre de carbonos est en majorite superieur a  $C_{25}$  et donne une huile produit fini dont la viscosite est voisine de 32cSt a 37cSt a 100 °C]

IT: olii lubrificanti (petrolio),  $C_{>25}$ , estratti con solvente, deasfaltati, decerati, idrogenati. Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per estrazione con solvente e idrogenazione di residui della distillazione sotto vuoto. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente maggiore di  $C_{25}$  e produce un olio finito con viscosità dell'ordine di grandezza da 32cSt a 37cSt a 100 °C]

NL: smeerolien (aardolie),  $C_{>25}$ , solventgeextraheerd, gedeasfalterd, van was ontdaan, gehydrogeneerd. Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door solventextractie en hydrogenering van vakuumdestillatieresiduen. Bestaat voornamelijk uit koolwaterstoffen overwegend groter dan  $C_{25}$  en vormt een voltooide olie met een viscositeit van 32cSt tot 37cSt bij 100 °C]

PT: oleos lubricantes (petroleo),  $C_{>25}$ , extraídos com solvente, desasfaltados, desparafinados, hidrogenados. Oleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por extração com solvente e hidrogenação de resíduos da destilação de vácuo. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente superiores a  $C_{25}$  e produz um óleo acabado com uma viscosidade da ordem dos 32cSt a 37cSt a 100 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatie, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	<b>R : 45</b> <b>S : 53-45</b>

*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 101 316 70 5

EEC No 309-875 6

No 649-528-00-9

NOTA H

NOTA L

- ES: aceites lubricantes (petróleo),  $C_{11}$ ,  $C_{12}$ , extraídos con disolvente, desparafinados, hidrogenados, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por extracción con disolvente e hidrogenación de residuos de destilación atmosférica. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{12}$ , y produce un aceite final con una viscosidad del orden de 17cSt a 23cSt a 40 °C]
- DA: smørelier (råolie),  $C_{11}$ ,  $C_{12}$ , solventekstraherede, afvoksede, hydrogenerede, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved solventekstraktion og hydrogenering af atmosfærisk destillationsrester. Den består overvejende af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{12}$ , og danner en færdig olie med en viskositet i området fra 17cSt til 23cSt ved 40 °C]
- DE: Schmierole (Erdöl),  $C_{11}$ ,  $C_{12}$ , durch Lösungsmittel extrahiert, entwachst, hydriert; Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen die man durch Lösungsmittelextraktion und Hydrierung von Rückständen aus der offenen Destillation erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{12}$  und ergibt ein Fertigöl mit einer Viskosität im Bereich von 17 cSt bis 23cSt bei 40 °C]
- EL: λιπαντικά ελαία (πετρελαιο),  $C_{11}$ ,  $C_{12}$ , εκχυλισμένα με διάλυτη, αποκηρωμένα, υδρογονωμένα. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται από εκχύλιση με διάλυτη και υδρογόνωση, υπολειμμάτων ατμοσφαιρικής κλασματικής αποσταξης. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{12}$  και παραγει έτοιμο έλαιο που έχει ιξώδες της τάξης από 17cSt έως 23cSt στους 40 °C]
- EN: Lubricating oils (petroleum),  $C_{11}$ ,  $C_{12}$ , solvent-extd., dewaxed, hydrogenated, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{12}$ , and produced a finished oil with a viscosity in the order of 17cSt to 23cSt at 40 °C (104 °F)]
- FR: huiles lubrifiantes en  $C_{11}$ ,  $C_{12}$  (pétrole), extraction au solvant, déparaffinage, hydrogénation, Huile de base — non spécifié  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant et hydrogénation de résidus de distillation atmosphérique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ ,  $C_{12}$  et donne une huile-produit fini dont la viscosité est voisine de 17cSt à 23cSt à 40 °C]
- IT: olii lubrificanti (petrolio),  $C_{11}$ ,  $C_{12}$ , estratti con solvente, decerati, idrogenati, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per estrazione con solvente e idrogenazione di residui della distillazione atmosferica. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ ,  $C_{12}$  e produce un olio finito con viscosità dell'ordine di grandezza da 17cSt a 23cSt a 40 °C]
- NL: smeerolien (aardolie),  $C_{11}$ ,  $C_{12}$ , solventgeextraheerd, van was ontdaan, gehydrogeneerd, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door solventextractie en hydrogenering van atmosferische destillatieresiduen. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$ , tot en met  $C_{12}$  en vormt een voltooide olie met een viscositeit van 17cSt tot 23cSt bij 40 °C]
- PT: oleos lubricantes (petróleo),  $C_{11}$ ,  $C_{12}$ , extraídos com solvente, desparafinados, hidrogenados, Óleo-base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por extração com solvente e hidrogenação de resíduos da destilação atmosférica. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$ , ate  $C_{12}$ , e produz um óleo acabado com uma viscosidade da ordem dos 17cSt a 23cSt à 40 °C]



*Classe con ALO specificazione Functiunea Tranzivouna Classification Classification Classificazione Indeling Classificação*

Carb. Cn 2 R 45

*Etiquetado Etikettering Kennzeichnung, Ετισημανση Labeling Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>Γ</p> 	R : 45
	S : 53-45

*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzuerte Όρια συγκεντρώσης, Concentration limits, Limites de concentration, Limits di concentrazione, Concentratiegrenzen Limites de concentraçao*


Cas No 101316-116

FEC No 309-876-1

No 649-529-00-4

NOTA H

NOTA L

- ES aceites lubricantes (petroleo),  $C_{10-15}$ , extraídos con disolvente desparafinados, hidrogenados, Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por extracción con disolvente e hidrogenación de residuos de destilación atmosférica. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{15}$  y produce un aceite final con una viscosidad del orden de 37cSt a 44cSt a 40 °C]
- DA smørelier (råolie),  $C_{10-15}$ , solventekstraherede, afvoksede, hydrogenerede, Uspecificeret baseolie  
[En sammensat blanding af carbonhydrider opnået ved solventekstraktion og hydrogenering af atmosfærisk destillationsrester. Den består overvejende af carbonhydrider, overvejende  $C_{10}$  til og med  $C_{15}$  og danner en færdig olie med en viskositet i området fra 37cSt til 44cSt ved 40 °C]
- DE Schmierole (Erdöl)  $C_{10-15}$ , durch Lösungsmittel extrahiert, entwachst, hydriert, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittelextraktion und Hydrierung von Rückständen aus der offenen Destillation erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{15}$  und ergibt ein Fertigöl mit einer Viskosität im Bereich von 37 cSt bis 44 cSt bei 40 °C]
- EL λιπαντικά έλαια (πυρρολίαι),  $C_{10-15}$ , εκχυλίσµενα µε διαλύτη, αποκηρωµένα, υδρογονωµένα, βασικό ορυκτέλαιο — µη προδιαγεγραµµένο  
[Πολύπλοκη συνδυασµός υδρογονάνθρακων που λαµβάνεται από την εκχύλιση και υδρογόνωση υπολειµµάτων ατµοσφαιρικής αποστάξης. Συνίσταται κυρίως από υδρογονάνθρακες µε αριθµό ατόµων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{15}$  και παράγει ετοιµό έλαιο µε ισχύς της τάξης από 37cSt έως 44cSt στο 40 °C]
- EN Lubricating oils (petroleum),  $C_{10-15}$ , solvent extd., dewaxed, hydrogenated, baseoil — unspecified  
[A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{15}$  and produces a finished oil with a viscosity in the order of 37cSt to 44cSt at 40 °C (104 °F)]
- FR huiles lubrifiantes (n°  $C_{10-15}$  (petrole), extraction au solvant, déparaffinage, hydrogenation, Huile de base — non spécifique  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant et hydrogenation de résidus de distillation atmosphérique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$ - $C_{15}$ , et donne une huile finie dont la viscosité est voisine de 37 cSt à 44 cSt à 40 °C]
- IT olii lubrificanti (petrolio),  $C_{10-15}$ , estratti con solvente, decerati, idrogenati, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per estrazione con solvente e idrogenazione di residui della distillazione atmosferica. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$ - $C_{15}$  e produce un olio finito con viscosità dell'ordine di grandezza da 37cSt a 44cSt a 40 °C]
- NL smeeroien (aardolie),  $C_{10-15}$ , solventgeextraheerd, van was ontdaan, gehydrogeneerd, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door solventextractie en hydrogenering van atmosferische destillatieresiduen. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_{10}$  tot en met  $C_{15}$  en vormt een voltooide olie met een viscositeit van 37 cSt tot 44 cSt bij 40 °C]
- PT oleos lubricantes (petroleo),  $C_{10-15}$ , extraídos com solvente desparafinados, hidrogenados, Óleo base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por extração com solvente e hidrogenação de resíduos da destilação atmosférica. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{15}$  e produz um óleo acabado com uma viscosidade da ordem dos 37cSt a 44cSt a 40 °C]

*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
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*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limite de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 101316-72 7

EEC No 309-877 7

No 649-530-00-X

NOTA H

NOTA L

- ES aceites lubricantes (petroleo),  $C_{24-50}$ , extraídos con disolvente, desparafinados, hidrogenados. Aceite de base, sin especificar  
[Combinación compleja de hidrocarburos obtenida por extracción con disolvente e hidrogenación de residuos de destilación atmosférica. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{24}$  a  $C_{50}$  y produce un aceite final con una viscosidad del orden de 16cSt a 75cSt a 40 °C]
- DA smørelier (råolie),  $C_{24-50}$ , solventekstraherede, afvoksede, hydrogenerede, Uspecificeret baseolie  
[En sammensæt blanding af carbonhydrider opnået ved solventekstraktion og hydrogenering af atmosfærisk destillationsrester. Den består overvejende af carbonhydrider overvejende  $C_{24}$  til og med  $C_{50}$ , og danner en færdig olie med en viskositet i området fra 16cSt til 75cSt ved 40 °C]
- DE Schmierole (Erdöl),  $C_{24-50}$ , durch Lösungsmittel extrahiert, entwachst, hydriert, Grundöl — nicht spezifiziert  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittelextraktion und Hydrierung von Rückständen aus der offenen Destillation erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{24}$  bis  $C_{50}$  und ergibt ein Fertigöl mit einer Viskosität im Bereich von 16 cSt bis 75 cSt bei 40 °C]
- EL λιπαντικά ελαία (πετρελαίου), εκχυλίσμενα με διαλυτή, αποκηρωμένα, υδρογονωμένα. Βασικό ορυκτέλαιο — μη προδιαγεγραμμένο  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται από εκχύλιση με διαλυτή και υδρογόνωση, υπολειμμάτων ατμοσφαιρικής αποστάξης. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{24}$  έως και  $C_{50}$  και παράγει έτοιμο έλαιο που έχει ιξώδες της τάξης από 16cSt έως 75cSt στους 40 °C]
- EN Lubricating oils (petroleum),  $C_{24-50}$ , solvent-extd, dewaxed, hydrogenated, Baseoil — unspecified  
[A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{24}$  through  $C_{50}$  and produces a finished oil with a viscosity in the order of 16cSt to 75cSt at 40 °C (104 °F)]
- FR huiles lubrifiantes en  $C_{24-50}$  (pétrole), extraction au solvant, deparaffinage, hydrogenation, Huile de base — non spécifiée  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant et hydrogenation de résidus de distillation atmosphérique. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majeure partie dans la gamme  $C_{24}$  -  $C_{50}$ , et donne une huile produit fini dont la viscosité est voisine de 16 cSt à 75 cSt à 40 °C]
- IT olii lubrificanti (petrolio),  $C_{24-50}$ , estratti con solvente, decerati, idrogenati, Olio base — non specificato  
[Combinazione complessa di idrocarburi ottenuta per estrazione con solvente e idrogenazione di residui della distillazione atmosferica. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{24}$  -  $C_{50}$  e produce un olio finito con viscosità dell'ordine di grandezza da 16cSt a 75cSt a 40 °C]
- NL smeerolien (aardolie),  $C_{24-50}$ , solvent-geextraheerd, van was ontdaan, gehydrogeneerd, Basisolie — niet gespecificeerd  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door solventextractie en hydrogenering van residuen van de atmosferische destillatie. Bestaat voornamelijk uit koolwaterstoffen overwegend  $C_{24}$  tot en met  $C_{50}$  en vormt een voltooide olie met een viscositeit tussen 16 cSt en 75 cSt bij 40 °C]
- PT oleos lubrificantes (petroleo),  $C_{24-50}$ , extraídos com solvente, desparafinados, hidrogenados, Oleo base não especificado  
[Uma combinação complexa de hidrocarbonetos obtida por extração com solvente e hidrogenação de resíduos da destilação atmosférica. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{24}$  até  $C_{50}$  e produz um óleo acabado com uma viscosidade da ordem dos 16cSt a 75cSt a 40 °C]

*Classification / Klassifizierung / Ταξινόμηση / Classification / Classificação / Classificazione / Classificação*

Carc Cat 2, R 45

*Etiquetado / Etikettering / Kennzeichnung / Επισήμανση / Labelling / Etiquetage, Etichettatura / Kenmerken, Rotulagem*

T	
	R : 45
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*Limites de concentration, Konzentrationsgrensen / Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration / Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 68783-00-6

EEC No 272-175-3

No 649-531-00-5

NOTA H

NOTA L

- ES extractos (petróleo), destilado naftenico pesado extraído con disolvente, concentrado aromático ; Extracto aromático destilado (tratado)  
[Concentrado aromático producido por adición de agua al extracto del disolvente del destilado nafténico pesado y extracción con disolvente]
- DA ekstrakter (råolie), tungt naphthendestillat solvent-, aromatkonzentrat ; Aromatisk ekstrakt af destillat (behandlet)  
[Et aromatkonzentrat fremstillet ved at sætte vand til solventekstrakter og ekstraktionssolvent af tungt naphthadestillat.]
- DE Extrakte (Erdöl), schweres naphthenhaltiges Destillat Lösungsmittel, aromatisch konzentriert ; Aromatenextrakt aus Destillat (behandelt)  
[Aromatisches Konzentrat, hergestellt durch Zusatz von Wasser zu schwerem naphthenhaltigen Destillatlösungsmittel- und Extraktionslösungsmittel]
- EL εκχύλισμα (πετρελαίου), βαρέος ναφθενικού αποστάγματος εκχυλισμένου με διαλύτη, συμπύκνωμα αρωματικών-  
Επεξεργασμένο εκχύλισμα  
[Αρωματικό συμπύκνωμα που παραγεται με προσθήκη νερού σε εκχύλισμα με διαλύτη βαρέος ναφθενικού αποστάγματος και σε διαλυτή εκχύλισης]
- EN Extracts (petroleum), heavy naphthenic distillate solvent, arom. conc. ; Distillate aromatic extract (treated)  
[An aromatic concentrate produced by adding water to heavy naphthenic distillate solvent extract and extraction solvent.]
- FR extraits au solvant de distillat naphthénique lourd (pétrole), concentré aromatique ; Extrait aromatique de distillat (traite)  
[Concentré aromatique obtenu par addition d'eau a un extrait au solvant de distillat naphthénique lourd et au solvant d'extraction.]
- IT estratti (petrolio), con solvente, da distillato naftenico pesante, concentrato in aromatici ; Estratto aromatico distillato (trattato)  
[Concentrato di aromatici prodotto per aggiunta di acqua ad un estratto con solvente di distillato naftenico pesante ed al solvente di estrazione]
- NL : extracten (aardolie), zwaar naften-houdend destillaatsolvent-, aromaatconcentraat ; Aromatisch extract van destillaat (bewerkt)  
[Een aromatisch concentraat, verkregen door het toevoegen van water aan zwaar naften-houdend destillaat-solventextract en extractiesolvent]
- PT extractos (petróleo), de solvente de destilados nafténicos pesados, concentrados em aromáticos ; Extracto aromático de destilado (tratado)  
[Um concentrado aromático produzido por adição de água a um extracto com solvente de um destilado nafténico pesado e extracção com solvente.]

Classification & *Einordnung, Taxierung, Classification, Classificazione, Indeling, Classificacão*

Carc Cat 2, R 45

*Επιγραφές* *Enketering* *Kenzeichnung* *Επισημάνση* *Labelling* *Étiquetage* *Etichettatura* *Kenmerken* *Rotulagem*

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*Límite de concentración* Konzentrationsgrænser, Konzentrationsgrenzwerse, Όρια συκέντρωσης, Concentration limits, *Limiti di concentrazione* Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 68783 04-0

FEC No 272 180 0

No 649-532 00-0

NOTA H

NOTA L

- ES** extractos (petroleo), destilado parafinico pesado extraido con disolvente refinado con disolvente. Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos obtenida como el extracto de la reextraccion del destilado parafinico pesado refinado con disolvente. Compuesta de hidrocarburos aromaticos saturados con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{30}$ ]
- DA** ekstrakter (råolie), solventraffineret tungt paraffindestillat solvent. Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået som ekstrakt fra re-ekstraktionen af solventraffineret, tungt paraffindestillat. Den består af mættede og aromatiske carbonhydrider overvejende  $C_{20}$  til og med  $C_{30}$ ]
- DE** Extrakte (Erdöl), durch Lösungsmittel aufbereitetes schweres paraffinhaltiges Destillat-Lösungsmittel. Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen erhalten als Extrakt aus der Re-Extraktion von durch Lösungsmittel aufbereitetem schwerem paraffinhaltigen Destillat. Besteht aus gesättigten und aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{30}$ ]
- EL** εκχυλίσμα (πετρελαίου), εξευγενισμένου με διαλυτή βαρυσ παραφινικού αποσταγμάτος, εξευγενισμένου με διαλυτή. Επεξεργασμένο εκχυλίσμα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το εκχυλίσμα επανεκχύλισης βαρυσ παραφινικού αποσταγμάτος εξευγενισμένου με διαλυτή. Συνίσταται από κορεσμένους και αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{30}$ ]
- EN** Extracts (petroleum), solvent refined heavy paraffinic distillate solvent. Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained as the extract from the re-extraction of solvent refined heavy paraffinic distillate. It consists of saturated and aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{30}$ ]
- FR** extraits au solvant de distillat paraffinique lourd raffiné au solvant (pétrole). Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue comme extrait lors d'une seconde extraction d'un distillat paraffinique lourd raffiné au solvant. Se compose d'hydrocarbures saturés et aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$  -  $C_{30}$ ]
- IT** estratti (petrolio), con solvente da distillato paraffinico pesante raffinato con solvente. Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta come estratti dalla re-estrazione di un distillato paraffinico pesante raffinato con solvente. E' costituita da idrocarburi saturi e aromatici con numeri di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$  -  $C_{30}$ ]
- NL** extracten (aardolie), solvent geraffineerde zwaar paraffinehoudend destillaat solvent. Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen verkregen als het extract van de herextractie van solventgeraffineerd zwaar paraffinehoudend destillaat. Bestaat uit verzadigde en aromatische koolwaterstoffen overwegend  $C_{20}$  tot en met  $C_{30}$ ]
- PT** extractos (petroleo), de solvente de um destilado parafinico pesado refinado com solvente. Extracto aromatico de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida como o extracto da re-extracção de um destilado parafinico pesado refinado com solvente. E' constituída por hidrocarbonetos saturados e aromáticos com numeros de átomos de carbono predominantemente na gama de  $C_{20}$  até  $C_{30}$ ]



Classification Klassificering Ein-ufangung Ταξινόηση Classification Classification Classificazione Indeling Classificacao

C 200 Cat 2, R 45

Etiquetado Etikettering Kennzeichnung Επισήμανση Labelling Etiquetage Etichettatura Kenmerken, Rotulagem

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Limites de concentration, Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits,  
Limites de concentration Limiti di concentrazioni Concentratiegrenzen, Limites de concentraçao


Cas No 68814 89 1

FEC No 272 342 0

No 649 533 00 6

NOTA H

NOTA L

- ES extractos (petroleo), destilados parafinicos pesados, desasfaltados con disolvente , Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos obtenida como el extracto de una extraccion con disolvente del destilado parafinico pesado]
- DA ekstrakter (råolie), tunge paraffindestillater, solvent afasfalterede , Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået som ekstraktet fra en solventekstraktion af tungt paraffindestillat]
- DE Extrakte (Erdöl), schwere paraffinhaltige Destillate, durch Lösungsmittel von Asphalt befreit , Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Extrakt aus einer Lösungsmittelsextraktion von schwerem paraffinhaltigem Destillat]
- EL εκχυλίσματα (πετρελαιο) βαρέων παραφινικών αποσταγμάτων, απασφαιτωμένων με διαλυτή. Επεξεργασμένο εκχύλισμα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το εκχύλισμα εκχύλισης με διαλυτή βαρέως παραφινικού αποσταγματος]
- EN Extracts (petroleum), heavy paraffinic distillates, solvent deasphalted . Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained as the extract from a solvent extraction of heavy paraffinic distillate]
- FR extraits (petrole), desasphaltage au solvant de distillats paraffiniques lourds . Extrait aromatique de distillat (traite)  
[Combinaison complexe d'hydrocarbures obtenue comme extrait lors de l'extraction au solvant de distillat paraffinique lourd]
- IT estratti (petrolio), distillati paraffinici pesanti, desasfaltati con solvente . Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta come estratto da una estrazione con solvente di distillato paraffinico pesante]
- NL extracten (aardolie) zware paraffinehoudende destillaten, solvent gedeasfalteerd . Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt gewonnen uit het stroomloze solventextractie van zware paraffine houdend destillaat]
- PT extractos (petroleo) de destilados parafinicos pesados, desastillado com solvente . Extracto aromatico de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida como o extracto de uma extracção com solvente de um destilado parafinico pesado]

*Classification Klassificering Einstufung, Ταξινόμηση, Classification Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado Etikettering Kennzeichnung, Επισήμανση Labelling Étiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentration Konzentrationsgrenzen Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentração*


Cas No 90641 07 9

EFC No 922 631 5

No 649 534 00 1

NOTA H

NOTA I

- ES** extractos (petroleo), disolvente del destilado naftenico pesado tratado con hidrogeno. Extracto aromático destilado (tratado)  
[Combinación compleja de hidrocarburos obtenida por tratamiento con hidrogeno en presencia de un catalizador de un extracto del disolvente del destilado naftenico pesado. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$  y produce un aceite final de al menos 19cSt a 40 °C (100 SUS a 100 °F)]
- DA** ekstrakter (råolie), tungt naphthendestillat solvent hydrogenbehandlede. Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået ved behandling af et tungt naphthendestillatsolventekstrakt med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af aromatiske carbonhydrider overvejende  $C_{20}$  til og med  $C_{40}$  og danner en færdig olie på mindst 19cSt ved 40 °C]
- DE** Extrakte (Erdöl), schweres naphthenhaltiges Destillat Lösungsmittel mit Wasserstoff behandelt. Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln eines schweren naphthenhaltigen destillierten Lösungsmittelextrakts mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$  und ergibt ein Fertigöl von wenigstens 19 cSt bei 40 °C]
- EL** εκχυλίσματα (πετρελαιο), βαρύνων νηφθενικού αποσταγματο, με διαλυτή υδρογονοκατεργασμένα. Επεξεργασμένο εκχυλίσμα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με κατεργασία βαρύνων νηφθενικού αποσταγματο, εκχυλίσματος με διαλυτή με υδρογόνο παρουσία καταλύτου. Αποτελείται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$  και παράγει τελικό έλαιο με τουλάχιστον 19cSt στους 40 °C]
- EN** Extracts (petroleum), heavy naphthenic distillate solvent hydrotreated, Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained by treating a heavy naphthenic distillate solvent extract with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$  and produces a finished oil of at least 19cSt at 40 °C (100 SUS at 100 °F)]
- FR** extraits au solvant (pétrole), distillat naphténique lourd, hydrotraités. Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue par traitement à l'hydrogène en présence d'un catalyseur d'un extrait au solvant de distillat naphténique lourd. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$  à  $C_{40}$  et donne une huile produit fini de viscosité supérieure ou égale à 19 cSt à 40 °C]
- IT** estratti (petrolio), solvente distillato naftenico pesante, idrotrattato. Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi prodotta trattando un distillato naftenico pesante di un estratto con solventi con idrogeno in presenza di un catalizzatore. Costituita prevalentemente da idrocarburi aromatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$  a  $C_{40}$  e produce un olio finito di almeno 19cSt a 40 °C]
- NL** extracten (aardolie), zwaar naftenhoudend destillaat - solvent - met waterstof behandeld. Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door de behandeling van een solventextract van zwaar naftenhoudend destillaat met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit aromatische koolwaterstoffen overwegend  $C_{20}$  tot en met  $C_{40}$  vormt een voltooide olie met een viscositeit van ten minste 19 cSt bij 40 °C]
- PT** extractos (petróleo), de solvente de destilados naftenicos pesados tratados com hidrogenio. Extracto aromático de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida pelo tratamento de um extracto de solvente de um destilado naftenico pesado com hidrogenio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos aromaticos com numeros de atomos de carbono predominantemente na gama de  $C_{20}$  ate  $C_{40}$  e produz um oleo acabado com uma viscosidade minima de 19cSt a 40 °C]

*Clasificación, Klasificering, Einstufung, Ταξινόηση, Classification, Classificazione, Classificação, Phélog, Classificação*

Carc. Cat. 2 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
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*Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 90641-08-0

EEC No 292-632-0

No 649-535-00-7

NOTA H

NOTA L

- ES:** extractos (petroleo), disolvente del destilado parafínico pesado, tratado con hidrógeno. Extracto aromático destilado (tratado)  
[Combinación compleja de hidrocarburos producida por tratamiento con hidrógeno en presencia de un catalizador de un extracto del disolvente del destilado parafínico pesado. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{11}$ , y con un intervalo de ebullición aproximado de 350 °C a 480 °C]
- DA:** ekstrakter (råolie) tungt paraffindestillat solvent-, hydrogenbehandlede; hydrogenbehandlede; Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrier fremstillet ved at behandle et tungt paraffindestillat-solventekstrakt med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af carbonhydrier, overvejende  $C_{11}$ , ul og med  $C_{11}$ , med kogeinterval omtrent fra 350 °C til 480 °C]
- DE:** Extrakte (Erdöl), schweres paraffinhaltiges Destillat Lösungsmittel, mit Wasserstoff behandelt. Aromatenextrakt, aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln eines schweren paraffinhaltigen Lösungsmittel-extraktes mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{11}$ , und siedet im Bereich von etwa 350 °C bis 480 °C]
- EL:** εκχυλίσματα (πετρελαιο), βαρέος παραφινικού αποστάγματος εκχυλισμένου με διαλυτή, υδρογονοκατεργασμένα Επεξεργασμένο εκχύλισμα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που παράγεται με κατεργασία εκχυλίσματος με διαλυτή βαρέος παραφινικού αποστάγματος με υδρογόνο παρουσία καταλύτη. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατομών άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{11}$  και βράζει στην περιοχή από 350 °C έως 480 °C περίπου]
- EN:** Extracts (petroleum), heavy paraffinic distillate solvent, hydrotreated. Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons produced by treating a heavy paraffinic distillate solvent extract with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{11}$  and boiling in the range of approximately 350 °C to 480 °C (662 °F to 896 °F)]
- FR:** extraits au solvant (pétrole), distillat paraffinique lourd, hydrotraités. Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue par traitement à l'hydrogène en présence d'un catalyseur d'un extrait au solvant de distillat paraffinique lourd. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{11}$ , et dont le point d'ébullition est compris approximativement entre 350 °C et 480 °C]
- IT:** estratti (petrolio), solvente distillato paraffinico pesante, idrotrattati; Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi prodotta trattando un estratto solvente di distillato paraffinico pesante con idrogeno in presenza di un catalizzatore. Costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{11}$  e con punto di ebollizione nell'intervallo 350 °C-480 °C ca]
- NL:** extracten (aardolie), zwaar paraffinehoudend destillaat solvent-, met waterstof behandeld. Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de behandeling van een solventextract van zwaar paraffinehoudend destillaat met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$ , tot en met  $C_{11}$ , met een kooktraject van ongeveer 350 °C tot 480 °C]
- PT:** extractos (petróleo), de solvente de destilados parafínicos pesados, tratados com hidrogénio. Extracto aromático de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos produzida pelo tratamento de um extracto de solvente de um destilado parafínico pesado com hidrogénio na presença de um catalisador. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$ , até  $C_{11}$ , e destila no intervalo de aproximadamente 350 °C a 480 °C]

*Classification Klassificering Einstufung Ταξινόμηση Classification Classification Classificazione Indeling Classificacão*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte Όρια συγκέντρωσης, Concentration limits, Limites de concentration Limiti di concentrazione Concentratiegrenzen, Limites de concentraçào*


Cas No 90641 00-1

EFC No 292-633-6

No 549 536 00-2

NOIA H

NOIA I

- ES extractos (petroleo), disolvente del destilado parafinico ligero, tratado con hidrogeno Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos producida por tratamiento con hidrogeno en presencia de un catalizador de un extracto del disolvente del destilado parafinico ligero Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{16}$  y con un intervalo de ebullicion aproximado de 280 °C a 400 °C]
- DA ekstrakter (råolie), let paraffindestillat solvent, hydrogenbehandlede, Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider fremstillet ved at behandle et let paraffindestillat solventekstrakt med hydrogen i tilstedeværelse af en katalysator Den består overvejende af carbonhydrider, overvejende  $C_{11}$ , til og med  $C_{16}$ , med koginterval omtrent fra 280 °C til og med 400 °C]
- DE Extrakte (Erdöl), leichtes paraffinhaltiges Destillat Lösungsmittel, mit Wasserstoff behandelt, Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln eines leichten paraffinhaltigen Lösungsmittel-extraktes mit Wasserstoff in Gegenwart eines Katalysators erhält Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoff zahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{16}$  und siedet im Bereich von etwa 280 °C bis 400 °C]
- EL εκχυλίσματα (πετρελαίου), ελαφρού παραφινικού αποσταγμάτος εκχυλίσμενου με υαλύτη, υδρογονοκατεργασμένα Επεξεργασμένο εκχύλισμα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που παραγεται με κατεργασία εκχυλίσματος με διαλυτή βαρέως παραφινικού αποσταγμάτος, με υδρογόνο παρουσία καταλύτη Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων ανθράκα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{16}$  και βράζει στην περιοχή από 280 °C έως 400 °C περίπου]
- EN Extracts (petroleum), light paraffinic distillate solvent, hydrotreated, Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons produced by treating a light paraffinic distillate solvent extract with hydrogen in the presence of a catalyst It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{16}$  and boiling in the range of approximately 280 °C to 400 °C (536 °F to 752 °F)]
- FR extraits au solvant (pétrole), distillat paraffinique léger, hydrotraités, Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue par traitement à l'hydrogene en presence d'un catalyseur d'un extrait au solvant de distillat paraffinique léger Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{11}$  -  $C_{16}$ , et dont le point d'ébullition est compris approximativement entre 280 °C et 400 °C]
- IT estratti (petrolio), solvente distillato paraffinico leggero, idrotrattati, Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi prodotta trattando un estratto solvente di distillato paraffinico leggero con idrogeno in presenza di un catalizzatore Costituita prevalentemente da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{16}$  e con punto di ebollizione nell'intervallo 280 °C-400 °C]
- NL extracten (aardolie), licht paraffinehoudend destillaat solvent-, met waterstof behandeld, Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt gevormd door de behandeling van een solventextract van licht paraffine houdend destillaat met waterstof in de aanwezigheid van een katalysator Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{16}$ , met een kooktraject van ongeveer 280 °C tot 400 °C]
- PT extractos (petroleo), de solvente de destilados parafinicos leves, tratados com hidrogenio, Extracto aromatico de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos produzida pelo tratamento de um extracto de solvente de um destilado parafinico leve com hidrogenio na presença de um catalisador É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{16}$  e destila no intervalo de aproximadamente 280 °C a 400 °C]



*Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificação, Classificazione, Indeling, Classificação*

Carc. Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Ca. 15-17-19-21

E. 15-17-19-21

No. 649-657 (00-8)

NOTA 14

NOTA 1

- ES Extractos (petróleo) solvente destilado parafínico (ligero) (extracción de petróleo aromático destilado tratado)
- [Combination: combinación de hidrocarburos obtenida como el extracto de la extracción con disolvente del destilado de carbón de disolvente, tratada e intermedio que extrae con hidrogeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{24}$ ]
- DA ekstrakter (olie) hydrogenbehandlet let paraffindestillat solvent. Aromatisk ekstrakt af destillat (behandlet)
- [En sammensat blanding af carbonhydrider opnået som ekstrakt fra solventekstrakt af et intermediært paraffintopsolvent destillat, der er behandlet med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af aromatiske carbonhydrider, hvorved  $C_{10}$  og med  $C_{24}$ ]
- DE Extrakte (Erdöl), mit Wasserstoff behandeltes leichtes paraffinhaltiges Destillat-Lösungsmittel, Aromatenextrakt aus Destillat (behandelt)
- [Komplexe Kombination von Kohlenwasserstoffen, die man als Extrakt aus der Lösungsmittel-Extraktion von intermediärem paraffinhaltigen Kopf-Lösungsmittel-Destillat erhält, das mit Wasserstoff in Gegenwart eines Katalysators behandelt wird. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{24}$ ]
- EL εκχυλίσματα (πετρέλαιου) από υδρογονοκλιπρωμένο εύκολο διαλυτικό, αρωματικό εκχύλισμα από εκχύλισμα (αρωματικό)
- [Ποικίλο σύμμιγμα υδρογονωμένων υδρογονανθράκων που παράγονται ως εκχύλισμα από εύκολο διαλυτικό, αρωματικό εκχύλισμα από εκχύλιση με υδρογόνο, παρουσία καταλύτη, ενός μεσογενούς παραφινώδους κορυφαίου διαλυτικού. Το εκχύλισμα αποτελείται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμούς άνθρακα κυρίως στο εύρος  $C_{10}$  έως  $C_{24}$ ]
- EN Extracts (petroleum) hydrogen-treated light paraffinic distillate solvent. Distillate aromatic extract (treated)
- [A complex combination of hydrocarbons obtained as the extract from a light paraffinic distillate solvent. The distillate is treated with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons, the carbon numbers predominantly in the range of  $C_{10}$  through  $C_{24}$ ]
- FR extrait (huile) (pétrole) distillat paraffinique léger traité. Extrait aromatique du distillat (traité)
- [Combinaison complexe d'hydrocarbures obtenue comme extrait d'un distillat paraffinique léger traité avec l'hydrogène en présence d'un catalyseur. Elle est constituée principalement d'hydrocarbures aromatiques, le nombre de carbones se situe en majorité dans la gamme  $C_{10}$  à  $C_{24}$ ]
- IT estratti (petrolio) solvente distillato paraffinico (leggero) (estrattato) (trattato) (aromatizzato)
- [Combinazione complessa di idrocarburi ottenuta come estratto dall'estrazione con solvente paraffinico leggero di un distillato di petrolio aromatico. L'estrazione è condotta con idrogeno in presenza di un catalizzatore. È costituita prevalentemente da idrocarburi aromatici, il numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$  a  $C_{24}$ ]
- NI extracten (ardolie) waterstofbehandeld paraffienhoudend licht destillat (vloeit). Aromatisch extract van destillat (bewerkt)
- [En complexe combinatie van koolwaterstoffen, die men verkrijgt als extract uit een licht paraffienhoudend destillat, dat met waterstof wordt behandeld in aanwezigheid van een katalysator. Het bestaat voornamelijk uit aromatische koolwaterstoffen, waarvan  $C_{10}$  tot met  $C_{24}$  het aantal koolatomen]
- PT extractos (petróleo) solvente destilado parafínico (ligero) (extracción de petróleo aromático destilado tratado)
- [Uma mistura complexa de hidrocarbonetos obtida como o extracto da extracção com solvente parafínico ligeiro do destilado de petróleo aromático tratado. A extracção é efectuada com hidrogénio na presença de um catalisador. É constituída fundamentalmente por hidrocarbonetos aromáticos com um número de átomos de carbono maioritariamente no intervalo  $C_{10}$  a  $C_{24}$ ]

*Classification Klassificering Einstufung Ταξινόμηση Classification Classification, Classificazione Indeling Classificação*

Carc Cat 2, R 45

*Enquetoado Etikettering, Kennzeichnung, Επισήμανση Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No. 1995-75-4

EEC No 295-338-0

No 649-538-00-3

NOTA H


NOTA L

- ES** extractos (petróleo), disolvente del destilado nattenico ligero, hidrodesulfurado ; Extracto aromático destilado (tratado)  
[Combinación compleja de hidrocarburos obtenida por tratamiento del extracto, obtenido de un proceso de extracción con disolvente con hidrogeno en presencia de un catalizador en condiciones adecuadas para separar compuestos de azufre. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{16}$ . Esta corriente es probable que contenga 5 % en peso o mas de hidrocarburos aromaticos con anillos condensados de 4 a 6 miembros.]
- DA** ekstrakter (råolie), let naphthendestillat solvent-, hydroafsvovlede . Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået ved at behandle ekstraktet, opnået fra en solventekstraktionsproces, med hydrogen i tilstedeværelse af en katalysator under betingelser primært til fjernelse af svovlforbindelser. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_{11}$  til og med  $C_{16}$ . Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere, aromatiske carbonhydrider bestående af 4- til 6-leddede kondenserede ringe.]
- E** Extrakte (Erdöl), leichtes naphthenhaltiges Destillat Lösungsmittel, hydrodesulfuriert , Aromatenextrakt aus Destillat (behandelt)  
Komplexe Kombination von Kohlenwasserstoffen, die man durch Behandeln eines Extraktes aus einem Lösungsmittel-extraktions-System mit Wasserstoff in Gegenwart eines Katalysators unter Bedingungen in erster Linie zur Beseitigung von Schwefelverbindungen erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{16}$ . Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen enthalten .
- EL** εκχυλίσματα (πετρελαιοί), ελαφρό ναφθενικό αλόσταγμα εκχυλίσμενο με διαλύτη, υδρογονοαποθειωμένο· Επεξεργασμένο εκχύλισμα  
[Πολύπλοκη συνδυασμός υδρογονανθράκων που λαμβάνεται από κατεργασία εκχυλίσματος που λαμβάνεται από εκχύλιση με διαλύτη, με υδρογόνο παρουσία καταλύτη και σε συνθήκες πρωτίστως τέτοιες ώστε να απομακρυνθούν ενώσεις θείου. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{16}$ . Το ρεύμα αυτό πιθανόν να περιέχει 5 % κατά βάρος, ή περισσότερο αρωματικούς υδρογονανθράκες με τετραμέλεις έως εξαμέλεις συμπυκνωμένες δακτυλίους.]
- EN** extracts (petroleum), light naphthenic distillate solvent, hydrodesulfurized ; Distillate aromatic extract (treated)  
A complex combination of hydrocarbons obtained by treating the extract, obtained from a solvent extraction process, with hydrogen in the presence of a catalyst under conditions primarily to remove sulfur compounds. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{16}$ . This stream is likely to contain 5 wt % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.]
- FR** extraits au solvant (pétrole), distillat naphénique léger, hydrodésulfurés ; Extrait aromatique de distillat (traité)  
Combinaison complexe d'hydrocarbures obtenue par traitement de l'extrait résultant d'une extraction au solvant avec de l'hydrogène en présence d'un catalyseur, dans des conditions destinées en premier lieu à l'élimination des composés soufrés. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{16}$ . Tout contient 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant 4 à 6 cycles.]
- IT** estratti (petrolio), solvente di distillato naftenico leggero, idrodesolforato , Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta dal trattamento dell'estratto, ottenuto da un processo di estrazione con solvente, con idrogeno in presenza di un catalizzatore in condizioni atte prevalentemente a rimuovere i composti solforati. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{16}$ . Questa corrente contiene probabilmente più del 5 % in peso di idrocarburi aromatici condensati da 4 a 6 elementi.]
- NL** extracten (aardolie), naphteenhoudend licht destillaat solvent-, waterstofontzwaveld , Aromatisch extract van destillaat (verwerkt)  
[Een complexe combinatie van koolwaterstoffen die wordt verkregen door behandeling van het ruw met een solventextractieproces verkregen destillaat met waterstof in de aanwezigheid van een katalysator onder omstandigheden die primair gericht zijn op de verwijdering van zwavelverbindingen. Het bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend uit tot en met  $C_{16}$ . Deze stroom kan 5 gewichtprocent of meer aromatische koolwaterstoffen met 4- tot 6-voudig recondenserde ringen bevatten.]
- PT** extractos (petróleo), disolvente de destilado nattenico ligero, hidrogenodessulfurados , Extracto aromático de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida por tratamento de um extracto, obtido por um processo de extracção com solvente com hidrogeno na presença de um catalisador para remover principalmente compostos de enxofre. É constituída predominantemente por hidrocarbonetos aromaticos com numero de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{16}$ . Esta corrente provavelmente contém 5 % em peso ou mais de hidrocarbonetos aromaticos policíclicos com 4 a 6 membros.]

*Classification Klassifizierung Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçao*


Cas No 91995 76 5

EEC No 295 339 6

No 649 539 00 9

NOTA H


NOTA I

- ES** extractos (petroleo), disolvente del destilado parafinico ligero, tratado con acido. Extracto aromático destilado (tratado)  
[Combinación compleja de hidrocarburos obtenida como una fracción de la destilación de un extracto de la extracción con disolvente de destilado de cabeza parafinico ligero de petroleo que se somete a un refinado con acido sulfúrico. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{14}$ ]
- DA** ekstrakter (råolie), let paraffindestillat solvent, syrebehandlede. Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået som en fraktion fra destillationen af et ekstrakt a solventekstraktionen af lette paraffintopfraktion råoliedestillater, der er underkastet en svovlsyreforfining. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_{10}$  til og med  $C_{14}$ ]
- DE** Extrakte (Erdöl), leichtes paraffinhaltiges Destillat Lösungsmittel. Säure behandelt. Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, die man als Fraktion der Destillation eines Extraktes aus der Lösungsmittelextraktion von leichten paraffinhaltigen Kopf-Erdöldestillaten erhält, die einer schwefelsauren Aufbereitung ausgesetzt werden. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{14}$ ]
- EL** εκχυλίσματα (πετρέλαιου), ελαφρο παραφινικό απόσταγμα εκχυλίσμενο με διαλυτή. Κατεργασμένο με οξύ. Έπεξεργασμένο εκχύλισμα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν κλάσμα της απόσταξης εκχυλίσματος από την εκχύλιση με διαλυτή ελαφρών παραφινικών αποσταγμάτων πετρελαιοι κορυφής, που υποβάλλεται σε εξοξείνωση με θειικό οξύ. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων ανθράκα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{14}$ ]
- EN** Extracts (petroleum), light paraffinic distillate solvent, acid treated. Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained as a fraction of the distillation of an extract from the solvent extraction of light paraffinic top petroleum distillates that is subjected to a sulfuric acid refining. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{14}$ ]
- FR** extraits au solvant (pétrole), distillat paraffinique léger, traités à l'acide. Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue comme fraction de la distillation de l'extrait résultant d'une extraction au solvant de distillats paraffiniques légers pétroliers et ayant subi un raffinage à l'acide sulfurique. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$  à  $C_{14}$ ]
- IT** estratti (petrolio), solvente distillato paraffinico leggero, trattati con acido. Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta come frazione della distillazione di un estratto dall'estrazione con solvente di distillati paraffinici leggeri di petrolio di testa e che viene sottoposta a raffinazione con acido solforico. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$  a  $C_{14}$ ]
- NL** extracten (aardolie), paraffinehoudend licht destillaat solvent, zuurbehandeld. Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een fractie uit de destillatie van een extract uit de solventextractie van lichte paraffinehoudende topdestillaten uit aardolie dat is onderworpen aan een zuivering met zwavelzuur. Bestaat voornamelijk uit aromatische koolwaterstoffen overwegend  $C_{10}$  tot en met  $C_{14}$ ]
- PT** extractos (petroleo), de solvente de destilados parafinicos leves, tratados com acido. Extracto aromático de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida como a fracção da destilação de um extracto da extracção com solvente de destilados parafinicos leves que é submetida a um processo de refinação com ácido sulfúrico. É constituída predominantemente por hidrocarbonetos aromaticos com o numero de átomos de carbono predominantemente na gama de  $C_{10}$  até  $C_{14}$ ]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificaçào*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S' : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


C 15 N 10 1 198 776

EEC No 295-340-1

no 649-540-00-4

NOTA H

NOTA L

- ES Extractos (petróleo), disolvente del destilado parafínico ligero, hidrodesulfurado ; Extracto aromático destilado (tratado)  
[Combinación compleja de hidrocarburos obtenida por extracción con disolventes de un destilado parafínico ligero y tratado con hidrógeno para transformar el azufre orgánico en sulfuro de hidrógeno que se elimina. Compuesta fundamentalmente de hidrocarburos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{40}$ , y produce un aceite final con una viscosidad superior a 10cSt a 40 °C.]
- DA ekstrakter (råolie), let paraffindestillat solvent-, hydroafsvovlede ; Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået ved solventekstraktion af et let paraffindestillat og behandlet med hydrogen for at omjægne organisk svovl til hydrogensulfid, der fjernes. Den består overvejende af carbonhydrider, overvejende  $C_{11}$  til og med  $C_{40}$ , og danner en færdig olie med viskositet på mere end 10cSt ved 40 °C.]
- DE Extrakte (Erdöl), leichtes paraffinhaltiges Destillat Lösungsmittel, hydrodesulfuriert ; Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten durch Lösungsmittlextraktion eines leichten paraffinhaltigen Destillates und Behandeln mit Wasserstoff zur Konvertierung von organischem Schwefel in Schwefelwasserstoff, der eliminiert wird. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{40}$  und ergibt ein fertiges Öl mit einer Viskosität größer als 10 cSt bei 40 °C.]
- EL εκχυλίσματα (πετρέλαιου), ελαφρό παραφινικό απόσταγμα εκχυλισμένο με διαλύτη, υδρογονοαποθειωμένο· Επεξεργασμένο εκχυλίσμα  
[Πολύπλοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με εκχύλιση με διαλύτη ελαφρού παραφινικού αποσταγμάτος και κατεργάζεται με υδρογόνο για να μετατραπεί το οργανικό θείο σε υδρόθειο που απομακρύνεται. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες μεγαλύτερο από 10cSt στους 40 °C.]
- EN Extracts (petroleum), light paraffinic distillate solvent, hydrodesulfurized ; Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained by solvent extraction of a light paraffin distillate and treated with hydrogen to convert the organic sulfur to hydrogen sulfide which is eliminated. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{40}$  and produces a finished oil with a viscosity of greater than 10cSt at 40 °C.]
- FR extraits au solvant (pétrole), distillat paraffinique léger, hydrodésulfurés ; Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant d'un distillat paraffinique léger et traitée à l'hydrogène afin de convertir le soufre organique en hydrogène sulfure, qui est ensuite éliminé. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{40}$ , et donne une huile-produit fini de viscosité supérieure à 10cSt à 40 °C.]
- IT estratti (petrolio), solvente distillato paraffinico leggero, idrodesolforati ; Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta mediante estrazione con solvente di un distillato paraffinico leggero e trattato con idrogeno per trasformare lo zolfo organico in idrogeno solforato che viene eliminato. È costituita da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{40}$  e produce un olio finito con viscosità maggiore di 10cSt a 40 °C.]
- NL extracten (aardolie), paraffinehoudend licht destillaat solvent-, waterstofontzwaveld ; Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door solventextractie van een paraffinehoudend licht destillaat en wordt behandeld met waterstof om organische zwavel om te zetten in waterstofsulfide dat wordt verwijderd. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{40}$  en vormt een voltooide olie met een viscositeit van ongeveer 10cSt bij 40 °C.]
- PT extractos (petróleo), de solvente de destilados parafínicos leves, hidrogenodessulfurizados .  
[Uma combinação complexa de hidrocarbonetos obtida por extração com solvente de um destilado parafínico leve e tratada com hidrogenio para converter o enxofre orgânico em sulfureto de hidrogenio que é eliminado. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbonos predominantemente na gama de  $C_{11}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade superior a 10cSt a 40 °C.]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraçào*


Cas No 91495-79-8

EFC No 295-342-2

No 649-541-00-X

NOTA H

NOTA L

- ES Extractos (petróleo) disolvente de gasóleo ligero obtenido a vacío tratado con hidrogeno. Extracto aromático destilado (tratado).  
[Combinación compleja de hidrocarburos obtenida por extracción con disolvente de gasoleos ligeros de petróleo obtenidos a vacío y tratados con hidrogeno en presencia de un catalizador. Compuesta fundamentalmente de hidrocarburos aromáticos con un número de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{14}$ ]
- DA ekstrakter (trøle) let vakuumgasolie solvent hydrogenbehandlede. Aromatisk ekstrakt af destillat (behandlet).  
[En sammensat blanding af carbonhydrider opnået ved solventekstraktion af let vakuumråoliegasolier og behandlet med hydrogen i tilstedeværelse af en katalysator. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_{11}$  til og med  $C_{14}$ ]
- DE Extrakte (Erdöl), leichtes Vakuum Gasöl Lösungsmittel, mit Wasserstoff behandelt. Aromatenextrakt aus Destillat (behandelt).  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittel-extraktion aus leichten Vakuum-Erdöl Gasölen und Behandeln mit Wasserstoff in Gegenwart eines Katalysators erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{14}$ ]
- EL εκχυλίσματα (πετρέλαιο) ελαφρού ακαθάρτου πετρελαίου κενού εκχυλίσμενου με διάλυτη, κατεργασμένου με υδρογόνο. Επεξεργασμένο εκχύλισμα.  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με εκχύλιση με διάλυτη από ελαφρά ακαθάρτα πετρέλαια κενού και υφίσταται κατεργασία με υδρογόνο παρουσία καταλυτή. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{14}$ ]
- EN Extracts (petroleum) light vacuum gas oil solvent, hydrotreated. Distillate aromatic extract (treated).  
[A complex combination of hydrocarbons obtained by solvent extraction from light vacuum petroleum gas oils and treated with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{14}$ ]
- FR extraits au solvant (pétrole) gazole léger sous vide hydrotraités. Extrait aromatique de distillat (traité).  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant de gazoles pétroliers légers sous vide et traitée à l'hydrogène en présence d'un catalyseur. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$  à  $C_{14}$ ]
- IT estratti (petrolio), solvente gasolio leggero sotto vuoto idrotrattati. Estratto aromatico distillato (trattato).  
[Combinazione complessa di idrocarburi ottenuta per estrazione con solvente da un gasolio di petrolio leggero sotto vuoto e trattata con idrogeno in presenza di un catalizzatore. È costituita da idrocarburi con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  -  $C_{14}$ ]
- NL extracten (vardoel) lichte vacuumgasoliesolvent waterstofbehandeld. Aromatisch extract van destillaat (bewerkt).  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door solventextractie uit lichte vacuumgasolien uit vacuumgasolien uit aardolie en behandeld met waterstof in de aanwezigheid van een katalysator. Bestaat voornamelijk uit aromatische koolwaterstoffen overwegend  $C_{11}$  tot en met  $C_{14}$ ]
- PT extractos (petróleo) disolvente de gasóleo leve de vacío tratado com hidrogeno. Extracto aromático de destilado (tratado).  
[Uma combinação complexa de hidrocarboretos obtida por extração com o solvente de gasoleos leves de vacío e tratada com hidrogeno na presença de um catalizador. É constituída predominantemente por hidrocarboretos aromáticos com um erro de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{14}$ ]

*Classification Klasificering Einstufung Ταξινόμηση Classification Classificatie Classificazione Indeling Classificação*

Carc Cat 2 R 45

*Etiquetado Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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*Limites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraç3o*


Cas No 92704 08 0

EEC No 296-437 1

No 649-542-00-5

NOTA H


NOTA L

- ES extractos (petroleo), disolvente del destilado parafinico pesado, tratado con arcilla , Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos que resulta del tratamiento de una fraccion de petroleo con arcilla natural o modificada en un proceso por contacto o percolacion para separar las trazas presentes de compuestos polares e impurezas. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{20}$  a  $C_{40}$ . Esta corriente es probable que contenga un 5 % en peso o mas de hidrocarburos aromaticos con anillos de 4-6 miembros]
- DA ekstrakter (råolie), tungt paraffindistillat solvent , lerbehandlede , Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydinder opnået fra behandling af en råoliefraktion med naturligt eller modificeret ler i enten en kontakt- eller perkolationsproces for at fjerne spurmængderne af polære forbindelser eller tilstedeværende urenheder. Den består overvejende af aromatiske carbonhydinder, overvejende  $C_{20}$  til og med  $C_{40}$ . Denne strøm indeholder sandsynligvis 5 vægtprocent, eller mere aromatiske carbonhydinder bestående af 4- til 6-leddede kondenserede ringe]
- DE Extrakte (Erdöl), schwere paraffinhaltige Destillat Lösungsmittel, Ton-behandelt , Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen die man durch Behandeln einer Erdöl Fraktion mit natürlichem oder modifiziertem Ton entweder in einem Kontakt- oder Perkolationsverfahren zur Beseitigung von Spuren polarer Verbindungen und von Verunreinigungen erhält. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{20}$  bis  $C_{40}$ . Dieser Lauf kann 5 Gewichtsprozent oder mehr aromatische Kohlenwasserstoffe mit 4- bis 6-gliedrigen kondensierten Ringen enthalten]
- EL εκχυλίσματα (πετρελαίου), βαρύ παραφινικό αποσταγμά εκχυλισμένο με διαλυτή, κατεργασμένο με αργίλλο. Επεξεργασμένο εκχυλίσμα  
[Πολυπλοκή συνδυασμός υδρογονανθράκων που προκύπτει από κατεργασία κλάσματος πετρελαίου με φυσική ή τροποποιημένη αργίλλο είτε με διεργασία επαφής είτε διήθησης, για να απομακρυνθούν ιχνοποσοτητές πολικών ενώσεων και υπάρχουσες προσμίξεις. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{20}$  έως και  $C_{40}$ . Αυτό το ρεύμα μπορεί να περιέχει 5 % κατά βάρος ή περισσότερο αρωματικούς υδρογονανθράκες με τετραμελείς έως εξαμελείς δακτυλίους]
- EN Extracts (petroleum), heavy paraffinic distillate solvent, clay-treated , Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a contact or percolation process to remove the trace amounts of polar compounds and impurities present. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through  $C_{40}$ . This stream is likely to contain 5 wt % or more 4-6 membered ring aromatic hydrocarbons]
- FR extraits au solvant (pétrole), distillat paraffinique lourd, traités à la terre , Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures résultant du traitement d'une fraction pétrolière avec de l'argile naturelle ou modifiée, par contact ou percolation, destinée à éliminer les traces de composés polaires et les impuretés. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{20}$  -  $C_{40}$ . Peut contenir 5 % ou plus, en poids, d'hydrocarbures aromatiques à noyaux condensés comportant de 4 à 6 cycles]
- IT estratti (petrolio), distillato solvente paraffinico pesante, trattati con argilla. Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi risultante dal trattamento di una frazione di petrolio con argilla naturale o modificata in un processo sia di contatto che di percolazione per eliminare le quantità in traccia di composti polari ed impurezze presenti. È costituita prevalentemente da idrocarburi aromatici con un numero di atomi di carbonio prevalentemente nell'intervallo  $C_{20}$  -  $C_{40}$ . Questa corrente contiene probabilmente il 5 % o più di idrocarburi aromatici con un numero di anelli da 4 a 6]
- NL ekstrakter (aardolie), zwaar paraffinehoudend destillat solvent met klei behandeld , Aromatisch extract van destillat (bewerkt)  
[Een combinatie van verschillende oplosmiddelen die wordt verkregen uit de behandeling van een aardoliefractie met een natuurlijke of gemodificeerde klei in een contact- of een filtratie proces waarbij sporen van polaire verbindingen en aanwezige onzuiverheden worden verwijderd. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_{20}$  tot en met  $C_{40}$ . Deze stroom bevat waarschijnlijk 5 of meer gewichtsprocenten aromatische koolwaterstoffen met 4- tot 6-voudig gecondenseerde ringen]
- PT extractos (petróleo), de solvente de destilados parafínicos pesados, tratados com argila , Extracto aromático de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos resultante do tratamento de uma fracção petrolífera com argila natural ou modificada quer por um processo de percolação para remoção de vestígios de compostos polares e impurezas presentes. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono predominantemente na gama  $C_{20}$  até  $C_{40}$ . Este produto geralmente contém 5 % em peso ou mais de hidrocarbonetos aromáticos com 4 a 6

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc Cat. 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 93763-10-1

EEC No 297-827-4

No 649-543-00-0

NOTA H

NOTA L

- ES** extractos (petroleo), disolvente del destilado naftenico pesado hidrodesulfurado, Extracto aromatico destilado (tratado)  
[Combinación compleja de hidrocarburos obtenida de una reserva de petroleo por tratamiento con hidrogeno para transformar el azufre organico en sulfuro de hidrogeno que se separa. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{30}$  y produce un aceite final con una viscosidad superior a 19cSt a 40 °C]
- DA** ekstrakter (råolie), tungt naphthendestillat solvent-, hydroafsvovlede, Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydinder opnået fra et råolieråstof ved behandling med hydrogen for at omdanne organisk svovl til hydrogensulfid, der fjernes. Den består overvejende af carbonhydinder, overvejende  $C_{11}$  til og med  $C_{30}$ , og danner en færdig olie med en viskositet større end 19cSt ved 40 °C]
- DE** Extrakte (Erdöl), schwere naphthenhaltige Destillat Lösungsmittel, hydrodesulfuriert, Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus einem Erdölausgangsstoff durch Behandeln mit Wasserstoff zur Konvertierung von organischem Schwefel in Schwefelwasserstoff, der entfernt wird, erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{30}$  und ergibt ein Fertigöl mit einer Viskosität größer als 19 cSt bei 40 °C]
- EL** εκχυλίσματα (πετρελαίου), βαρεος ναφθενικού αποστάγματος εκχυλίσμενου με διαλύτη, υδρογονοαποθειωμένα· Επεξεργασμένο εκχύλισμα  
[Πολύπλοκος συνδυασμός υδρογονάνθρακων που λαμβάνεται από πρώτη ύλη πετρελαίου με κατεργασία με υδρογόνο για να μετατραπεί το οργανικό θείο σε υδρόθειο το οποίο απομακρύνεται. Συνίσταται κυρίως από υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$ , έως και  $C_{30}$  και παραγει τελικό έλαιο με ιξώδες μεγαλύτερο από 19cSt σε 40 °C]
- EN** Extracts (petroleum), heavy naphthenic distillate solvent, hydrodesulfurized, Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{30}$  and produces a finished oil with a viscosity of greater than 19cSt at 40 °C]
- FR** extraits au solvant hydrodésulfures (pétrole), distillat naphénique lourd, Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue par traitement d'une charge pétrolière à l'hydrogène afin de convertir le soufre organique en hydrogène sulfure, qui est ensuite éliminé. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$ - $C_{30}$  et donne une huile-produit fini de viscosité supérieure à 19 cSt à 40 °C]
- IT** estratti (petrolio), solvente distillato naftenico pesante, idrodesolforato, Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta da uno stock di petrolio per trattamento con idrogeno per trasformare lo zolfo organico in idrogeno solforato che viene eliminato. È costituita prevalentemente da idrocarburi con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$ - $C_{30}$  e produce un olio finito con viscosità superiore a 19cSt a 40 °C]
- NL** extracten (aardolie), zwaar naftenhoudend destillaat solvent-, waterstofontzwaamd, Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een aardoliegrondstof door behandeling met waterstof om organische zwavel om te zetten in waterstofsulfide dat wordt verwijderd. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{30}$  en vormt een voltooide olie met een viscositeit groter dan 19 cSt bij 40 °C]
- PT** extractos (petroleo), de solvente de destilados nafténicos pesados, hidrogenodessulfurizados, Extracto aromático de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida de uma fracção petrolífera por tratamento com hidrogenio para conversão de enxofre orgânico em sulfureto de hidrogenio que é removido. É constituída predominantemente por hidrocarbonetos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$ , ate  $C_{30}$  e produz um óleo acabado com uma viscosidade superior a 19cSt a 40 °C]

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 93763-11-2

EEC No 297-829-5

No 649-544-00-6

NOTA H

NOTA L


- ES** extractos (petroleo), disolvente del destilado parafinico pesado desparafinado con disolventes, hidrodesulfurado, Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos obtenida de una reserva de petroleo desparafinado con disolvente por tratamiento con hidrogeno para transformar el azufre organico en sulfuro de hidrogeno que se separa. Compuesta fundamentalmente de hidrocarburos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{40}$  y produce un aceite final con una viscosidad superior a 19cSt a 40 °C]
- DA** ekstrakter (råolie), solventarvoksende tunge paraffindestillat solvent-, hydroafsvovlede, Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blandning af carbonhydrier opnået fra et solventafvokset råolieråstof ved behandling med hydrogen for at omdanne organisk svovl til hydrogensulfid, der jernes. Den består overvejende af carbonhydrier, overvejende  $C_{11}$  til og med  $C_{40}$ , og danner en færdig olie med en viskositet større en 19cSt ved 40 °C]
- DE** Extrakte (Erdöl), durch Lösungsmittel entwachste schwere paraffinhaltige Destillat Lösungsmittel, hydrodesulfuriert, Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, die man aus einem durch Lösungsmittel entwachsenen Erdölausgangsstoff durch Behandeln mit Wasserstoff zur Konvertierung von organischem Schwefel in Schwefelwasserstoff, der entfernt wird, erhält. Besteht vorherrschend aus Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{40}$  und ergibt ein Fertigöl mit einer Viskosität größer als 19 cSt bei 40 °C]
- EL** εκχυλίσματα (πετρελαίου), από αποκηρωμένο με διαλύτη βαρύ παραφινικό κλάσμα καθαρισμένο με διαλύτη, υδρογονοαποδειωμένο· Επεξεργασμένο εκχύλισμα  
[Πολυάτοκος συνδυασμός υδρογονανθράκων που λαμβάνεται με πετρελαιοκή πρωτή ύλη αποκηρωμένη με διαλύτη από κατεργασία με υδρογόνο για να μετατραπεί το οργανικό θείο σε υδρόθειο που απομακρύνεται. Συνίσταται κυρίως από υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{40}$  και παράγει τελικό έλαιο με ιξώδες μεγαλύτερο από 19cSt στους 40 °C]
- EN** Extracts (petroleum), solvent-dewaxed heavy paraffinic distillate solvent, hydrodesulfurized; Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained from a solvent dewaxed petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{40}$  and produces a finished oil with a viscosity of greater than 19cSt at 40 °C.]
- FR** extraits au solvant hydrodesulfures (petrole), distillat paraffinique lourd déparaffiné au solvant, Extrait aromatique de distillat (traite)  
[Combinaison complexe d'hydrocarbures obtenue par traitement à l'hydrogene d'une charge pétrolière déparaffinée au solvant, afin de convertir le soufre organique en hydrogene sulfure, qui est ensuite elimine. Se compose principalement d'hydrocarbures dont le nombre de carbones se situe en majorite dans la gamme  $C_{11}$  -  $C_{40}$ , et donne une huile-produit fini de viscosite supérieure à 19cSt à 40 °C]
- IT** estratti (petrolio), solvente distillato paraffinico pesante decerato con solvente, idrodesolforato, Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta da uno stock di petrolio decerato con solvente per trattamento con idrogeno per trasformare lo zolfo organico in idrogeno solforato che viene eliminato. È costituita prevalentemente da idrocarburi con numeri di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  -  $C_{40}$  e produce un olio finito con viscosità superiore a 19cSt a 40 °C.]
- NL** extracten (aardolie), met solvent van was ontdane zwaar paraffinehoudend destillaat solvent-, waterstofontzwaveld; Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen uit een met solvent van was ontdane aardoliegrondstof door behandeling met waterstof om organische zwavel om te zetten in waterstofsulfide dat wordt verwijderd. Bestaat voornamelijk uit koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{40}$  en vormt een voltooide olie met een viscositeit groter dan 19cSt bij 40 °C.]
- PT** extractos (petróleo), de solvente de destilados parafínicos pesados desparafinados com solvente, hidrogenodessulfurizados; Extracto aromático de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida de uma fracção petrolífera desparafinada com solvente por tratamento com hidrogénio para conversão de enxofre orgânico em sulfureto de hidrogenio que é removido. É constituída predominantemente por hidrocarbonetos com números de átomos de carbono predominantemente na gama de  $C_{11}$  até  $C_{40}$  e produz um óleo acabado com uma viscosidade superior a 19cSt a 40 °C]



*Classification Klassificeren Ein teilung Ταξινόγηση Classification Classification Classificazione Indeling, Classificação*

Carc. Cat. 2 R 45

*Enquetado Etikettering Kennzeichnung Επισήμανση Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Limites de concentration, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκεντρώσεως, Concentration limits, Limites de concentration, Limiti di concentrazione Concentratiegrenzen, Limites de concentração*


Cas No 100684 02 4

EEC No 309-672 2

No 649-545 00 1

NOTA H


NOTA I

- FS extractos (petroleo) destilado parafinico ligero extraido con disolvente, tratado con carbon , Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos obtenida como una traccion de la destilacion de un extracto recuperado por extraccion con disolvente del destilado de cabeza parafinico ligero de petroleo tratado con carbon vegetal activado para separar constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{12}$ ]
- DA ekstrakter (råolie), let paraffindestillat solvent , carbonbehandiede Aromatisk ekstrakt af destillat (behandlet)  
[En sammensæt blanding af carbonhydrier opnået som en fraktion fra destillation af et ekstrakt, genvundet ved solventekstraktion af let paraffin topaoliedestillat behandlet med aktivt kul for at fjerne spor af polære bestanddele og urenheder. Den består overvejende af aromatiske carbonhydrier overvejende  $C_{10}$  til og med  $C_{12}$ ]
- DE Extrakte (Erdöl), leichte paraffinhaltige Destillat Lösungsmittel mit Kohlenstoff behandelt , Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen die man als eine Fraktion aus der Destillation eines Extraktes erhält, den man durch Lösungsmittelextraktion von leichtem paraffinhaltigen Kopf Erdöldestillat wiedergewinnt, mit Aktivkohle behandelt um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorwiegend im Bereich von  $C_{10}$  bis  $C_{12}$ ]
- EL εκχυλίσματα (πετρελαιο) από ελαφρό παραφινικό αποστάγμα εκχυλισμένο με διαλυτή, κατεργασμένο με άνθρακα. Επεξεργασμένο εκχύλισμα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν κλάσμα από απόσταξη εκχυλίσματος που ανακτάται από εκχύλιση με διαλυτή ελαφρού παραφινικού αποστάγματος κορυφής πετρελαιο κατεργασμένου με ενεργό άνθρακα για να απομακρυνθούν ίχνη πολικών συστατικών και προσμίξεις. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{12}$ ]
- EN Extracts (petroleum), light paraffinic distillate solvent carbon-treated Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained as a fraction from distillation of an extract recovered by solvent extraction of light paraffinic top petroleum distillate treated with activated charcoal to remove traces of polar constituents and impurities. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{12}$ ]
- FR extraits au solvant de distillat paraffinique léger (petrole), traites au charbon Extrait aromatique de distillat (traite)  
[Combinaison complexe d'hydrocarbures obtenue comme fraction dans la distillation d'un extrait recupere par extraction au solvant de distillat de tete paraffinique léger et traite au charbon actif afin d'éliminer les traces de constituants polaires et les impuretes. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorite dans la gamme  $C_{10}$  a  $C_{12}$ ]
- IT estratti (petrolio), distillato paraffinico leggero solvente, trattato con carbone , Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta come frazione della distillazione di un estratto recuperato per estrazione con solvente di distillato di testa paraffinico leggero di petrolio trattato con carbone attivo per eliminare costituenti polari in tracce ed impurezze. E' costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$  -  $C_{12}$ ]
- NI extracten (aardolie) licht paraffinehoudend destillaat solvent met koolstof behandeld , Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een fractie uit de destillatie van een extract dat is herwonnen door solventextractie van het lichte paraffinehoudende bij aflopen verkregen aardoliedestillaat, behandeld met geactiveerde kool teneinde sporen van polaire bestanddelen en onzuiverheden te verwijderen. Bevat voornamelijk aromatische koolwaterstoffen overwegend  $C_{10}$  tot en met  $C_{12}$ ]
- PT extractos (petroleo) de solvente de destilados parafinicos leves, tratados com carvão activado , Extracto aromatico de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida como uma fracção de destilação de um extracto recuperado por extracção com solvente de um destilado parafínico leve tratado com carvão activado para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos aromaticos com numeros de atomos de carbono predominante mente na gama de  $C_{10}$  ate  $C_{12}$ ]

*Classificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatião, Classificazione, Indeling, Classificação*

Carc. Cat. 2 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 100684 03 5

EFC No 309 673 8

No 649 546-00 7

NOTA H


NOTA L

- ES extractos (petroleo), destilado parafinico ligero extraido con disolvente, tratado con arcilla, Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos obtenida como una fraccion de destilacion de un extracto recuperado por extraccion con disolvente de destilados de cabeza parafinicos ligeros de petroleo tratado con tierra para blanquear para separar constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{12}$ ]
- DA ekstrakter (råolie), let paraffindestillat solvent, lerbehandlede, Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået en fraktion fra destillation af et ekstrakt genvundet ved solventekstraktion af let paraffin topråoliedestillat, behandlet med blegejord for at fjerne spor af polære bestanddele og urenheder. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_{10}$  til og med  $C_{12}$ ]
- DE Extrakte (Erdöl), leichte paraffinhaltige Destillat Lösungsmittel, mit Ton behandelt, Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen die man als eine Fraktion aus der Destillation eines Extraktes erhält den man durch Lösungsmittelextraktion von leichten paraffinhaltigen Kopf Erdöldestillaten wiedergewinnt, mit Bleicherde behandelt, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{12}$ ]
- EL εκχυλίσματα (πετρελαιο), από ελαφρύ παραφινικό αποστάγμα εκχυλισμένο με διαλύτη, κατεργασμένο με αργίλιο επεξεργασμένο εκχυλίσμα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν κλάσμα από αποστάξη εκχυλίσματος που ανακτάται από εκχύλιση με διαλύτη ελαφρών παραφινικών αποσταγμάτων κορυφής πετρελαιο κατεργασμένου με αποχρωστική γη για να απομακρυνθούν ίχνη πολικών συστατικών και προσμείξεις. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{12}$ ]
- EN Extracts (petroleum), light paraffinic distillate solvent, clay treated, Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained as a fraction from distillation of an extract recovered by solvent extraction of light paraffinic top petroleum distillates treated with bleaching earth to remove traces of polar constituents and impurities. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{12}$ ]
- FR extraits au solvant de distillat paraffinique léger (pétrole), traités à la terre, Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue comme fraction dans la distillation d'un extrait récupéré par extraction au solvant de distillats de tête paraffiniques légers et traité à la terre decolorante afin d'éliminer les traces de constituants polaires et les impuretés. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{10}$  à  $C_{12}$ ]
- IT estratti (petrolio), solvente distillato paraffinico leggero, trattato con argilla, Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta come frazione della distillazione di un estratto recuperato per estrazione con solvente di distillato di testa paraffinico leggero di petrolio trattato con terra sbiancante per eliminare costituenti polari in tracce ed impurezze. E costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$  a  $C_{12}$ ]
- NL extracten (aardolie), lichte paraffinehoudend destillaat-solvent, met klei behandeld, Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als een fractie uit de destillatie van een extract teruggewonnen door solventextractie van lichte paraffinehoudende afgetopte aardoliedestillaten, behandeld met bleekarde teneinde sporen van polaire bestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit aromatische koolwaterstoffen overwegend  $C_{10}$  tot en met  $C_{12}$ ]
- PT extractos (petróleo), de solvente de destilados parafínicos leves, tratados com argila, Extracto aromático de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida como um a fracção da destilação de um extracto recuperado por extracção com solvente de destilados parafínicos leves tratados com argila descorante para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos aromáticos com números de átomos de carbono na gama  $C_{10}$  ate  $C_{12}$ ]

*Clasificación, Klasificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 2 ; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

T	
	R : 45
	S : 53-45

*Límites de concentración, Konzentrationsgrensen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limit, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 100684-04 6

EEC No 309 674-3

No 649-547-00-2

NOTA H


NOTA L

- ES extractos (petroleo), fraccion ligera obtenida a vacio, gasoleo extraido con disolvente, tratado con carbon , Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos obtenida por extraccion con disolvente de gasoleo ligero de petroleo obtenido a vacio tratado con carbon vegetal activado para separar constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{16}$ ]
- DA ekstrakter (råolie) let vakuum, gasoliesolvent, carbonbehandlede , Aromatiske ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået ved solventekstraktion af let vakuumråoliegasolie behandlet med aktivt kul, for at fjerne spor af polære bestanddele og urenheder. Den består overvejende af aromatiske carbonhydrider, overvejende  $C_{11}$  til  $C_{16}$ ]
- DE Extrakte (Erdöl), leichte Vakuum, Gasöl Lösungsmittel, mit Kohlenstoff behandelt , Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen, die man durch Lösungsmittelextraktion von leichtem Vakuumerdölgas erhält, mit Aktivkohle behandelt, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{16}$ ]
- EL εκχυλίσματα (πετρελαιο) από ελαφρύ κενό, ακαθάρτου πετρελαιο εκχυλίσμενου με διαλυτή, κατεργασμένα με άνθρακα. Επεξεργασμένο εκχύλισμα  
[Πολυπλοκός συνδυασμός υδρογονάνθρακων που λαμβάνεται με εκχύλιση με διαλυτή ελαφρού ακαθάρτου πετρελαιο κενού με ενεργό άνθρακα για να απομακρυνθούν ίχνη πολικών ενώσεων και προσμίξεις. Συνίσταται κυρίως από αρωματικούς υδρογονάνθρακες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως και  $C_{16}$ ]
- EN Extracts (petroleum) light vacuum, gas oil solvent, carbon treated. Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained by solvent extraction of light vacuum petroleum gas oil treated with activated charcoal for the removal of trace polar constituents and impurities. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{16}$ ]
- FR extraits au solvant de gazole léger sous vide (petrole), traités au charbon , Extrait aromatique de distillat (traité)  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant de gazole léger sous vide et traitement au charbon actif afin d'éliminer les traces de constituants polaires et les impuretés. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$  à  $C_{16}$ ]
- IT estratti (petrolio), leggeri sotto vuoto, gasolio solvente trattati con carbone , Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta per estrazione con solvente di gasolio leggero di petrolio sotto vuoto trattato con carbone attivo per eliminare costituenti polari in tracce ed impurezze. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  a  $C_{16}$ ]
- NL extracten (aardolie) lichte vacuum , gasoliesolvent-, behandeld met koolstof , Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door solventextractie van lichte vacuumgasolie uit aardolie, behandeld met geactiveerde kool teneinde sporen van polaire bestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit aromatische koolwaterstoffen overwegend  $C_{11}$  tot en met  $C_{16}$ ]
- PT extractos (petroleo), de solvente de gasoleo leve de vacuo, tratados com carvão activado , Extracto aromatico de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida por extração com solvente de gasoleo leve de vacuo tratado com carvão activado para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos aromaticos com numeros de atomos de carbono na gama de  $C_{11}$  ate  $C_{16}$ ]

*Clasificación Klassificering, Einstufung, Ταξινόμηση Classification Classification Classificazione Indeling Classificação*

Carc Cat 2 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling Etiquetage, Etichettatura, Kenmerken, Rotulagem*

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	R . 45
	S . 53-45

*Límites de concentracion, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione Concentratiegrenzen, Limites de concentraçào*


Cas No 100684 05 7

FEC No 309 675 9

No 649-548-00-8

NOTA H

NOTA L

- ES extractos (petroleo), gasoleo ligero obtenido a vacio extraido con disolvente, tratado con arcilla, Extracto aromatico destilado (tratado)  
[Combinacion compleja de hidrocarburos obtenida por extraccion con disolvente de gasoleos ligeros de petroleo obtenidos a vacio tratada con tierra para blanquear para separar constituyentes polares en trazas e impurezas. Compuesta fundamentalmente de hidrocarburos aromaticos con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{11}$  a  $C_{16}$ ]
- DA ekstrakter (råolie), let vakuumgasolie solvent, lerbehandlede, Aromatisk ekstrakt af destillat (behandlet)  
[En sammensat blanding af carbonhydrider opnået ved solventekstraktion af lette vakuumgasolier behandlede med blegejord, for at fjerne spor af polære bestanddele og urenheder. Den består overvejende af aromatiske carbonhydrider overvejende  $C_{11}$  til og med  $C_{16}$ ]
- DE Extrakte (Erdöl), leichte Vakuum Gasöl Lösungsmittel mit Ton behandelt, Aromatenextrakt aus Destillat (behandelt)  
[Komplexe Kombination von Kohlenwasserstoffen die man durch Lösungsmittelextraktion von leichtem Vakuumerdöl gas erhält, mit Bleicherde behandelt, um Spuren polarer Bestandteile und Verunreinigungen zu entfernen. Besteht vorherrschend aus aromatischen Kohlenwasserstoffen mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{11}$  bis  $C_{16}$ ]
- EL εκχυλίσματα (πετρελαιο), από ελαφρό ακαθάρτο πετρελαιο εκχυλισμένο με διαλυτή, κατεργασμένα με άργιλλο. Επεξεργασμένο εκχυλίσμα  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται με εκχύλιση με διαλυτή ελαφρού ακαθάρτου πετρελαιο κενού με αποχρωστική γη για να απομακρυνθούν ίχνη πολικών συστατικών και προσμίξεις. Συνίσταται κυρίως από αρωματικούς υδρογονανθράκες με αριθμό ατόμων άνθρακα κυρίως στην περιοχή από  $C_{11}$  έως  $C_{16}$ ]
- EN Extracts (petroleum), light vacuum gas oil solvent, clay treated, Distillate aromatic extract (treated)  
[A complex combination of hydrocarbons obtained by solvent extraction of light vacuum petroleum gas oils treated with bleaching earth for removal of trace polar constituents and impurities. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of  $C_{11}$  through  $C_{16}$ ]
- FR extraits au solvant de gazole léger sous vide (petrole), traites a la terre, Extrait aromatique de distillat (traite)  
[Combinaison complexe d'hydrocarbures obtenue par extraction au solvant de gazoles légers sous vide et traitement a la terre decolorante afin d'éliminer les traces de constituants polaires et les impuretés. Se compose principalement d'hydrocarbures aromatiques dont le nombre de carbones se situe en majorité dans la gamme  $C_{11}$  -  $C_{16}$ ]
- IT estratti (petrolio), gasolio leggero sotto vuoto solvente, trattato con argilla, Estratto aromatico distillato (trattato)  
[Combinazione complessa di idrocarburi ottenuta per estrazione con solvente di gasoli leggeri di petrolio sotto vuoto trattati con terra sbiancante per eliminare costituenti polari in tracce ed impurezze. È costituita prevalentemente da idrocarburi aromatici con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{11}$  -  $C_{16}$ ]
- NL extracten (aardolie), lichte vacuumgasoliesolvent, behandeld met klei, Aromatisch extract van destillaat (bewerkt)  
[Een complexe verzameling koolwaterstoffen die wordt verkregen door solventextractie van lichte vacuumgasolien uit aardolie, behandeld met bleekarde teinende sporen van polaire bestanddelen en onzuiverheden te verwijderen. Bestaat voornamelijk uit aromatische koolwaterstoffen, overwegend  $C_{11}$  tot en met  $C_{16}$ ]
- PT extractos (petroleo), de solvente de gasoleo leve de vacuo, tratado com argila, Extracto aromatico de destilado (tratado)  
[Uma combinação complexa de hidrocarbonetos obtida por extração com solvente de gasoleos leves de vacuo tratados com argila descorante para remoção de vestígios de constituintes polares e impurezas. É constituída predominantemente por hidrocarbonetos aromaticos com numeros de atomos de carbono predominantemente na gama de  $C_{11}$  ate  $C_{16}$ ]



*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45</p> <p>S : 53-45</p>
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*Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 64742 67-2

EEC No 265-171-8

No 649 549-00-3

NOTA H


NOTA L

- ES Aceite de sedimentos (petroleo) , Aceite de desaceitado de parafinas  
[Combinacion compleja de hidrocarburos obtenida como la fraccion de aceite de un disolvente deslustrificado o un proceso de exudacion de cera Compuesta fundamentalmente de hidrocarburos de cadena ramificada con un numero de carbonos en su mayor parte dentro del intervalo de  $C_{10}$  a  $C_{30}$ ]
- DA Foots oil (råolie) , Solventekstraherede eller afvoksede tunge restolier  
[En sammensat blanding af carbonhydrider opnået som oliefraktionen fra en solventafolierings-eller voksvedningsproces Den består overvejende af forgrenede carbonhydrider, overvejende  $C_{10}$  til og med  $C_{30}$ ]
- DE Klauenöl (Erdöl) , Weichparaffin  
[Komplexe Kombination von Kohlenwasserstoffen, erhalten als Ölfraktion aus einem Lösungsmittelöl- oder Wachserschmelzverfahren Besteht vorherrschend aus Kohlenwasserstoffen mit verzweigter Kette und mit Kohlenstoffzahlen vorherrschend im Bereich von  $C_{10}$  bis  $C_{30}$ ]
- EL ελαιο Foot (πετρελαιο) Φότος οίλ  
[Πολυπλοκός συνδυασμός υδρογονανθράκων που λαμβάνεται σαν το ελαιώδες κλάσμα από απελαίωση με διαλυτή ή διαδικασία επιδρόωσης κηρού Συνίσταται κυρίως από υδρογονανθρακες διακλαδισμένης αλυσού με αριθμό ατομών ανθράκα κυρίως στην περιοχή από  $C_{10}$  έως και  $C_{30}$ ]
- EN Foots oil (petroleum) , Foots oil  
[A complex combination of hydrocarbons obtained as the oil fraction from a solvent deoiling or a wax sweating process It consists predominantly of branched chain hydrocarbons having carbon numbers predominantly in the range of  $C_{10}$  through  $C_{30}$ ]
- FR huile de ressuage (petrole) , Huile de ressuage  
[Combinaison complexe d'hydrocarbures obtenue comme fraction huileuse lors d'un deshuilage au solvant ou d'un ressuage Se compose principalement d'hydrocarbures a chaîne ramifiée dont le nombre de carbones se situe en majorite dans la gamme  $C_{10}$  -  $C_{30}$ ]
- IT olio di trasudamento (petrolio) , Olio di trasudamento  
[Combinazione complessa di idrocarburi ottenuta come frazione oleosa da un processo di deoliatura o di essudamento della cera È prevalentemente costituita da idrocarburi a catena ramificata con numero di atomi di carbonio prevalentemente nell'intervallo  $C_{10}$  -  $C_{30}$ ]
- NL bezinkselolie (aardolie) , Bezinkselolie uit paraffinewas  
[Een complexe verzameling koolwaterstoffen die wordt verkregen als de oliefractie uit een solvent olieverwijderings- of een wasuittzettingsproces Bestaat voornamelijk uit vertakte koolwaterstoffen, overwegend  $C_{10}$  tot en met  $C_{30}$ ]
- PT óleo da refinação das parafinas (petróleo) , Óleo de ressudação  
[Uma combinação complexa de hidrocarbonetos obtida como a fracção de óleo de processos de remoção de óleos com solvente ou de segregação de parafinas É constituída predominantemente por hidrocarbonetos de cadeia ramificada com numeros de átomos de carbono predominantemente na gama a  $C_{10}$  ate  $C_{30}$ ]

*Clasificación, klassifisering, Einstufung, Ταξινόμηση, Classification, Classifikation, Classificazione, Indeling, Classificação*

Carc Cat 2, R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kenmerken, Rotulagem*

<div data-bbox="373 443 392 465" style="text-align: center;">T</div> <div data-bbox="336 495 432 584" style="text-align: center;">  </div> <div data-bbox="946 495 1015 517" style="text-align: right;">R : 45</div> <div data-bbox="946 546 1046 568" style="text-align: right;">S : 53-45</div>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 92045 12 0

EEC No 295 394-6

No 649-550-00-9


NOTA H  
NOTA L

- ES aceite de sedimentos (petroleo), tratado con hidrogeno , Aceite de desaceitado de parafinas
- DA Foots oil (råolie), hydrogenbehandlet , Solventekstraherede eller afvoksede tunge restolier
- DE Klauenöl (Erdöl), Wasserstoff-behandelt , Weichparaffin
- EL ελαιο Foot (πετρελαιο), υδρογονοκατεργασμένο Φοοτς οια
- EN Foots oil (petroleum), hydrotreated , Foots oil
- FR huiles de ressuage hydrotraitees (petrole) , Huile de ressuage
- IT olio da residuo di fondo (petrolio), idrottrattato Olio di trasudamento
- NL bezinkselolie (aardolie), met water behandeld , Bezinkselolie uit paraffinewas
- PT oleos residuais (petroleo), tratados com hidrogenio Óleo de ressudação

*Clasificación Klassificering, Einstufung, Ταξινόμηση Classification Classificazione, Indeling Classificação*

Carc Cat 2 R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken Rotulagem*

T	
	R 45
	S 53-45

*Limites de concentracion Konzentrationsgrenser Konzentrationsgrenzwerte Ορια συγκεντρώσεως, Concentration limits, Limites de concentration Limiti di concentrazione Concentrationsgrenzen Limites de concentraçao*


Cas No 8006-64-2 (mix.)

EEC No 232-350-7

No 650-002-00-6

ES: aguarras; esencia de trementina  
 DA: terpentunolie; vegetabilisk terpentun  
 DE: Terpentinol  
 EL: τερεβινθέλαιο  
 EN: turpentine  
 FR: essence de terebenthine  
 IT: olio di trementina  
 NL: terpentijnolie  
 PT: essencia de terebentina

Classification Klassificering Einstufung Ταξινόμηση Classification Classificazione Indeling Classificação

R 10

Xn, R 20/21/22

Etiquetado, Etikettering, Kennzeichnung Επισήμανση, Labeling Étiquetage, Etichettatura Kenmerken, Rotulagem

Xn



R : 10-20/21/22

S : (2)

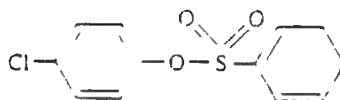
Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκέντρωσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçao

C ≥ 25 %	Xn : R 20/21/22

Cas No 80-38-6

EEC No 201-274-6

No 650-003-00-1



ES: τένσον; bencenosulfonato de 4-cloroteniio

DA: τένσον, 4-chlorphenyl-benzensulfonat

DE: Fenson, (4-Chlor-phenyl)-benzol-sulfonat

EL: τένσον· δεινζοσουλφονικος + χλωροφαινυλεστερας

EN: τένσον, 4-chlorophenyl benzenesulfonate

FR: τένσον; benzenesulfonate de 4-chlorophényle

IT: τένσον; (4-clorofenil)-benzenosulfonato

NL: τένσον, (4-chloortenyl)-benzeensulfonaat, PCPBS

PT: τένσαο, benzenossulfonato de 4-cloroténio

Classificacion, Klassificering, Einstufung, Τξινοῦση Classification, Classificazione, Indeling, Classificação

Xn, R 22

Xi, R 36

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

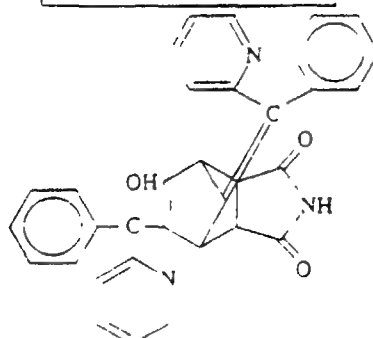
Xn	
	R 22-36
	S (2-)24-26

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Ορια συγκεντρώσεως, Concentration limits, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas No 991-42-4

EEC No 213-589-6

No 650-004-00-7



- ES : norbormida (ISO) , 5-(α-ιδροxi-α-2-πινδιλβενζιλ)-7-(α-2-πινδιλβενζιλιδεν)βικυκλο[2.2.1]ηεπ-5-ενο-2,3-δικαρβοxιμιδα  
 DA : norbormid (ISO) , 5-(α-hydroxy-α-2-pyridylbenzyl)-7-(α-2-pyridylbenzyliden)bicyclo[2.2.1] hept-5-en-2,3-  
 dicarboximide  
 DE : Norbormid (ISO) , 5-(α-Hydroxy-α-2-pyridylbenzyl)-7-(α-2-pyridylbenzyliden) bicyclo [2.2.1] hept-5-en-2,3-  
 dicarboximide  
 EL : norbormide (ISO) , 5-(α-υδροξυ-α-2-πυριδυλοβενζυλο)-7-(α-2-πυριδυλοβενζυλιδενο)δικυκλο[2.2.1]επτ-5-εν-2,3-  
 δικαρβοxιμιδιο  
 EN : norbormide (ISO) , 5-(α-hydroxy-α-2-pyridylbenzyl)-7-(α-2-pyridylbenzylidene)bicyclo [2.2.1] hept-5-ene-  
 2,3-dicarboximide  
 FR : norbormide (ISO) , nobormide 5-(α-hydroxy-α-2-pyridylbenzyl)-7-(α-2-pyridylbenzylidène)bicyclo [2.2.1] hept-  
 5-ène-2,3- dicarboximide  
 IT : norbormide (ISO) , 5-(α-ιδροξι-α-2-πινδιλβενζιλ)-7-(α-2-πινδιλβενζιλιδεν) βικυκλο [2.2.1] επτ-5-εν-2,3-  
 δικαρβοxιμιδα  
 NL : norbormide (ISO) , 5-(α-hydroxy-α-2-pyridylbenzyl)-7-(α-2-pyridylbenzylideen)bicyclo[2.2.1] hept-5-ene-  
 2,3-dicarboximide  
 PT : norbormida (ISO) , 5-(α-ιδροxi-α-2-πινδιλβενζιλ)-7-(α-2-πινδιλβενζιλιδενο)βικυκλο [2.2.1]hepte-5-eno-2,3-  
 dicarboximida

Clasificación Klassificering Einstufung Ταξινόηση, Classification, Classification, Classificazione, Indeling Classificação

Xn; R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

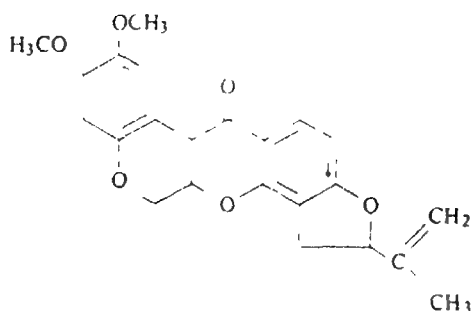
Xn	
	R : 22
	S : (2)

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Ορια συγκεντρώσης, Concentration limits,  
 Limites de concentration, Limite di concentrazione, Konzentrationsgrenzen, Limites de concentraçao


Cas No 83-79-4

EEC No 201-501-9

No 650-005-00-2



ES rotenona  
 DA rotenon  
 DE Rotenon  
 EL ροτενόνη  
 EN rotenone , derris  
 FR : rotenone  
 IT rotenone  
 NL . rotenon  
 PT rotenona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T, R 25	X <sub>1</sub> , R 36/37/38
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Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

<p>T</p> 	R : 25-36/37/38
	S : (1/2-)22-24/25-36-45

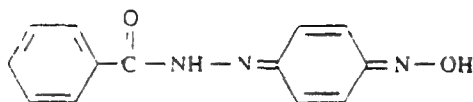
Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 495-73-8

EEC No 207-807-9

No 650-006-00-8



ES: benquinox (ISO), p-benzoquinona-1-benzoiidrazona-4-oxima  
 DA: benquinox (ISO), p-benzoquinon-1-benzovihdrazon-4-oxim  
 DE: Benquinox (ISO), p-Benzochinon-1-benzovihdrazon-4-oxim  
 EL: benquinox (ISO) π-δενζοκινονο-1-δενζουλυδραζον-4-οξιμη  
 EN: benquinox (ISO), p-benzoquinone 1-benzovihdrazone 4-oxime  
 FR: benquinox (ISO), p-benzoquinone-1-benzoylhvarazone-4-oxime  
 IT: benquinox (ISO), p-benzochinon-1-benzoiidrazon-4-ossima  
 NL: benchinox (ISO), p-benzochinon-1-benzovihdrazon-4-oxim  
 PT: benquinox (ISO), p-benzoquinona-1-benzoiidrazona-4-oxima

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

T, R 25

Xn: R 21

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

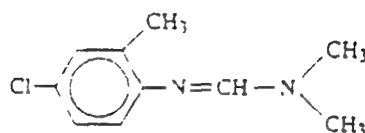
<p>T</p> 	R: 21-25
	S: (1/2-)36/37-45

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo


Cas No 6164-98-3

EEC No 228-200-5

No 650-007-00-3



- ES: clorazemetorm (ISO), N<sup>1</sup>-(4-cloro-o-tolil)-N<sup>1</sup>,N<sup>1</sup>-dimetilformamidina  
 DA: chlorazemetorm (ISO), N<sup>1</sup>-(4-chlor-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidin  
 DE: chlorazemetorm (ISO), N<sup>1</sup>-(4-Chlor-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidin  
 EL: κλoρaμετορμ (ISO), N<sup>1</sup>-(4-κλωρο-ο-τολουολο)-N<sup>1</sup>,N<sup>1</sup>-διμεθυλοφορμαιοιδίνη  
 EN: chlorazemetorm (ISO), N<sup>1</sup>-(4-chloro-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidine  
 FR: chlorazemetorme (ISO), N<sup>1</sup>-(4-chloro-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidine  
 IT: clorazemetorme (ISO), N<sup>1</sup>-(4-cloro-o-tolil)-N<sup>1</sup>,N<sup>1</sup>-dimetilformamidina  
 NL: chlorazemetorm (ISO), N<sup>1</sup>-(4-chloor-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidine  
 PT: clorazemetorme (ISO), N<sup>1</sup>-(4-cloro-o-tolil)-N<sup>1</sup>,N<sup>1</sup>-dimetilformamidina

Classificazion, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Classificazione, Indeling, Classificação

Carc. Cat. 3, R 40 | Xn, R 21/22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Etiquetage, Etichettatura, Kēnmerken, Rotulagem

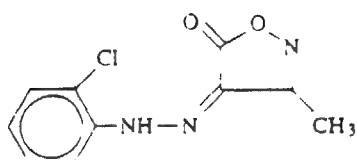
Xn	
	R 21/22-40 S (2-)22-36/37

Límites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçào


Cas No 5707-69-7

EEC No 227-197-8

No 650-008-00-9



- ES: drazoxolon (ISO), 4-(2-clorofenilidrazon)-3-metil-5-isoxazolona  
 DA: drazoxolon (ISO); 4-(2-chlorphenylhydrazono)-3-methyl-5-isoxazolone  
 DE: drazoxolon (ISO); 4-(2-Chlorphenylhydrazono)-3-methyl-5-isoxazolone  
 EL: drazoxolon (ISO) 4-(2-χλωροφαινυλδραζονο)-3-μεθυλ-5-ισοξαζολονη  
 EN: drazoxolon (ISO), 4-(2-chlorophenylhydrazono)-3-methyl-5-isoxazolone  
 FR: drazoxolon (ISO), 4-(2-chlorophenylhydrazono)-3-methyl-5-isoxazolone  
 IT: drazoxolon (ISO), 4-(2-clorotenilidrazono)-3-metil-5-isossazolone  
 NL: drazoxolon (ISO), 4-(2-chloorfenylhydrazono)-3-methyl-5-isoxazolone  
 PT: drazoxolon (ISO); 4-(2-clorofenilidrazono)-3-metil-5-isoxazolona

Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

T, R 25

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

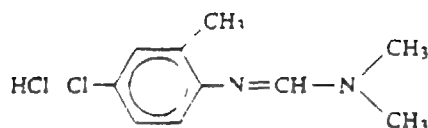
T	
	R 25
	-S: (1/2-)22-24-36/37-45

Límites de concentración, Koncentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração


Cas<sup>\*</sup> No 19750-95-9

EEC No 243-269-1

No 650-009-00-4



- ES: clordimetorm, cloridrato, N<sup>2</sup>-(4-cloro-o-tolil)-N<sup>1</sup>,N<sup>1</sup>-dimeulformamidina, cloridrato  
 DA: enlordimeformhydrochlorid; N<sup>2</sup>-(4-chlor-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidinhydrochlorid  
 DE: Chlordimeformhydrochlorid, N<sup>2</sup>-(4-Chlor-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidinhydrochlorid  
 EL: enlordimetorm υδροχλωρικο υδροχλωρική N<sup>2</sup>-(4-χλωρο-ο-τολουολο)-N<sup>1</sup>,N<sup>1</sup>-διμεθυλοφορμαμίδίνη  
 EN: enlordimeform hydrochloride, N<sup>2</sup>-(4-chloro-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidine hydrochloride  
 FR: chlordimeforme, chlorhydrate, N<sup>2</sup>-(4-chloro-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-diméthylformamidine, chlorhydrate  
 IT: clordimetorm, clodrato, N<sup>2</sup>-(4-cloro-o-tolil)-N<sup>1</sup>,N<sup>1</sup>-dimeulformamidina, clodrato  
 NL: enloordimetormhydrochloride, N<sup>2</sup>-(4-chloor-o-tolyl)-N<sup>1</sup>,N<sup>1</sup>-dimethylformamidinehydrochloride  
 PT: clordimeforme, clodrato; N<sup>2</sup>-(4-cloro-o-tolil)-N<sup>1</sup>,N<sup>1</sup>-dimeulformamidina, clodrato

Classification, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificazione, Indeling, Classificação

Carc. Cat. 3; R 40

Xn; R 22

Εtiquetado, Etikettering, Kennzeichnung, Επισημάνση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

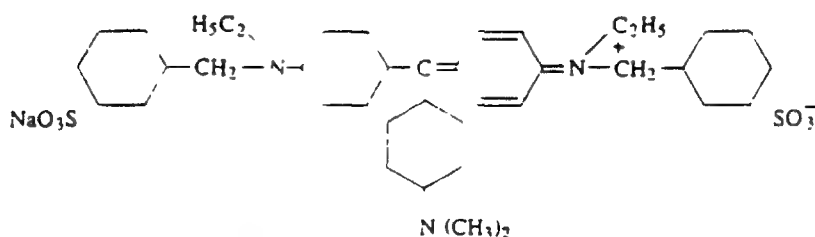
Xn	
	R : 22-40
	S : (2-)22-36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentrationsgrenzen, Limites de concentração


Cas No 1694-09-3

EEC No 216-901-9

No 650-010-00-X



- ES: benzyl violet 4B; alfa-[4-(4-dimetilamino-alfa-[4-(etil(3-sodiosulfonatobencil)amino] fenil)benzilideno)ciclohexa-2,5-dieniliden(etil)ammonio]tolueno-3-sulfonato
- DA: benzyl violet 4B; alfa-[4-(4-dimethylamino-alfa-[4-(ethyl(3-natnosulfonatobenzyl)amino] phenyl)benzyliden)cyclohexa-2,5-dienyliden(etil)ammonio]toluen-3-sulfonat
- DE: Benzyl violet 4B; alpha-[4-(4-Dimethylamino-alpha-[4-(ethyl(3-natnosulfonatobenzyl)amino] phenyl)benzyliden)cyclohexa-2,5-dienyliden(etil)ammonio]toluol-3-sulfonat
- EL: benzyl violet 4B; α-[4-(4-διμεθυλαμινο-α-[4-(αιθυλο(3-νατριοςουλφονατοβενζυλ)αμινο] φαινυλο]-δενζυλιδενο)κυκλιοεξα-2,5-διενυλιδεν(αιθυλ)αμμωνιο]τολουολο-3-σουλφονικό
- EN: benzyl violet 4B; alpha-[4-(4-dimethylamino-alpha-[4-(ethyl(3-sodiosulphonatobenzyl)amino] phenyl)benzylidene)cyclohexa-2,5-dienylidene(etil)ammonio]toluene-3-sulphonate
- FR: benzyl violet 4B; alpha-[4-(4-dimethylamino-alpha-[4-(éthyl(3-sodiosulphonatobenzyl)amino] phenyl)benzylidène)cyclohexa-2,5- diénylidène(etil)ammonio]toluene-3-sulfonate
- IT: benzyl violet 4B; alfa-[4-(4-dimetilammio-alfa-[4-(etil(3-sodiosulfonatobencil)ammino] fenil)benziliden)cicloesa-2,5-dieniliden(etil)ammonio]toluen-3-sulfonato
- NL: benzyl violet 4B; alfa-[4-(4-dimethylamino-alfa-[4-(ethyl(3-natnosulfonatobenzyl)amino] fenyl)benzylideen)cyclohexa-2,5-dienylideen(etil)ammonio]tolueen-3-sulfonaat
- PT: benzyl violet 4B; alfa-[4-(4-dimetilamino-alfa-[4-(etil(3-sodiosulfonatobencil)amino] fenil)benzilideno)cicloexa-2,5-dieniliden(etil)ammonio]tolueno-3-sulfonato

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classificatiön, Classificazione, Indeling, Classificação

Carc. Cat. 3 : R 40

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

Xn	
	R : 40
	S : (2-)36/37

Límites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentraçáo


Cas No 12510-42-8

EEC No —

No 650-012-00-0

ES: enonita  
 DA: enonit  
 DE: Enionit  
 EL: επιονιτης  
 EN: enonite  
 FR: enonite  
 IT: enonite  
 NL: enoniet  
 PT: enonite

*Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. 1; R 45

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<p>T</p> 	<p>R : 45 S : 53-45</p>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No 132207-33-1  
 132207-32-0  
 12172-73-5  
 77536-66-4  
 77536-68-6  
 — 77536-67-5

EEC No —

No 650-013-00-6

NOTA E

ES: amianto  
 DA: asbest  
 DE: Asbest  
 EL: αμιάντο  
 EN: asbestos  
 FR: amiante  
 IT: amianto  
 NL: asbest  
 PT: amianto

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classification, Classificazione, Indeling, Classificação*

Carc. Cat. I ; R 45      T, R 48/23

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>T</p>  </div> <div> <p>R : 45-48/23</p> <p>S : 53-45</p> </div> </div>
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*Limites de concentración, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração*


Cas No

EEC No 401-770-4

No 650-014-00-1

- ES: 2,4-dihidroxiciclodisiloxano-2,4-diilbis(trimetileno)difosfonato de dietilo, sal de tetrasodio, productos de reacción con metasilicato de disodio
- DA: diethyl-2,4-dihydroxycycloisiloxan-2,4-diylbis(trimethylen)diphosphonat, tetranatnumsalt, reaktionsprodukter med dinatnummetasilicat
- DE: Diethyl-2,4-dihydroxycycloisiloxan-2,4-diylbis(trimethylen)diphosphonat, Tetranatnumsalt, Reaktionsprodukte mit Dinatnummetasilicat
- EL: 2,4-διυδροξυκυκλοδισιλοξανο-2,4-διυλοδισ(τριμεθυλενο)διφωσφονικο διαιθύλιο, άλας τετρανατρίου, προϊόντα αντιδρασης με μεταπυριτικο δινατριο
- EN: diethyl 2,4-dihydroxycycloisiloxane-2,4-diylbis(trimethylene)diphosphonate, tetrasodium salt, reaction products with disodium metasilicate
- FR: 2,4-dihydroxycycloisiloxanne-2,4-diylbis(triméthylene)diphosphonate de diéthyle, sel de tétrasodium, produits de réaction avec le mérasilicate de disodium
- IT: 2,4-diidrossiciclodisilossano-2,4-diilbis(trimetilen)difosfonato di dietile, sale di tetrasodio, prodotti di reazione con metasilicato di disodio
- NL: diethyl-2,4-dihydroxycycloisiloxaan-2,4-diylbis(trimethyleen)difosfonaat, tetranatnumzout, reactieprodukten met dinatnummetasilicaat
- PT: 2,4-dihidroxiciclodisiloxano-2,4-diilbis(trimetileno)difosfonato de dietile, sal de tetrassodio, produtos de reacção com metasilicato de dissodio

Clasificación, Klassificering, Einstufung, Ταξινόηση, Classification, Classification, Classificazione, Indeling, Classificação

C; R 34

Xn, R 22

Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem

C	
	
	R : 22-34
	S : (1/2)-26-36/37/39-45

Limites de concentración, Konzentrationsgrenzen, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limite di concentrazione, Concentratiegrenzen, Limites de concentração




Cas No 80-50-09-7  
8052-10-6  
73138-82-6

EEC No 232-475-7  
232-484-6  
277-299-1

No 650-015-00-7

ES: colofonia

DA: terpentínlíefri harpíks, Kolophonium

DE: Kolophonium

EL: κολοφώνιο

EN: Rosin; colophony

FR: colophane

IT: rosina, colofonia

NL: pínhars

PT: colofónia

*Clasificación, Klassificering, Einstufung, Ταξινόμηση, Classification, Classificatió, Classificazione, Indeling, Classificação*

R 43

*Etiquetado, Etikettering, Kennzeichnung, Επισήμανση, Labelling, Étiquetage, Etichettatura, Kenmerken, Rotulagem*

Xi



R: 43

S: (2-)24-37

*Limites de concentraci3n, Konzentrationsgrænser, Konzentrationsgrenzwerte, Όρια συγκέντρωσης, Concentration limits, Limites de concentration, Limiti di concentrazione, Concentratiegrenzen, Limites de concentraç3o*


APPENDICE  
ALL'ALLEGATO I

Nome	Numero indice
AAT	611-006-00-3
Acefato	015-079-00-7
Acetaldeide	605-003-00-6
Acetamide	616-022-00-4
Acetilacetone	606-029-00-0
Acetile cloruro	607-011-00-5
Acetilene	601-015-00-0
Acetilene tetrabromuro	602-016-00-9
Acetofenone	606-042-00-1
Acetoncianidrina	608-004-00-X
Acetone	606-001-00-8
Acetonitrile	608-001-00-3
6beta-Acetossi-3beta-(beta-D-glucopiranosilossi)-8,14-diidrossibufa-4,20,22-trienolide	614-027-00-6
Acidi di catrame, carbone bruno, grezzi; Fenoli grezzi	648-117-00-1
Acidi di catrame, carbone bruno, frazione C2-alchilfenolo: Fenoli distillati	648-129-00-7
Acidi di catrame, cresilici, residui: Fenoli distillati	648-126-00-0
Acidi di catrame, cresilici: Fenoli distillati	648-128-00-1
Acidi di catrame, cresilici, sali di sodio, soluzioni caustiche: Estratto alcalino	648-139-00-1
Acidi di catrame, distillati, taglio primario: Fenoli distillati	648-125-00-5
Acidi di catrame, frazione polialchilfenolo; Fenoli distillati	648-121-00-3
Acidi di catrame, frazione 3,5-xilenolo: Fenoli distillati	648-124-00-X
Acidi di catrame, frazione etilfenolo: Fenoli distillati	648-123-00-4
Acidi di catrame, frazione metilfenolo: Fenoli distillati	648-120-00-8
Acidi di catrame, frazione xilenolo: Fenoli distillati	648-122-00-9
Acidi di catrame, gasificazione del carbone bruno: Fenoli grezzi	648-118-00-7
Acidi di catrame, residui della distillazione: Fenoli distillati	648-119-00-2
Acidi grassi di tallolio, prodotti di reazione con iminodietanolo e acido borico	649-007-00-6
Acido acetico ...%	607-002-00-6
Acido acrilico	607-061-00-8
Acido adipico	607-144-00-9
Acido 3-aminobenzenzolfonico	612-013-00-4
Acido 4-aminobenzenzolfonico	612-014-00-X
Acido 7-amino-3-((5-carbossimetil-4-metil-1,3-tiazol-2-iltio)metil)-8-osso-5-tia-1-azabicyclo(4.2.0)ott-2-ene-2-carbossilico	613-097-00-5
Acido 3-(3-amino-5-(1-metilguanidino)-1-ossopentilamino-6-(4-amino-2-osso-2,3-diidro-pirimidin-1-il)-2,3-diidro-(6H)-piran-carbossilico	607-155-00-9
Acido arsenico e sali	033-005-00-1
Acido 3-azidosolfonilbenzoico	607-225-00-9
Acido (benzotiazol-2-iltio)succinico	607-179-00-X
Acido bromidrico ...%	035-002-01-8
Acido bromoacetico	607-065-00-X
Acido 3-(3-terz-butil-4-idrossifenil)propionico	607-215-00-4

Nome	Numero indice
Acido butirrico	607-135-00-X
Acido cianidrico	006-006-00-X
Acido cianidrico ...%	006-006-01-7
Acido cianidrico sali, esclusi i cianuri complessi come ferrocianuri, ferricianuri, ossicianuro di mercurio	006-007-00-5
Acido cloridrico	017-002-00-2
Acido cloridrico ...%	017-002-01-X
Acido cloroacetico	607-003-00-1
Acido cloroacetico, sale sodico	607-158-00-5
Acido 4-clorofenossiacetico	607-073-00-3
Acido 4-cloro-2-ossobenzotiazolin-3-ilacetico	607-153-00-8
Acido 2-cloropropionico	607-139-00-1
Acido clorosolfonico	016-017-00-1
Acido 4-(4-cloro-2-tolilossi)butirrico	607-053-00-4
Acido 2-(4-cloro-o-tolilossi)propionico	607-049-00-2
Acido (4-cloro-o-tolilossi)acetico	607-051-00-3
Acido cromico(VI), sale di cromo(III)	024-010-00-X
Acido 4-(2,4-diclorofenossi)butirrico	607-083-00-8
Acido dicloroacetico	607-066-00-5
Acido 3,7-diclorochinolin-8-carbossilico	607-186-00-8
Acido 2-(2,4-diclorofenossi)propionico	607-045-00-0
Acido (2,4-dicloro-fenossi)acetico	607-039-00-8
Acido (+)-R-2-(2,4-diclorofenossi)propionico	607-218-00-0
Acido dicloroisocianurico, sale di sodio	613-030-00-X
Acido dicloroisocianurico, sale di potassio	613-030-00-X
Acido dicloroisocianurico	613-029-00-4
Acido 3,6-dicloropiridin-2-carbossilico	607-231-00-1
Acido 2,2-dicloropropionico	607-162-00-7
Acido 2-(difosfonometil)succinico	015-148-00-1
Acido N-dimetilaminosuccinammico	607-171-00-6
Acido 6-docosilossi-1-idrossi- 4-(1-(4-idrossi-3-metilfenantren-1-il)- 3-osso-2-ossafenalen-1-il)naftalen-2-carbossilico	607-221-00-7
Acido eptanoico	607-196-00-2
Acido 2-etilesanoico	607-230-00-6
Acido fluoborico ...%	009-010-00-X
Acido fluoridrico ...%	009-003-00-1
Acido fluoridrico anidro	009-002-00-6
Acido fluorosolfonico	016-018-00-7
Acido fluosilicico ...%	009-011-00-5
Acido formico ...%	607-001-00-0
Acido fosforico ...%	015-011-00-6
Acido fumarico	607-146-00-X
Acido glutammico, prodotti di reazione con N-(C12-14-alchil) propilen 1,3-diamina	607-216-00-X
Acido N,N-idrazinodiacetico	607-214-00-9
Acido iodidrico	053-002-00-9
Acido iodidrico ...%	053-002-01-6

Nome	Numero indice
Acido iodoacetico	607-068-00-6
Acido isobutirrico	607-063-00-9
Acido maleico	607-095-00-3
Acido mercaptoacetico	607-090-00-6
Acido metacrilico	607-088-00-5
Acido metanilico	612-013-00-4
Acido metansolfonico	607-145-00-4
Acido 2-metilpropenoico	607-088-00-5
Acido monofluoroacetico	607-081-00-7
Acido nitrico ...%	007-004-00-1
Acido nonanoico	607-197-00-8
Acido 7-ossabicyclo(2,2,1)eptan-2,3-dicarbossilico	607-150-00-1
Acido ossalico	607-006-00-8
Acido ossalico, sali	607-007-00-3
Acido peracetico ...%	607-094-00-8
Acido perclorico ...%	017-006-00-4
Acido picrammico	612-034-00-9
Acido picrico	609-009-00-X
Acido picrico, sali	609-010-00-5
Acido propionico ...%	607-089-00-0
Acido solfammico	016-026-00-0
Acido solfanilico	612-014-00-X
Acido solfidrico	016-001-00-4
Acido solfocianico	615-003-00-8
Acido solfocianico, sali	615-004-00-3
Acido solforico ...%	016-020-00-8
Acido stiftico	609-018-00-9
Acido tiocianico	615-003-00-8
Acido tioglicolico	607-090-00-6
Acido p-toluensolfonico (H <sub>2</sub> SO <sub>4</sub> ≤ 5%)	016-030-00-2
Acido p-toluensolfonico (H <sub>2</sub> SO <sub>4</sub> > 5%)	016-029-00-7
Acido tricloraacetico	607-004-00-7
Acido 2,3,6-triclorobenzoico	607-152-00-2
Acido (2,3,6-triclorofenil)acetico	607-074-00-9
Acido 2-(2,4,5-triclorofenossi)propionico	607-047-00-1
Acido 2,4,5-triclorofenossiacetico	607-041-00-9
Acido tricloroisocianurico	613-031-00-5
Acido trifluoroacetico ...%	607-091-00-1
Acido trimetilendiaminotetracetico	607-189-00-4
Acido 4,8,12-trimetiltrideca-3,7,11-trienoico, miscela di isomeri (3,7-trans/trans, 3,7-trans/cis, 3,7-cis/trans, 3,7-cis/cis)	607-208-00-6
Acido valerianico	607-143-00-3
Acetonifene	612-120-00-6
Aconitina	614-008-00-2
Aconitina, sali	614-009-00-8
Acqua ossigenata ...%	008-003-00-9
Acetaldeide	605-008-00-3

Nome	Numero indice
Acrilamide	616-003-00-0
Acrilati, esclusi quelli espressamente indicati in questo allegato	607-133-00-9
2-Acridoilossietile idrogenocicloesan-1,2-dicarbossilato, miscela con	
2-metacridoilossietil idrogenocicloesan-1,2-dicarbossilato	607-226-00-4
Acilonitrile	608-003-00-4
Acroleina	605-008-00-3
Alaclor	616-015-00-6
Alcani, C1-2: Gas di petrolio	649-193-00-9
Alcani, C1-4, ricchi di C3: Gas di petrolio	649-114-00-8
Alcani, C12-26 lineari e ramificati	649-242-00-4
Alcani, C2-3: Gas di petrolio	649-194-00-4
Alcani, C3-4: Gas di petrolio	649-195-00-X
Alcani, C4-5: Gas di petrolio	649-196-00-5
2-((C16 o C18-n-Alchil)(C16 o C18-n-alchil)carbamoil)benzen	
solfonato di (C16 o C18-n-alchil) (C16 o C18-n-alchil)ammonio	016-053-00-8
C12-14-terz-Alchilamina, sali dell'acido metilfosfonico	612-117-00-X
C12-14-terz-Alchilammonio difenil tiofosfato, miscela con dinonile	
solfuro (o disolfuro)	015-147-00-6
C8-18 Alchilbis(2-idrossietil) ammonio bis(2-etilesil) fosfato	612-116-00-4
Alcool allilico	603-015-00-6
Alcool terz-amilico	603-007-00-2
Alcool amilico (eccetto alcool terz-amilico)	603-006-00-7
Alcool benzilico	603-057-00-5
Alcool 2-butilico	603-004-00-6
Alcool n-butilico	603-004-00-6
Alcool terz-butilico	603-005-00-1
Alcool etilico	603-002-00-5
Alcool furfurilico	603-018-00-2
Alcool isobutilico	603-004-00-6
Alcool isopropilico	603-003-00-0
Alcool metilico	603-001-00-X
Alcool propargilico	603-078-00-X
Alcool propilico	603-003-00-0
Alcool tetraidrofurfurilico	603-061-00-7
Aldeide benzoica	605-012-00-5
Aldeide butirrica	605-006-00-2
Aldeide formica ... %	605-001-00-5
Aldeide 2-furilica	605-010-00-4
Aldeide propionica	605-018-00-8
Aldicarb	006-017-00-X
Aldrin	602-048-00-3
Alletrina	006-025-00-3
Allidoclor	616-004-00-6
Allilamina	612-046-00-4
5-Allil-1,3-benzodiossolo	605-020-00-9
Allile cloruro	602-029-00-X
Allile ioduro	602-054-00-6

Nome	Numero indice
Allilglicidil etere	603-038-00-1
(+)-3-Allil-2-metil-4-ossociclopent-2-enil (+)-cis-trans-crisantemato	006-025-00-3
(+)-3-Allil-2-metil-4-ossociclopent-2-enil (+)-trans-crisantemato	006-075-00-6
3-Allil-2-metil-4-osso-ciclopent-2-en-1-il (1R-(1alpha(S*),3beta))-2,2-dimetil-3-(2-metilprop-1-enil)ciclopropancarbossilato	613-055-00-6
1-[1-(Allilossi)-2-(2,4-diclorofenil)etil]-1H-imidazolo	613-042-00-5
1-Allilossi-2,3-epossipropano	603-038-00-1
1-(2-(Allilossi)etil-2-(2,4-diclorofenil))-1H-imidazolio idrogenosolfato	613-043-00-0
Alluminio dietil(etildimetilsilanolato)	013-005-00-8
Alluminio-alchili (n=1-5)	013-004-00-2
Alluminio cloruro anidro	013-003-00-7
Alluminio fosfuro	015-004-00-8
Alluminio in polvere (stabilizzata)	013-002-00-1
Alluminio in polvere (piroforica)	013-001-00-6
Alluminio isopropilato	603-042-00-3
Alluminio trisodio esafluoruro	009-016-00-2
Ametrina	613-010-00-0
Amianto	650-013-00-6
Amianto actinolite	650-013-00-6
Amianto amosite	650-013-00-6
Amianto antofillite	650-013-00-6
Amianto crisotilo	650-013-00-6
Amianto crocidolite	650-013-00-6
Amianto tremolite	650-013-00-6
Amidition	015-080-00-2
Amilasi, alfa	647-015-00-4
Amilasi, escluse quelle espressamente indicate in questo allegato	647-016-00-X
Amile acetato	607-130-00-2
Amile formiato	607-018-00-3
Amile nitrito, miscela di isomeri	007-020-00-9
Amile propionato	607-131-00-8
Amine, polietilenpoli-	612-121-00-1
4-Aminoazobenzene	611-008-00-4
4-Aminobifenile	612-072-00-6
4-Aminobifenile, sali	612-073-00-1
4-Amino-6-terz-butil-3-metiltio-1,2,4-triazin-4-one	606-034-00-8
Aminocarb	006-018-00-5
5-Amino-4-cloro-2-fenilpiridazin-3-one	606-035-00-3
4-Amino-N,N-dietilanilina	612-080-00-X
4-Amino-N,N-dimetilanilina	612-031-00-2
4-Amino-2',3-dimetilazobenzene	611-006-00-3
2-Amino-4,6-dinitrofenolo	612-034-00-9
2-Aminoetanolo	603-030-00-8
2-Aminoetildimetilamina	612-075-00-2
N-Aminoetilpiperazina	612-105-00-4
2-Amino-6-etossi-4-metilamino-1,3,5-triazina	613-096-00-x
4-Aminofenolo	612-128-00-X

Nome	Numero indice
3-Aminofenolo	612-127-00-4
2-Aminofenolo	612-033-00-3
4-Amino-3-fluorofenolo	604-028-00-X
2-Amino-2-metilpropanolo	603-070-00-6
3-Aminometil-3,5,5-trimetilcicloesilamina	612-067-00-9
2-Aminopropano	612-007-00-1
1-Aminopropan-2-olo	603-082-00-1
N,N-bis(3-Aminopropil)metilamina	612-102-00-X
3-Aminopropiltrietossisilano	612-108-00-0
2-Aminotoluene	612-091-00-X
Amitraz	612-086-00-2
Amitrolo	613-011-00-6
Ammoniaca anidra	007-001-00-5
Ammoniaca soluzione ...%	007-001-01-2
tetrAmmonio 5-(4-(7-amino-1-idrossi-3-solfonato-2-naftilazo)-6-solfonato-1-naftilazo) isoftalato	611-018-00-9
Ammonio bifluoruro	009-009-00-4
Ammonio cloruro	017-014-00-8
Ammonio dicromato	024-003-00-1
Ammonio bis(1-(3,5-dinitro-2-ossidofenilazo)-3-(N-fenilcarbamoil)-2-naftolato)cromato(1-)	024-011-00-5
Ammonio esafluosilicato	009-012-00-0
Ammonio fluoruro	009-006-00-8
Ammonio idrossido ...%	007-001-01-2
Ammonio perclorato	017-009-00-0
Ammonio polisolfuri	016-008-00-2
Anidride acetica	607-008-00-9
Anidride 1,2,4-benzentricarbossilica	607-097-00-4
Anidride endo-cis-biciclo (2,2,1) 5-epten-2,3-dicarbossilica	607-105-00-6
Anidride 1,2-cicloesandicarbossilica	607-102-00-X
Anidride 4-cicloesen-1,2-dicarbossilica	607-099-00-5
Anidride clorendica	607-101-00-4
Anidride cromica	024-001-00-0
Anidride 1,4,5,6,7,7-esaclorobiciclo(2,2,1)-5-epten-2,3-dicarbossilica	607-101-00-4
Anidride esaidroftalica	607-102-00-X
Anidride fosforica	015-010-00-0
Anidride ftalica	607-009-00-4
Anidride maleica	607-096-00-9
Anidride 1-metil-5-norbornen-2,3-dicarbossilica	607-106-00-1
Anidride propionica	607-010-00-2
Anidride solforosa	016-011-00-9
Anidride succinica	607-103-00-5
Anidride tetraidroftalica	607-099-00-5
Anidride trimellitica	607-097-00-4
Anidride vanadica	023-001-00-8
Anidroglucoclorallio	605-013-00-0



Nome	Numero indice
Anilazina	613-053-00-5
Anilina	612-008-00-7
Anilina, sali	612-009-00-2
p-Anisidina	612-112-00-2
o-Anisidina	612-035-00-2
Antimonio composti esclusi tetrossido, pentossido, trisolfuro, pentasolfuro e quelli espressamente indicati in questo allegato	051-003-00-9
Antimonio pentacloruro	051-002-00-3
Antimonio triclорuro	051-001-00-9
Antimonio trifluoruro	051-004-00-4
Antimonio triossido	051-005-00-X
Antu	006-008-00-0
Argento nitrato	047-001-00-2
Arsenico	033-001-00-X
Arsenico composti, esclusi quelli espressamente indicati in questo allegato	033-002-00-5
Arsenico triossido	033-002-00-5
Arsina	033-006-00-7
Atrazina	613-068-00-7
Atropina	614-010-00-3
Atropina, sali	614-011-00-9
Auramina base	612-096-00-7
Auramina sali	612-097-00-2
Azaconazolo	613-040-00-4
3-Azapentan-1,5-diamina	612-058-00-X
Azir,phos-etile	015-056-00-1
Azinphos-metile	015-039-00-9
Aziridina	613-001-00-1
Azobenzene	611-001-00-6
Azocoloranti della benzidina, esclusi quelli espressamente indicati in questo allegato	611-024-00-1
Azossibenzene	611-002-00-1
Azotoato	015-082-00-3
Azoto diossido	007-002-00-0
diAzoto tetraossido	007-002-00-0
Azoturo di piombo	082-003-00-7
Barbano	006-020-00-6
Bario carbonato	056-003-00-2
Bario clorato	017-003-00-8
Bario cloruro	056-004-00-8
Bario perclorato	017-007-00-X
Bario perossido	056-001-00-1
Bario polisolfuri	016-003-00-5
Bario sali, escluso il solfato di bario e i sali espressamente indicati in questo allegato	056-002-00-7
Bario solfuro	016-002-00-X
Basi di catrame, carbone, grezze, Basi di catrame grezze	648-141-00-2

Nome	Numero indice
Basi di catrame, carbone, frazione anilina; Basi distillate	648-034-00-0
Basi di catrame, carbone, frazione collidina; Basi distillate	648-033-00-5
Basi di catrame, carbone, frazione derivati della chinolina; Basi distillate	648-132-00-3
Basi di catrame, carbone, frazione toluidinica; Basi distillate	648-035-00-6
Basi di catrame, carbone, residui della distillazione; Basi distillate	648-133-00-9
Basi di catrame, carbone, frazione lutidinica; Basi distillate	648-031-00-4
Basi di catrame, derivati chinolinici; Basi distillate	648-131-00-8
Basi di catrame, carbone, frazione picolina; Basi distillate	648-030-00-9
Benazolina	607-153-00-8
Bendiocarb	006-046-00-8
Benomil	613-049-00-3
Benquinox	650-006-00-8
Bensulide	015-083-00-9
Bentazone	613-012-00-1
Benzaldeide	605-012-00-5
Benzale cloruro	602-058-00-8
Benzene	601-020-00-8
Benzidina	612-042-00-2
Benzidina sali	612-070-00-5
Benzilamina	612-047-00-X
S-Benzil diisopropil tiofosfato	015-127-00-7
Benzildimetilamina	612-074-00-7
Benzildimetilottadecilammonio 3-nitrobenzensolfonato	612-119-00-0
S-Benzil N,N-dipropiltiocarbammato	006-072-00-X
Benzile benzoato	607-085-00-9
Benzile bromuro	602-057-00-2
Benzile cloroformiato	607-064-00-4
Benzile cloruro	602-037-00-3
(N-Benzil-N-etil)amino-3'-idrossiacetofenone, cloridrato	606-040-00-0
5-Benzil-3-furilmetil (+-)-cis,trans-crisantemato	613-060-00-3
Benzilidene cloruro	602-058-00-8
Benzil-2-idrossidodeciltrimetilammonio benzoato	612-095-00-1
Benziltributilammonio 4-idrossinaftalen-1-solfonato	016-052-00-2
Benzina naturale; Nafta con basso punto di ebollizione	649-261-00-8
Benzina, C5-11, alto ottano stabilizzata riformata; Nafta di reforming catalitico con basso punto di ebollizione	649-312-00-4
Benzina, estrazione del carbone con solvente, nafta da idrocracking	648-151-00-7
Benzina, pirolisi, frazioni residue del debutanizzatore; Nafta con basso punto di ebollizione-non specificata	649-373-00-7
Benzina, pirolisi, idrogenata; Nafta con basso punto di ebollizione-non specificata	649-389-00-4
Benzina, prima distillazione, impianto di topping; Nafta con basso punto di ebollizione	649-270-00-7
Benzina, recupero vapori; Nafta con basso punto di ebollizione	649-269-00-1
Benzina; Nafta con basso punto di ebollizione-non specificata	649-378-00-4
Benzo(e)acefenantrilene	601-034-00-4

Nome	Numero indice
Benzo(a)antracene	601-033-00-9
p-Benzochinon-1-benzoilidrazon-4-ossima	650-006-00-8
p-Benzochinone	606-013-00-3
Benzo(d,e,f)crisene	601-032-00-3
Benzo(b)fluorantene	601-034-00-4
Benzo(j)fluorantene	601-035-00-X
Benzo(k)fluorantene	601-036-00-5
Benzoguanamina	613-038-00-3
Benzoile cloruro	607-012-00-0
Benzoile perossido	617-008-00-0
Benzoilprop-etil	607-154-00-3
1,2-Benzoisotiazol-3(2H)-one	613-088-00-6
Benzolo, frazioni di testa (carbone): olio leggero ridistillato, frazione bassobollente	648-003-00-1
Benzonitrile	608-012-00-3
Benzo(a)pirene	601-032-00-3
1-Benzotiazol-2-il-3-metilurea	006-036-00-3
Benzotiazol-2-tiolo	613-108-00-3
alfa-3-(3-(2H-Benzotriazol-2-il)-5-terz-butil-4-idrossifenil)propionil- omega-3-(3-(2H-benzotriazol-2-il)-5-terz-butil-4-idrossifenil) propionilossipoli(ossietilene)	607-176-00-3
Benzotricloruro	602-038-00-9
Benzotrifluoruro	602-056-00-7
Benziazuron	006-036-00-3
Berillio	004-001-00-7
Berillio composti esclusi i silicati doppi di alluminio e berillio	004-002-00-2
BGE	603-039-00-7
BHC	602-042-00-0
Bifenil-4-ilamina	612-072-00-6
3,3'-[[1,1'-Bifenil]-4,4'-diilbis(azo)]bis(4-aminonaftalen-1-solfonato)	611-027-00-8
Bifenile	601-042-00-8
3-(3-Bifenil-4-il-1,2,3,4-tetraidro-1-naftil)-4-idrossicumarina	607-157-00-X
Bifenil-2-olo	604-020-00-6
Binapacril	609-024-00-1
Bioalletrina	006-075-00-6
S-Bioalletrina	613-055-00-6
Bisfenolo A	604-030-00-0
Blasticidin-S	607-155-00-9
Boro tribromuro	005-003-00-0
Boro tricloruro	005-002-00-5
Boro trifluoruro	005-001-00-X
Brodifacoum	607-172-00-1
Bromelina, succo	647-005-00-X
Bromo	035-001-00-5
Bromobenzene	602-060-00-9
Bromobenzilbromotoluene, miscela di isomeri	602-071-00-9
O-(4-Bromo-2-clorofenil) O-etil S-propil tiofosfato	015-135-00-0

Nome	Numero indice
O-Bromo-2,5-diclorofenil O,O-dimetil ditiofosfato	015-108-00-3
Bromoetano	602-055-00-1
Bromoetilene	602-024-00-2
2-(2-Bromoetossi)anisolo	603-090-00-5
Bromofenoxim	609-032-00-5
Bromoformio	602-007-00-X
Bromofos	015-108-00-3
Bromofos-etile	015-064-00-5
Bromometano	602-002-00-2
2-Bromo-2-nitropropan-1,3-diolo	603-085-00-8
1-Bromopropano	602-019-00-5
alfa-Bromotoluene	602-057-00-2
Bromoxinil	608-006-00-0
Bromuro di idrogeno	035-002-00-0
Bronopol (DCI)	603-085-00-8
Brucina	614-006-00-1
Brucina, sali	614-007-00-7
Bufencarb	006-047-00-3
1,3-Butadiene	601-013-00-X
Butadiene diepossido	603-060-00-1
1,4-Butandiol-diacrilato	607-119-00-2
1,3-Butandiol-diacrilato	607-118-00-7
Butandiol glicidil etere	603-072-00-7
Butano	601-004-00-0
Butano contenente piu' di 0.1% di butadiene	601-004-01-8
n-Butanolo	603-004-00-6
2-Butanolo	603-004-00-6
2-Butanone	606-002-00-3
2-Butanone-ossima	616-014-00-0
2-Butenale	605-009-00-9
2-Butene	601-012-00-4
iso-Butene	601-012-00-4
1-Butene	601-012-00-4
3-(But-2-enil)-2-metil-ossociclopent-2-enil 2,2-dimetil-3-(3-metossi-2-metil-3-ossoprop-1-enil)ciclopropancarbossilato	613-026-00-8
3-(But-2-enil)-2-metil-ossociclopent-2-enil 2,2- dimetil-3-(2-metilpropenil) ciclopropancarbossilato	613-025-00-2
n-Butilamina	612-005-00-0
sec-Butilamina	612-052-00-7
2-sec-Butilamino-4-etilamino-6-metossi-1,3,5-triazina	613-063-00-X
2-terz-Butilamino-4-etilamino-6-metossi-1,3,5-triazina	613-066-00-6
2-terz-Butilaminoetil metacrilato	607-128-00-1
5(o 6)-terz-Butil-2'-cloro-6'-etilamino-3',7' '-dimetilspiro(isobenzofuran 1(1H),9'-xanten)-3-one	606-039-00-5
5-terz-Butil-2'cloro-6'-etilamino-3',7'-dimetilspiro(isobenzofuranxanten)-3-one	606-039-00-5
4-terz-Butil-2-clorofenil metilfosforamidato	015-074-00-X

Nome	Numero indice
terz-Butilcumile perossido	617-007-00-5
Butil(dialchilossi(dibutossifosforilossi)titanio (trialchilossi)titanio fosfato	015-142-00-9
2-sec-Butil-4,6-dinitrofenil 3-metilcrotonato	609-024-00-1
2-sec-Butil-4,6-dinitrofenil isopropil carbonato	006-028-00-X
2-terz-Butil-4,6-dinitrofenolo	609-030-00-4
n-Butile acetato	607-025-00-1
terz-Butile acetato	607-026-00-7
sec-Butile acetato	607-026-00-7
n-Butile acrilato	607-062-00-3
Butile butirrato	607-031-00-4
Butile cloroformiato	607-138-00-6
Butile diglicol	603-096-00-8
O,O-terz-Butile O-docosile monoperossiossalato	617-013-00-8
terz-Butile formiato	607-017-00-8
n-Butile formiato	607-017-00-8
sec-Butile formiato	607-017-00-8
1-Butilene	601-012-00-4
2-Butilene	601-012-00-4
iso-Butilene	601-012-00-4
terz-Butile nitrito	007-019-00-3
n-Butile nitrito	007-016-00-7
terz-Butile perossido	617-001-00-2
terz-Butile propionato	607-029-00-3
sec-Butile propionato	607-029-00-3
n-Butile propionato	607-029-00-3
5-Butil-2-etilamino-6-metilpirimidin-4-olo	603-086-00-3
Butiletilchetone	606-003-00-9
2-(4-terz-Butilfenossi)cicloesil prop-2-inil solfito	607-151-00-7
n-Butil-glicidil-etere	603-039-00-7
Butilglicol	603-014-00-0
Butilglicol acetato	607-038-00-2
5-terz-Butil-3-isossazolilamina cloridrato	613-104-00-1
n-Butilmetacrilato	607-033-00-5
6-terz-Butil-3-metil-2,4-dinitrofenil acetato	607-166-00-9
1-Butil-2-metilpiridinio bromuro	613-081-00-8
N,N',N'',N'''-tetrakis(4,6-bis(Butil-(N-metil-2,2,6,6-tetrametilpiperidin-4-il)amino)triazin-2-il)-4,7-diazadecan-1,10-diamina	613-078-00-1
sec-Butilnitrito	007-018-00-8
1-(5-terz-Butil-3-tiadiazol-2-il)-1,3-dimetilurea	616-020-00-3
S-terz-Butiltiometil O,O-dietil tiofosfato	015-139-00-2
But-2-in-1,4-diolo	603-076-00-9
2-Butin-1,4-diolo	603-076-00-9
Butirraldeide	605-006-00-2
Butirraldeideossima	616-013-00-5
Butirile cloruro	607-136-00-5
n-Butirronitrile	608-005-00-5

Nome	Numero indice
1-Butossi-2,3-epossipropano	603-039-00-7
2-Butossietanolo	603-014-00-0
2-Butossietilacetato	607-038-00-2
2-(2-Butossietossi)etanolo	603-096-00-8
2-(2-Butossietossi)etil tiocianato	615-018-00-X
3-Butossi-2-propanolo	603-052-00-8
1-(2-Butossipropossi)-2-propanolo	603-050-00-7
2-Butossi-2-tiociandietiletere	615-018-00-X
C.I. Bruno diretto 95	611-005-00-8
C.I.77603 Giallo di piombo solfocromato	082-009-00-X
C.I.77605 (Rosso piombo cromo molibdato solfato)	082-010-00-5
C.I.Direct Black 38	611-025-00-7
C.I.Direct Blue 6	611-026-00-2
C.I.Direct Red 28	611-027-00-8
Cadmio cianuro	048-004-00-1
Cadmio cloruro	048-008-00-3
Cadmio composti esclusi CdS.CdSe,CdS.HgS,CdS.ZnS e quelli espressamente indicati in questo allegato	048-001-00-5
Cadmio esafluosilicato	048-005-00-7
Cadmio fluoruro	048-006-00-2
Cadmio formiato	048-003-00-6
Cadmio ioduro	048-007-00-8
Cadmio ossido	048-002-00-0
Cadmio solfato	048-009-00-9
Cadmio solfuro	048-010-00-4
Caffeina	613-086-00-5
Calcio	020-001-00-X
Calcio carburo	006-004-00-9
Calciocianamide	615-017-00-4
Calcio cianuro	020-002-00-5
Calcio cloruro	017-013-00-2
Calcio cromato	024-008-00-9
Calcio 2,5-dicloro-4-(4-((5-cloro-4-metil-2-solfonatofenil)azo)-5-idrossi-3-metilpirazol-1-il) benzensolfonato	016-041-00-2
Calcio fosfuro	015-003-00-2
Calcio idruro	001-004-00-5
Calcio iodossibenzoato	053-004-00-X
Calcio ipoclorito ...% Cl attivo ( > 39% cloro attivo)	017-012-00-7
Calcio ottadecilxilenesolfonato	016-049-00-6
Calcio polisolfuri	016-005-00-6
Calcio solfuro	016-004-00-0
Calomelano	080-003-00-1
Camfeclor	602-044-00-1
Caprolattame	613-069-00-2
Captafol	613-046-00-7
Captan	613-044-00-6
Carbadox	613-050-00-9

Nome	Numero indice
Carbanonitril	615-013-00-2
Carbaril	006-011-00-7
Carbendazim	613-048-00-8
Carbofenotion	015-044-00-6
Carbofuran	006-026-00-9
Carbonile cloruro	006-002-00-8
4,4'-Carbonimidoil-bis(N,N-dimetilanilina)	612-096-00-7
4,4'-Carbonimidoil-bis(N,N-dimetilanilina), sali	612-097-00-2
Carbonio ossido	006-001-00-2
Carbonio solfuro	006-003-00-3
Carbonio tetracloruro	602-008-00-5
Carburanti, aerei a reazione, estrazione del carbone con solvente, idrogenati da idrocracking	648-154-00-3
Carburanti, diesel, estrazione del carbone con solvente, idrogenati da idrocracking	648-155-00-9
Cartap cloridrato	616-017-00-7
Catrame, carbone bruno;	648-145-00-4
Catrame, carbone bruno, bassa temperatura	648-146-00-X
Catrame, carbone, alta temperatura, residui della distillazione e stoccaggio; Residui solidi di carbon fossile	648-059-00-7
Catrame, carbone, alta temperatura, residui; Residui solidi di carbon fossile	648-061-00-8
Catrame, carbone, alta temperatura, alto contenuto in solidi; Residui solidi di carbon fossile	648-062-00-3
Catrame, carbone, alta temperatura; Catrame di carbone	648-082-00-2
Catrame, carbone, bassa temperatura, residui della distillazione; Olio di catrame, mediobollente	648-068-00-6
Catrame, carbone, bassa temperatura; Carbolio	648-083-00-8
Catrame, carbone, residui di stoccaggio; Residui solidi di carbon fossile	648-060-00-2
Catrame, carbone; Catrame di carbone	648-081-00-7
Cellobioidrolasi,eso-	647-003-00-9
Cellulasi	647-002-00-3
Cellulasi, escluse quelle espressamente indicate in questo allegato	647-004-00-4
Cera molle (petrolio), idrotrattata; Paraffina molle	649-247-00-1
Cera molle (petrolio), basso punto di fusione; Paraffina molle	649-248-00-7
Cera molle (petrolio), basso punto di fusione, idrotrattata; Paraffina molle	649-249-00-2
Cera molle (petrolio), a basso punto di fusione, trattata con carbone; Paraffina molle	649-250-00-8
Cera molle (petrolio), a basso punto di fusione, trattata con argilla; Paraffina molle	649-251-00-3
Cera molle (petrolio), a basso punto di fusione, trattata con acido silicico; Paraffina molle	649-252-00-9
Cera molle (petrolio), trattata con carbone; Paraffina molle	649-253-00-4
Cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura, trattate con argilla; Catrame di carbon fossile lavato.	648-053-00-4

Nome	Numero indice
Cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura; Catrame di carbon fossile lavato	648-065-00-X
Cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura; idrotrattate; Catrame di carbon fossile lavato	648-066-00-5
Cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura, trattato con acido silicico; Catrame di carbon fossile lavato	648-067-00-0
Cere paraffiniche (carbone), catrame di carbone bruno ad alta temperatura, trattate con carbone; Catrame di carbon fossile lavato.	648-052-00-9
Cherosene (petrolio), idrotrattato; Cherosene-non specificato	649-434-00-8
Cherosene (petrolio), idrodesolforato raffinato con solvente	649-430-00-6
Cherosene (petrolio), raffinato con solvente addolcito; Cherosene-non specificato	649-428-00-5
Cherosene (petrolio), addolcito; Cherosene-non specificato	649-427-00-X
Cherosene (petrolio), idrodesolforato; Cherosene-non specificato	649-423-00-8
Cherosene (petrolio); Cherosene di prima distillazione	649-404-00-4
Cherosene (petrolio), crackizzato termicamente idrodesolforato;	
Cherosene da cracking	649-412-00-8
Cherosene (petrolio), di prima distillazione taglio largo; Cherosene di prima distillazione	649-407-00-0
Chimotripsina	647-011-00-2
Chinone	606-013-00-3
Cianamide	615-013-00-2
Cianazina	613-013-00-7
4-Ciano-2,6-diiodofenil ottanoato	608-018-00-6
2'-(2-Ciano-4,6-dinitrofenilazo)-5'-(N,N-dipropilamino)propionanilide	611-010-00-5
Cianofenfos	015-110-00-4
O-4-Cianofenil O-etil feniltiofosfonato	015-110-00-4
N-(4-(3-(4-Cianofenil)ureido)-3-idrossifenil)-2-(2,4-di-terz-pentilfenossi)ottanamide	616-028-00-7
Cianofos	015-087-00-0
Cianogeno	608-011-00-8
2-(4-(4-Ciano-3-metilisotiazol-5-ilazo)-N-etil-3-metilanilino)etil acetato	611-021-00-5
2-Cianopropan-2-olo	608-004-00-X
Ciantoato	015-070-00-8
Cianurile cloruro	613-009-00-5
Ciclobutan-1,3-dione	606-008-00-6
4-Ciclododecil-2,6-dimetilmorfolina	613-057-00-7
Cicloesano	601-017-00-1
Cicloesanolo	603-009-00-3
Cicloesanone	606-010-00-7
Cicloesanone perossido, miscela	617-010-00-1
N-Cicloesil-2,5-dimetil-N-metossi-3-furamide	006-070-00-9
2-Cicloesil-4,6-dinitrofenolo	609-028-00-3
Cicloesile acrilato	607-116-00-6
Cicloesilmetildimetossisilano	014-011-00-3



Nome	Numero indice
Cicloott-4-en-1-il metil carbonato	006-071-00-4
Ciclopentano	601-030-00-2
Ciclopentanone	606-025-00-9
Ciclopropano	601-016-00-6
N-(Ciclopropilmetil)-alfa,alfa,alfa-trifluoro-2,6-dinitro-N-propil-p-toluidina	613-059-00-8
Ciexatin	050-002-00-0
Cinerina I	613-025-00-2
Cinerina II	613-026-00-8
Citrale	605-019-00-3
Clofenotano	602-045-00-7
Clofop-isobutile	607-160-00-6
Clopiralid	607-231-00-1
Cloralio idrato	605-014-00-6
Cloralosio	605-013-00-0
Cloramina T, sale sodico	616-010-00-9
Cloranile	602-066-00-1
Clordano	602-047-00-8
Clordecone	606-019-00-6
Clordimeform	650-007-00-3
Clordimeform cloridrato	650-009-00-4
Clorfenac	607-074-00-9
Clorfenetol	603-049-00-1
Clorfenprop-metile	607-075-00-4
Clorfenon	607-156-00-9
Clorfenvinfos	015-071-00-3
Clorfonio cloruro	015-085-00-X
Cloridazone	606-035-00-3
Cloridrina etilenica	603-028-00-7
Cloridrina solforica	016-017-00-1
Clormefos	015-114-00-6
Clormequato cloruro	007-003-00-6
Cloro	017-001-00-7
Cloroacetilcloruro	607-080-00-1
Cloroacetonnitrile	608-008-00-1
2-Cloroallile dietilditiocarbammato	006-038-00-4
Cloroanilina, di-	612-010-00-8
Cloroanilina, tri-	612-010-00-8
Cloroanilina, mono-	612-010-00-8
o-Clorobenzaldeide	605-011-00-X
2-Clorobenzaldeide	605-011-00-X
Clorobenzilato	607-159-00-0
S-4-Clorobenzil dietilditiocarbammato	006-063-00-0
Clorobenzolo	602-033-00-1
2-Clorobenzonitrile	608-013-00-9
7-Clorobiciclo(3.2.0)epa-2,6-dien-6-il dimetil fosfato	015-126-00-1
2-Cloro-1,3-butadiene	602-036-00-8

Nome	Numero indice
1-Clorobutano	602-059-00-3
4-Clorobut-2-inil 3-clorofenilcarbammato	006-020-00-6
3-Cloro-6-ciano-biciclo(2,2,1)eptan-2-on-O (N-metilcarbamoil) ossima	006-065-00-1
Clorocresolo	604-014-00-3
2-Cloro-N-(4,6-dicloro-1,3,5-triazin-2-il)anilina	613-053-00-5
O-(2-Cloro-1-(2,4-diclorofenil)vinil) O,O-dietil fosfato	015-071-00-3
(2-Cloro-3-dietilamino-1-metil-3-oxo-prop-1-en-il)-dimetil-fosfato	015-022-00-6
2-Cloro-2',6'-dietil-N-(metossimetil)acetanilide	616-015-00-6
1-Cloro-2,3-epossipropano	603-026-00-6
Cloroetano	602-009-00-0
2-Cloroetanolo	603-028-00-7
2-Cloro-4-etilamino-6-isopropil-amino-1,3,5-triazina	613-068-00-7
2-(4-Cloro-6-etilamino-1,3,5-triazin-2-il)amino-2-metil-propionitrile	613-013-00-7
2-Cloroetil cloropropil 2-cloroetilfosfonato, miscela di isomeri	015-143-00-4
Cloroetilene	602-023-00-7
tris(2-Cloroetil)fosfato	015-102-00-0
2-Cloroetil-trimetilammonio cloruro	007-003-00-6
Clorofacinone	606-014-00-9
O,O-bis(4-Clorofenil) N-acetimidoditiofosforamidato	015-092-00-8
O-[4-(4-Clorofenilazo)-fenil] O,O-dimetil tiofosfato	015-082-00-3
(4-Clorofenil)-benzensolfonato	650-003-00-1
4-Clorofenil-4-clorobenzensolfonato	607-156-00-9
(Clorofenil)(clorotolil)metano, miscela di isomeri	607-204-00-4
2-(4-(3-(4-Clorofenil)-4,5-diidropirazolil)fenilsulfonil)etildimetilammonio idrogenofosfonato	613-084-00-4
3-(4-Clorofenil)-1,1-dimetilurea	006-042-00-6
3-(4-Clorofenil)-1,1-dimetiluronio tricloroacetato	006-043-00-1
4-(3-(4-Clorofenil)-3-(3,4-dimetossifenil)acrilil)morfolina	613-102-00-0
1,1-bis(4-Clorofenil)etanolo	603-049-00-1
2-(alfa(4-clorofenil)fenilacetil)indan-1,3-dione	606-014-00-9
4-(2-Clorofenilidrazone)-3-metil-5-isossazolone	650-008-00-9
3-(4-Clorofenil)-N-metossi-N-metilurea	006-032-00-1
3-(1-(4-Clorofenil)-3-osso-butil)-4-idrossi-cumarina	607-057-00-6
2-(4-(3-(4-Clorofenil-2-pirazolin-1-il)fenilsulfonil)etildimetilammonio formiato	613-083-00-9
S-(Clorofeniltiometil) O,O-dimetil ditiofosfato	015-132-00-4
p-Clorofenolo	604-008-00-0
o-Clorofenolo	604-008-00-0
m-Clorofenolo	604-008-00-0
Clorofenolo	604-008-00-0
1-(4-Clorofenossi)-3,3-dimetil-1-(1,2,4-triazol-1-il)butanone	606-037-00-4
2-Cloro-3-fenossi-6-nitroanilina	612-120-00-6
Cloroformio	602-006-00-4
2-Cloro-1-ftalimidoetil O,O-dietil ditiofosfato	015-088-00-6
2-Cloro-4,6-bis(isopropilamino)-1,3,5-triazina	613-067-00-1
Clorometano	602-001-00-7

Nome	Numero indice
(Clorometil)bis(4-fluorofenil)metilsilano	014-008-00-7
S-clorometil O,O-dietil ditiofosfato	015-114-00-6
bis(Clorometil)etere	603-046-00-5
4-Cloro-3-metilfenolo	604-014-00-3
(tris(Clorometil)ftalocianinato)rame(II), prodotti di reazione con N-metilpiperazina e acido metossiacetico	029-005-00-6
Clorometil(metil)etere	603-075-00-3
Clorometil(metil)ossido	603-075-00-3
bis(Clorometil)ossido	603-046-00-5
2-Cloro-6-metilpirimidin-4-il-dimetilamina	613-004-00-8
3-Cloro-2-metil-1-propene	602-032-00-6
2-Cloro-4-nitroanilina	610-009-00-7
Cloronitroanilina	610-006-00-0
1-Cloro-4-nitrobenzene	610-005-00-5
p-Cloronitrobenzolo	610-005-00-5
O-(3-Cloro-4-nitrofenil) O,O-dimetil tiofosfato	015-042-00-5
O-(4-Cloro-3-nitro-fenil) O,O-dimetil tiofosfato	015-043-00-0
1-Cloro-1-nitropropano	610-007-00-6
3-Cloro-4,5,alfa,alfa,alfa-pentafluorotoluene	602-070-00-3
1-Cloropentano	602-022-00-1
2-Cloropentano	602-022-00-1
3-Cloropentano	602-022-00-1
Cloropicrina	610-001-00-3
Cloroprene	602-036-00-8
1-Cloropropano	602-018-00-X
2-Cloropropano	602-018-00-X
3-Cloropropene	602-029-00-X
Clorotalonil	608-014-00-4
N(2)-(4-Cloro-o-tolil)-N(1),N(1)-dimetilformamidina	650-007-00-3
N(2)-(4-Cloro-o-tolil)-N(1),N(1)-dimetilformamidina, cloridrato	650-009-00-4
o-Clorotoluene	602-040-00-X
p-Clorotoluene	602-040-00-x
m-Clorotoluene	602-040-00-X
alfa-Clorotoluene	602-037-00-3
Clorotoluene, miscela di isomeri	602-040-00-X
2-Cloro-6-triclorometilpiridina	006-057-00-8
4-( 2-Cloro-4-trifluorometil) fenossi-2-fluoroanilina, cloridrato	612-094-00-6
3-Cloro-5-trifluorometil-2-piridilamina	613-076-00-0
Clorpirifos	015-084-00-4
Clortiamide	616-005-00-1
Clortiofos	015-115-00-1
Clortion	015-042-00-5
Cloruro di idrogeno	017-002-00-2
Cobalto	027-001-00-9
Cobalto ossido	027-002-00-4
Cobalto solfuro	027-003-00-X
Colchicina	614-005-00-6

Nome	Numero indice
Colofonia	650-015-00-7
Coloranti del 4,4'-diarilazobifenile, esclusi quelli espressamente indicati in questo allegato	611-024-00-1
Combustibili, diesel : Gasolio-non specificato	649-224-00-6
Combustibili, diesel n.2: Gasolio-non specificato	649-227-00-2
4-CPA	607-073-00-3
4-CPA, sale di dietanolamina	607-161-00-1
Creosoto: Olio lavaggio gas	648-101-00-4
Cresil glicidil etere	603-056-00-X
p-Cresolo	604-004-00-9
o-Cresolo	604-004-00-9
m-Cresolo	604-004-00-9
Cresolo, miscela di isomeri	604-004-00-9
Crimidina	613-004-00-8
Criolite	009-016-00-2
tris(Cromato) di dicromo	024-010-00-X
Cromile dicloruro	024-005-00-2
composti di Cromo (VI), esclusi bario cromato e quelli espressamente indicati in questo allegato	024-017-00-8
Cromo(III)cromato	024-010-00-X
Cromo ossicloruro	024-005-00-2
Cromo triossido	024-001-00-0
Crotonaldeide	605-009-00-9
Crotoxifos	015-109-00-9
Crufomato	015-074-00-X
Cumacoloro	607-057-00-6
Cumafos	015-038-00-3
Cumafuril	607-058-00-1
Cumatetralil	607-059-00-7
Cumene	601-024-00-X
Cumene idroperossido 80%	617-002-00-8
o-Cumenil metilcarbammato	006-053-00-6
Cumitoato	015-086-00-5
2,4-D	607-039-00-8
2,4-D, sali ed esteri	607-040-00-3
Dalapon	607-162-00-7
Daminozide	607-171-00-6
Dapsone	612-084-00-1
Dazomet	613-008-00-X
2,4-DB	607-083-00-8
2,4-DB, sali	607-084-00-3
DDT	602-045-00-7
Decacloropentaciclo(5,2,1,0(2.6),0(3.9),0(5.8))decan-4-one	606-019-00-6
Decarbofurano	006-022-00-7
Deet	616-018-00-2
Demefion-O	015-116-00-7
Demefion-S	015-117-00-2

Nome	Numero indice
Demeton	015-118-00-8
Demeton-O	015-028-00-9
Demeton-O-metil	015-030-00-X
Demeton-S	015-029-00-4
Demeton-S-metil	015-031-00-5
Demeton-S-metilsolfone	015-078-00-1
Desmetrina	613-007-00-4
N,N'-Diacetilbenzidina	612-044-00-3
Diacetonacool	603-016-00-1
Diacetonacool, tecnico	603-017-00-7
Diacetonacoolmetiletere	606-023-00-8
Dialifos	015-088-00-6
Diallato	006-019-00-0
N,N-Diallilcloroacetamide	616-004-00-6
Diallile ftalato	607-086-00-4
Diamide 5-amino-3-fenil-1,2,4-triazol-1-il-N,N,N',N'-tetrametil fosfonica	015-024-00-7
4,4'-Diaminodifenile	612-042-00-2
4,4'-Diaminodifenilmetano	612-051-00-1
4,4'-Diaminodifenilsolfone	612-084-00-1
1,6-Diaminoesano	612-104-00-9
1,2-Diaminoetano	612-006-00-6
3-(2-(Diaminometileneamino)tiazol-4-ilmetiltio) propionitrile	608-021-00-2
1,2-Diaminopropano	612-100-00-7
2,6-Diaminotoluene	612-111-00-7
2,4-Diaminotoluene	612-099-00-3
2,5-Diaminotoluene	612-125-00-3
S-[(4,6-diamino-1,3,5-triazin-2-il)-metil] O,O-dimetil ditiofosfato	015-053-00-5
Dianidride 1,2,4,5-benzentetracarbossilica	607-098-00-X
Dianidride 3,3',4,4'-benzofenontetracarbossilica	607-100-00-9
Dianidride piromellitica	607-098-00-X
o-Dianisidina sali	612-037-00-5
Diarsenico pentossido	033-004-00-6
Diarsenico triossido	033-002-00-5
3,6-Diazaottano-1,8-diamina	612-059-00-5
Diazinon	015-040-00-4
4,5-Diazoferantrene	613-092-00-8
Diazometano	006-068-00-8
Dibenz(a,h)antracene	601-041-00-2
Dibenzoile perossido	617-008-00-0
1,2-Dibromo-3-cloropropano	602-021-00-6
O-(1,2-Dibromo-2,2-dicloroetil) O,O-dimetil fosfato	015-055-00-6
1,2-Dibromoetano	602-010-00-6
3,5-Dibromo-4-idrossibenzonitrile	608-006-00-0
Dibromometano	602-003-00-8
Di-n-butilamina	612-049-00-0
Di-sec-butilamina	612-049-00-0

Nome	Numero indice
2,4-Di-terz-butilcicloesano	606-043-00-7
Di-terz-butil-8-cumil perossido	617-007-00-5
Di-n-butiletere	603-054-00-9
Dibutylstagno idrogenoborato	005-006-00-7
Dichetene	606-017-00-5
Dicicloesilamina	612-066-00-3
Dicicloesilammonio nitrito	007-009-00-9
Dicicloesilcarbodiimide	615-019-00-5
Dicicloesilmetan-4,4'-diisocianato	615-009-00-0
Diciclopentadiene	601-044-00-9
Diclobenil	608-015-00-X
Diclofention	015-068-00-7
Diclofluamide	616-006-00-7
Diclofop-metile	607-165-00-3
Diclone	606-018-00-0
Dicloroacetile cloruro	607-067-00-0
Dicloroacetilene	602-069-00-8
S-2,3-dicloroallil diisopropiltiocarbammato	006-019-00-0
1,3-Diclorobenzene	602-067-00-7
1,4-Diclorobenzene	602-035-00-2
p-Diclorobenzene	602-035-00-2
1,2-Diclorobenzene	602-034-00-7
3,3'-Diclorobenzidina	612-068-00-4
3,3'-Diclorobenzidina, sali	612-069-00-X
o-Diclorobenzolo	602-034-00-7
2,6-Diclorobenzonitrile	608-015-00-X
1,4-Dicloro-2-butene	602-073-00-X
Dicloro(diclorofenil)metil metilbenzene, miscela di isomeri	602-072-00-4
Diclorodifeniltricloroetano	602-045-00-7
3,5-Dicloro-2,4-difluorobenzoilfluoruro	607-181-00-0
1,2-Dicloroetano	602-012-00-7
1,1-Dicloroetano	602-011-00-1
1,1-Dicloroetilene	602-025-00-8
1,2-Dicloroetilene	602-026-00-3
cis-Dicloroetilene	602-026-00-3
trans-Dicloroetilene	602-026-00-3
2,2'-Dicloroetiletere	603-029-00-2
2,4-Dicloro-3-etilfenolo	604-023-00-2
1,3-Dicloro-5-etil-5-metilimidazolidin-2,4-dione	613-075-00-5
Diclorofene	604-019-00-0
3-(3,4-Diclorofenil)-1,1-dimetilurea	006-015-00-9
1-((2-(2,4-Diclorofenil)1,3-diossolan-2-il)metil)-1H-1,2,4-triazolo	613-040-00-4
(2,4-Diclorofenil)(fenil)(5-pirimidinil)metanolo	603-043-00-9
1-(3,4-Diclorofenilimino) tiosemicarbazide	616-016-00-1
3-(3,4-Diclorofenil)-1-metil-1-metossiurea	006-021-00-1
2-(3,4-Diclorofenil)-4-metil-1,2,4-ossadiazolidindione	606-033-00-2
2,4-Diclorofenil-4-nitrofenil ossido	609-040-00-9

Nome	Numero indice
2,4-Diclorofenolo	604-011-00-7
2-(2,4-Diclorofenossi)etil solfato acido	016-025-00-5
N-Diclorofluorometiltio-N-fenil- N',N'-dimetilsolfamide	616-006-00-7
N-(Diclorofluorometiltio)ftalimide	616-012-00-X
Diclorometano	602-004-00-3
4,4'-Dicloro-2,2'-metilendifenolo	604-019-00-0
2,2'-Dicloro-4,4'-metilendianilina sali	612-079-00-4
2,2-Dicloro-4,4'-metilendianilina	612-078-00-9
2,3-Dicloro-1,4-naftochinone	606-018-00-0
2,6-Dicloro-4-nitroanisolo	610-008-00-1
1,1-Dicloro-1-nitroetano	610-002-00-9
1,2-Dicloropropano	602-020-00-0
1,3-Dicloropropan-2-olo	602-064-00-0
1,1-Dicloropropene	602-031-00-0
1,3-Dicloropropene	602-030-00-5
(Z)-1,3-Dicloropropene	602-030-00-5
3',4'-Dicloropropionanilide	616-009-00-3
3,5-Dicloro-4-(1,1,2,2-tetrafluoroetossi)anilina	612-093-00-0
2,6-Dicloro-tiobenzamide	616-005-00-1
alfa,alfa-Diclorotoluene	602-058-00-8
O-(2,2-Diclorovinil) O-metil-O-(2-etilsolfonil-etil)fosfato	015-077-00-6
2,2-Diclorovinil dimetil fosfato	015-019-00-X
Diclorprop	607-045-00-0
Diclorprop, sali	607-046-00-6
Diclorvos	015-019-00-X
Dicofano	602-045-00-7
Dicofol	603-044-00-4
Dicrotofos	015-073-00-4
Dicumarina	607-060-00-2
Dicumile perossido	617-006-00-X
Dieldrin	602-049-00-9
1,2,3,4-Diepossibutano	603-060-00-1
Dietanolamina	603-071-00-1
Dietilamina	612-003-00-X
2-Dietilaminoetanolo	603-048-00-6
2-Dietilamino etil metacrilato	607-127-00-6
O-2-Dietilamino-6-metilpirimidin-4-il O,O-dietil tiofosfato	015-099-00-6
3-(Dietilamino)-propilamina	612-062-00-1
2-(4-(Dietilaminopropilcarbamoil)fenilazo)-3-osso-N-(2,3-diidro-2-ossobenzimidazol-5-il)butirramide	611-017-00-3
2,9-bis(3-(Dietilamino)propilsolfamoil)chino(2,3-b)acridin-7,14-dione	613-100-00-X
2,6-Dietilanilina	612-106-00-X
N,N-Dietilanilina	612-054-00-8
2,6-Dietilbenzenamina	612-106-00-X
O,O-Dietil O-(4-bromo-2,5-diclorofenil)tiofosfato	015-064-00-5
Dietilcarbamoile cloruro	607-229-00-0
Dietilchetone	606-006-00-5

Nome	Numero indice
O,O-Dietil O-chinossalin-2-il tiofosfato	015-138-00-7
O,O-Dietil S[(2-cian-2-metiletil)-carbamoil]-metil tiofosfato	015-070-00-8
O,O-Dietil S-[(4-cloro-feniltio)-metil]ditiofosfato	015-044-00-6
O,O-Dietil O-(3-cloro-4-metil-cumarin-7-il)tiofosfato	015-038-00-3
O,O-Dietil S-[(6-cloro-2-osso-1,3-benzossazolin-3-il)metil] ditiofosfato	015-067-00-1
N,N-Dietil-1,3-diaminopropano	612-062-00-1
O,O-Dietil O-(2,4-diclorofenil)tiofosfato	015-068-00-7
O,O-Dietil S-[(2,5-dicloro-feniltio)-metil]ditiofosfato	015-037-00-8
Dietil-2,4-diidrossiciclodisilossano-2,4-diilbis(trimetilen) difosfonato, sale di tetrasodio, prodotti di reazione con metasilicato di disodio	650-014-00-1
O,O-Dietil ditiobis(tioformiato)	006-049-00-4
Dietile 1,3-ditiolan-2-iliden fosforamidato	015-111-00-X
Dietilenglicol diacrilato	607-120-00-8
Dietilenglicol dinitrato	603-033-00-4
Dietilentriamina	612-058-00-X
Dietile ossalato	607-147-00-5
O,O-Dietil S-(2-etiltio-etil)ditiofosfato	015-060-00-3
O,O-Dietil O-(2-etiltio-etil)tiofosfato	015-028-00-9
O,O-Dietil S-(etiltio-metil)ditiofosfato	015-033-00-6
O,O-Dietil N-etossi-carbonil-N-metil-carbamoil-metil ditiofosfato	015-045-00-1
O,O-Dietil O-(6-etossicarbonil-5-metilpirazolopirimidinil tiofosfato	015-137-00-1
N,N-Dietil-p-fenilendiamina	612-080-00-X
O,O-Dietil O-5-fenilossazol-3-il tiofosfato	015-131-00-9
O,O-Dietil O-1-fenil-1,2,4-triazol-3-il tiofosfato	015-140-00-8
O,O-Dietil ftalimidotiofosfonato	015-120-00-9
O,O-Dietil S-(N-isopropil-carbamoil-metil)ditiofosfato	015-032-00-0
O,O-Dietil O-2-isopropil-4-metil-pirimidin-6-il tiofosfato	015-040-00-4
O,O-Dietil O-(4-metilcumarin-7-il)tiofosfato	015-076-00-0
Dietil N-(4-metil-1,3-ditiolan-2-ilidene)fosforamidato	015-094-00-9
O,O-Dietil O-(3-metil-1H-pirazol-5-il)fosfato	015-023-00-1
O,O-Dietil O-4-metilsolfinil-fenil tiofosfato	015-090-00-7
O,O-Dietil O-(4-nitro-fenil)tiofosfato	015-034-00-1
O,O-Dietil 4-ossobenzotriazin-3-ilmetil ditiofosfato	015-056-00-1
O,O-Dietil 6-osso-7,8,9,10-tetraidro-benzo-(c)-cromen-2-il tiofosfato	015-086-00-5
O,O-Dietil O-pirazin-2-il tiofosfato	015-112-00-5
Dietilsolfato	016-027-00-6
N,N-Dietil-m-toluamide	616-018-00-2
O,O-Dietil O-(3,5,6-tricloro-2-piridil)tiofosfato	015-084-00-4
1,1-Dietossietano	605-015-00-1
alfa-(Dietossifosfinotioilimino)fenilacetonnitrile	015-100-00-X
Difacinone	606-038-00-X
Difenacum	607-157-00-X
Difenamide	616-007-00-2
2-Difenilacetilindan-1,3-dione	606-038-00-X
Difenilamina	612-026-00-5
2,2-Difenil-N,N-dimetilacetamide	616-007-00-2



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Difenile	601-042-00-8
Difenil(4-feniltiofenil)solfonio esafluoroantimonato	051-006-00-5
Difenilmetan-2,2'-diisocianato	615-005-00-9
Difenilmetan-2,4'-diisocianato	615-005-00-9
Difenilmetan-4,4'-diisocianato	615-005-00-9
Difenilmetan-diisocianato, isomeri e omologhi	615-005-01-6
Difenzoquat-metilsolfato	613-056-00-1
Digitossina	614-022-00-9
2,3-Diidro-2,2-dimetil-7-benzofuranil metilcarbammato	006-026-00-9
5,10-Diidro-5,10-diossonafto(2,3-b)(1,4)ditiazin-2,3-dicarbonitrile	613-021-00-0
5,6-Diidro-2-metil-1,4-ossatiin-3-carbossanilide 4,4-diossido	006-060-00-4
2,3-Diidro-5-metossi-2-osso-1,3,4-tiadiazol-3-ilme til O,O-dimetil ditiofosfato	015-069-00-2
5,5-Diidroresorcina dimetilcarbammato	006-010-00-1
1,4-Diidrossibenzene	604-005-00-4
1,3-Diidrossibenzene	604-010-00-1
1,2-Diidrossibenzene	604-016-00-4
Diisobutilchetone	606-005-00-X
Diisopropanolamina	603-083-00-7
Di-isopropilamina	612-048-00-5
Diisopropilamina	612-129-00-5
Diisopropilchetone	606-028-00-5
Di-isopropiletere	603-045-00-X
N,N'-Diisopropil-fosforodiamido fluoruro	015-062-00-4
O,O'-Diisopropil (pentatio)ditioformiato, O,O'-diisopropil(tetratio) ditioformiato, O,O'-diisopropil-( tritio)ditioformiato, miscela di isomeri	607-209-00-1
Dilauroil perossido	617-003-00-3
Dilitio 6-acetamido-4-idrossi-3-(4-(( 2-solfonatoossi)etilsolfonil) fenilazo)naftalen-2-solfonato	016-043-00-3
Dimefox	015-061-00-9
Dimepranol	603-077-00-4
Dimercurio dicloruro	080-003-00-1
Dimetan	006-010-00-1
N,N-Dimetil-p-fenilendiamina	612-031-00-2
O,O-Dimetil O-4-cianofenil tiofosfato	015-087-00-0
Dimetilacetale	605-007-00-8
N,N-Dimetilacetamide	616-011-00-4
O,S-Dimetil acetilfosforamidato	015-079-00-7
Dimetilamina	612-001-00-6
4-Dimetilaminobenzendiazonio 3-carbossi-4-dimetilaminobenzenesolfonato	611-021-00-0
4-Dimetilaminobenzendiazonio 3-carbossi-4-idrossibenzenesolfonato	611-022-00-0
2-Dimetil-amino-5,6-dimetil-4-pirimidinil N,N-dimetilcarbammato	006-035-00-8
2-Dimetilaminoetanolo	603-047-00-0

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alfa-(4-(4-Dimetilamino-alfa-(4-(etil( 3-sodiosolfonatobenzil)amino)fenil)benziliden)cicloesa-2,5-dieniliden(etil)ammonio)toluen-3-solfonato	650-010-00-X
2-Dimetilaminoetilamina	612-075-00-2
bis(2-Dimetilaminoetil)(metil)amina	612-109-00-6
2-Dimetilaminoetil metacrilato	607-132-00-3
2,4,6-tri(Dimetilaminometil)fenolo	603-069-00-0
3-(Dimetilamino-metilene-imino) fenil metilcarbammato	006-031-00-6
1-Dimetilaminopropan-2-olo	603-077-00-4
1-(1-(3-Dimetilaminopropil)-5-(3-((4-(1-(3-dimetilaminopropil)-1,6-diidro-2-idrossi-4-metil-6-oxo-5-piridinio-3-piridilazo)fenilazo)2,4 (o 2,6 o 3,5)-diidrossifenilazo)fenilazo)-1,2-diidro-6-idrossi-4-metil-2-oxo 3-piridil)piridinio dicloruro	611-016-00-8
3-(Dimetilamino)-propilamina	612-061-00-6
3-(Dimetilamino)propilurea	006-073-00-5
4-Dimetilamino-3-tolil metilcarbammato	006-018-00-5
S,S'-(Dimetilaminotrimetilen)bistiocarbammato, cloridrato	616-017-00-7
4-Dimetilamino-3,5-xilil metilcarbammato	006-054-00-1
Dimetilan	613-047-00-2
N,N-Dimetilanilina	612-016-00-0
2,2'-Dimetil-2,2'-azodipropionitrile	608-019-00-1
N,N'-dimetilbenzidina	612-043-00-8
3,3'-Dimetilbenzidina	612-041-00-7
3,3'-Dimetilbenzidina, sali	612-081-00-5
N,N-dimetilbenzilamina	612-074-00-7
alfa,alfa,alfa-Dimetilbenzil idroperossido	617-002-00-8
bis(alfa-alfa-Dimetilbenzil)perossido	617-006-00-X
2,2-Dimetil-1,3-benzodiossol-4-il metilcarbammato	006-046-00-8
2,2-Dimetil-1,3-benzodiossol-4-olo	604-022-00-7
1,1'-Dimetil-4,4'-bipiridinio	613-006-00-9
2,5-bis-(1,1-Dimetilbutil)idrochinone	604-025-00-3
N',N'-Dimetilcarbamoil(metiltio)metilenamina N-metilcarbammato	006-059-00-9
Dimetilcarbamoil cloruro	006-041-00-0
1-Dimetilcarbamoil-5-metilpirazol-3-il dimetilcarbammato	613-047-00-2
(Z)-2-Dimetilcarbamoil-1-metilvinil dimetil fosfato	015-073-00-4
bis(Dimetilcarbamoil) solfuro	006-005-00-4
Dimetil-carbonato	607-013-00-6
1,4-Dimetilcicloesano	601-019-00-2
N,N-Dimetil-2-(3-(4-clorofenil)-4,5-diidropirazol-1-il)fenilsolfonil)etilamina	613-073-00-4
N,N-Dimetil-1,3-diaminopropano	612-061-00-6
Dimetildiclorosilano	014-003-00-X
O,O-Dimetil O-(2-dietilamino-6-pirimidin-4-il)tiofosfato	015-134-00-5
1,2-Dimetil-3,5-difenilpirazolio metilsolfato	613-056-00-1
2-(4,4-Dimetil-diossoossazolidin-1-il)-2'-cloro-5'-(2-(2,4-di-terz-pentilfenossi)butirramido)-4,4-dimetil-3-ossovaleraniide	616-024-00-5
Dimetildiottadecilammonio idrogeno solfato	612-115-00-9

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tetrakis(Dimetilditetradecilammonio)esa-mu-ossotetra-mu3-ossodi- mu5-ossotetradecaossoottamolibdato(4-)	042-002-00-4
2,6-Dimetil-4-eptanone	606-005-00-X
Dimetiletere	603-019-00-8
5-(1,1-Dimetiletil)-3-(2,4-dicloro-5-(1-metiletossi)fenil)-5-1,3,4- ossadiazol-2(3H)-one	606-045-00-8
O,O-Dimetil S-2-(etilsolfinil)etil ditiofosfato	015-096-00-X
O,O-Dimetil S-(2-etilsolfinil-etil)tiofosfato	015-046-00-7
O,O-Dimetil S-(2-etiltio-etil)tiofosfato	015-031-00-5
N,N-Dimetil-m-fenilendiamina	612-031-00-2
Dimetil-4,4'-(O-fenilene)-bis-(3-tioallofanato)	006-069-00-3
3,5-Dimetilfenil metilcarbammato	006-067-00-2
1,1-Dimetilfenuuronio tricloroacetato	006-050-00-X
N,N-Dimetilformamide	616-001-00-X
O,O-Dimetil N-formil-N-metilcarbamoilmetil ditiofosfato	015-057-00-7
O,O-Dimetil S-ftalimidometil ditiofosfato	015-101-00-5
Dimetilglicol	603-031-00-3
1,2-Dimetilidrazina	007-013-00-0
N,N-Dimetilidrazina	007-012-00-5
1,2-Dimetilimidazolo	613-034-00-1
6-(2,3-Dimetilmaleimido)esil metacrilato	607-222-00-2
O,O-Dimetil S-2-(1-metilcarbamoiletiltio)etil tiofosfato	015-059-00-8
O,O-Dimetil S-(metil-carbamoil)metil tiofosfato	015-066-00-6
2,2'-Dimetil-4,4'-metilenbis(cicloesilamina)	612-110-00-1
Dimetil-1-metil-2-metossicarbonilvinil fosfato	015-020-00-5
Dimetil 1-metil-2-(metilcarbamoil)-vinil fosfato	015-072-00-9
Dimetil-(3-metil-4-(5-nitro-3-etossicarbonil-2- tienil)azo)fenilnitrilodipropionato	607-173-00-7
O,O-Dimetil O-(3-metil-4-nitrofenil)tiofosfato	015-054-00-0
3,3-Dimetil-1-(metiltio)butanone O-(N-metilcarbamoilossima)	006-064-00-6
Dimetil-4-(metiltio)fenil fosfato	015-119-00-3
Dimetil-S-2-metiltioetil tiofosfato	015-117-00-2
O,O-Dimetil O-2-metiltioetil tiofosfato	015-116-00-7
O,O-Dimetil O-(4-metiltiotolil)tiofosfato	015-048-00-8
O,O-Dimetil S-[(morfolincarbonil)metil] ditiofosfato	015-058-00-2
1,1'-bis(3,5-Dimetil-morfolinocarbonilmetil)-4,4'-bipiridilio	613-018-00-4
O,O-Dimetil O-(4-nitro-fenil)tiofosfato	015-035-00-7
Dimetilnitrosamina	612-077-00-3
7,7-Dimetil-3-ossa-6-azaottan-1-olo	603-089-00-X
O,O-Dimetil ossobenzotriazin-3-ilmetil ditiofosfato	015-039-00-9
5,5-Dimetil-3-ossocicloes-1-enil dimetilcarbammato	006-010-00-1
3,7-Dimetil-2,6-ottadienale	605-019-00-3
2,4-Dimetil-3-pentanone	606-028-00-5
1,1-Dimetil-3-(peridro-4,7-metanoinden-5-il)urea	006-058-00-3
Dimetilpropano	601-005-00-6
2,2-Dimetilpropan-1,3-propandiolo diacrilato	607-112-00-4
N,N'-(2,2-Dimetilpropiliden)esametilendiamina	612-092-00-5

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Dioxacarb	006-029-00-5
Dioxation	015-063-00-X
Dipentene	601-029-00-7
Dipicrilamina	612-019-00-7
Di-n-propilamina	612-048-00-5
Dipropilchetone	606-027-00-X
Dipropilenglicol monobutil etere	603-050-00-7
Dipropilentriamina	612-063-00-7
Di-n-propiletere	603-045-00-X
Diquat	613-005-00-3
Diquat, sali	613-089-00-3
Disodio, (5-(4'-((2,6-diidrossi-3-((2-idrossi-5-solfofenil)azo)fenil)azo) (1,1'-bifenil)-4-il)azo)salicilato(4-))cuprato(2-)	611-005-00-8
Disodio 1-amino-4-(4-benzensolfonamido-3-solfonatoanilino) antrachinone-2-solfonato	016-037-00-0
Disodio 4-amino-3-[[4'-((2,4-diaminofenil)azo)[1,1'-bifenil]4-il]azo]-6- (fenilazo)-5-idrossinaftalen-2,7-disolfonato	611-025-00-7
Disodio N-carbossimetil-N-(2-(2-idrossietossi)etil)glicinato	607-192-00-0
Disodio 6-((4-cloro-6-(N-metil)-2-toluidino)-1,3,5-triazin-2-ilamino)-1- idrossi-2-(4-metossi-2-solfonatofenilazo)naftalen-3-solfonato	016-038-00-6
Disodio 6-(2,4-diaminofenilazo)-3-(4-(4-(2,4-diaminofenilazo)anilino)- 3-solfonatofenilazo)-4-idrossinaftalen-2-solfonato	016-040-00-7
Disodio (5-((4'-((2,6-diidrossi-3-((2-idrossi-5- solfofenil)azo)fenil)azo)(1,1'-bifenil)-4-il)azo)salicilato(4-))cuprato(2-)	611-005-00-8
Disodio 6-(2,4-diidrossifenilazo)-3-(4-(4-(2,4-diidrossifenilazo) anilino)-3-solfonatofenilazo)-4-idrossinaftalen-2-solfonato	016-040-00-7
Disodio S,S'-esan-1,6-diildi(tiosolfato), diidrato	016-044-00-9
Disodio etilenbisditiocarbammato	006-014-00-3
Disodio metasilicato	014-010-00-8
Distillati (carbone-petrolio) aromatici a nuclei condensati: Distillati	648-072-00-8
Distillati (carbone), idrocracking di estrazione con solvente	648-149-00-6
Distillati (carbone), frazione intermedia di idrocracking di estrazione con solvente	648-152-00-2
Distillati (carbone), olio leggero di cokeria, taglio naftalene: Olio naftalinoso	648-084-00-3
Distillati (carbone), frazione intermedia idrogenata di idrocracking di estrazione con solvente	648-153-00-8
Distillati (carbone), estrazione con solvente liquido, primaria	648-148-00-0
Distillati (carbone), oli residui di pirolisi di catrame di carbone, oli naftalenici; Ridistillati	648-037-00-7
Distillati (catrame di carbone), oli naftalenici, privi di naftalene, estratti alcalini: Olio naftalinoso lavato	648-090-00-6
Distillati (catrame di carbone), oli leggeri, frazione neutra; Olio leggero lavato, altobollente	648-021-00-X
Distillati (catrame di carbone), frazione benzolo; Olio leggero	648-001-00-0
Distillati (catrame di carbone), tagli di testa; Olio di antracene II (pesante)	648-045-00-0

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Dimetilsolfamoid cloruro	016-033-00-9
Dimetilsolfato	016-023-00-4
O,S-Dimetil tiofosforamidato	015-095-00-4
N,N-Dimetil-toluidina	612-056-00-9
N,N-Dimetiltoluidina	612-056-00-9
Dimetil-2,2,2-tricloro-1-idrossi-etil-fosfonato	015-021-00-0
2,6-Dimetil-4-tridecilmorfolina	613-020-00-5
1,3-Dimetil-1-( 5-trifluorometil-1,3,4-tiadiazol-2-il)urea	616-021-00-9
Dimetoato	015-051-00-4
3,3'-Dimetossibenzidina sali	612-037-00-5
1,1-Dimetossietano	605-007-00-8
1,2-Dimetossietano	603-031-00-3
1,2-Dimetossipropano	603-100-00-8
Dimexano	016-024-00-X
Dinex	609-028-00-3
Dinex, sali ed esteri	609-029-00-9
Dinichel triossido	028-005-00-3
2,4-Dinitroanilina	612-040-00-1
Dinitrobenzene	609-004-00-2
Dinitrobenzolo	609-004-00-2
4,6-Dinitro-o-cresolo	609-020-00-X
O-(2,4-Dinitrofenil)-3,5-dibromo-4-idrossi-benzaldossima	609-032-00-5
Dinitrofenolo	609-016-00-8
Dinitrofenolo, sali	609-017-00-3
Dinitroglicol	603-033-00-4
4,6-Dinitro-2-(3-ottil)fenil metil carbonato-4,6-dinitro-2-(4-ottil)fenil metil carbonato	609-045-00-6
Dinitrotoluene	609-007-00-9
Dinitrotoluolo	609-007-00-9
Dinobuton	006-028-00-X
Dinocap	609-023-00-6
Dinocton	609-027-00-8
Dinocton-6	609-045-00-6
Dinosam	609-033-00-0
Dinosam, sali ed esteri	609-034-00-6
Dinoseb	609-025-00-7
Dinoseb, sali ed esteri, esclusi quelli espressamente indicati in questo allegato	609-026-00-2
Dinoterb	609-030-00-4
Dinoterb, sali ed esteri	609-031-00-X
1,4-Diossan-2,3-diil O,O,O',O'-tetraetil di(ditiofosfato)	015-063-00-X
1,4-Diossano	603-024-00-5
(1,3-Diosso-2H-benz(de)isochinolin-2-ilpropil)esadecildimetilammonio 4-toluensolfonato	612-118-00-5
2-(1,3-Diossolan-2-il)-fenil metilcarbammato	006-029-00-5
(2-(1,3-Diossolan-2-il)etil) trifenilfosfonio bromuro	015-150-00-2
1,3-Diossolano	605-017-00-2

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Distillati (catrame di carbone); Olio di antracene II (pesante)	648-047-00-1
Distillati (catrame di carbone), pece, oli pesanti; Olio di antracene II (pesante)	648-048-00-7
Distillati (catrame di carbone), acque madri della cristallizzazione di olio naftalenico: Olio naftalinoso ridistillato	648-087-00-X
Distillati (catrame di carbone), oli di naftalene, a basso tenore di naftalene; Olio naftalinoso ridistillato	648-086-00-4
Distillati (catrame di carbone), oli leggeri; olio carbolico	648-023-00-0
Distillati (catrame di carbone), frazione benzolo, residui di distillazione; Olio lavaggio gas	648-097-00-4
Distillati (catrame di carbone), oli leggeri, estratti alcalini; Estratto alcalino	648-112-00-4
Distillati (catrame di carbone), oli leggeri, estratti con acido; Olio leggero lavato, altobollente	648-022-00-5
Distillati (catrame di carbone), oli naftalenici, estratti alcalini; Estratto alcalino	648-114-00-5
Distillati (catrame di carbone), pece: Olio di antracene II (pesante)	648-049-00-2
Distillati (catrame di carbone), frazione benzolo, ricchi di benzene, toluene, xileni; olio leggero ridistillato, frazione bassobollente	648-004-00-7
Distillati (catrame di carbone), pece, frazione pirene: Ridistillati di olio di antracene II	648-051-00-3
Distillati (catrame di carbone), oli naftalenici; Olio naftalinoso	648-085-00-9
Distillati (catrame di carbone), oli naftalenici, frazione metilnaftalene; Olio di metilnaftalene	648-092-00-7
Distillati (catrame di carbone), frazione indolo-metilnaftalene: Olio di metilnaftalene	648-093-00-2
Distillati (catrame di carbone), oli naftalenici, estratti acidi; Olio di metilnaftalene lavato	648-094-00-8
Distillati (catrame di carbone), oli pesanti; Olio di antracene II (pesante)	648-044-00-5
Distillati (catrame da carbone), di testa, ricchi di fluorene: olio lavaggio gas ridistillato	648-042-00-4
Distillati (catrame di carbone), oli pesanti, frazione pirene: Ridistillati di olio di antracene II (pesante)	648-050-00-8
Distillati (catrame da carbone), di testa, esenti da fluorene: Olio lavaggio gas ridistillato	648-078-00-0
Distillati (petrolio), olio di pirolisi della produzione di alcheni-alchini, miscelato con carbone di catrame ad alta temperatura, frazione indene; Ridistillati	648-036-00-1
Distillati (petrolio), frazioni pesanti di cracking catalitico; Olio combustibile denso	649-010-00-2
Distillati (petrolio), frazioni pesanti di cracking termico; Olio combustibile denso	649-014-00-4
Distillati (petrolio), intermedi idrodesolforati crackizzati cataliticamente; Olio combustibile denso	649-021-00-2
Distillati (petrolio), idrodesolforati pesanti crackizzati cataliticamente; Olio combustibile denso	649-022-00-8

Nome	Numero indice
Distillati (petrolio), sotto vuoto, residui di petrolio; Olio combustibile denso	649-034-00-3
Distillati (petrolio), tagli leggeri sotto vuoto; Olio combustibile denso	649-036-00-4
Distillati (petrolio), sotto vuoto; Olio combustibile denso	649-038-00-5
Distillati (petrolio), intermedi da cracking catalitico, degradati termicamente; Olio combustibile denso	649-044-00-8
Distillati (petrolio), frazioni intermedie di idrotrattamento, punto di ebollizione intermedio; Nafta di "hydrotreating" con basso punto di ebollizione	649-331-00-8
Distillati (petrolio), idrodesolforati taglio intero intermedi; Olio combustibile denso	649-047-00-4
Distillati (petrolio), bassobollenti, processo di idrotrattamento di distillati leggeri; Nafta di "hydrotreating" con basso punto di ebollizione	649-332-00-3
Distillati (petrolio), frazioni paraffiniche pesanti; Olio base non raffinato o mediamente raffinato	649-051-00-6
Distillati (petrolio), intermedi altamente raffinati; Gasolio - non specificato	649-231-00-4
Distillati (petrolio), C3-6, ricchi di piperilene; Gas di petrolio	649-205-00-2
Distillati (petrolio), nafta pesante di idrotrattamento, frazioni di testa del deisoesanizzatore; Nafta di "hydrotreating" con basso punto di ebollizione	649-333-00-9
Distillati (petrolio), frazioni intermedie addolcite; Gasolio - non specificato	649-212-00-0
Distillati (petrolio), paraffinici intermedi, trattati con carbone; Gasolio - non specificato.	649-240-00-3
Distillati (petrolio), frazione intermedia raffinata con solvente; Gasolio - non specificato	649-214-00-1
Distillati (petrolio), C3-5, ricchi di 2-metil-2-butene, Nafta con basso punto di ebollizione-non specificata	649-358-00-5
Distillati (petrolio), frazione intermedia trattata con acido; Gasolio - non specificato	649-216-00-2
Distillati (petrolio), leggeri di prima distillazione; Nafta con basso punto di ebollizione	649-268-00-6
Distillati (petrolio), frazione leggera trattata con acido; Gasolio non specificato	649-217-00-8
Distillati (petrolio), distillati di petrolio crackizzati con vapore d'acqua polimerizzati, frazione C5-12; Nafta con basso punto di ebollizione-non specificati	649-359-00-0
Distillati (petrolio), frazione paraffinica pesante trattata con acido; Olio base non raffinato o mediamente raffinato	649-056-00-3
Distillati (petrolio), derivati da cracking con vapore di nafta, aromatici leggeri da idrotrattamento; Nafta di cracking catalitico con basso punto di ebollizione	649-293-00-2
Distillati (petrolio), frazione neftenica pesante neutralizzata chimicamente; Olio base non raffinato o mediamente raffinato	649-060-00-5

Nome	Numero indice
Distillati (petrolio), crackizzati a vapore, frazioni C5-12; Nafta con basso punto di ebollizione-non specificata	649-360-00-6
Distillati (petrolio), frazione intermedia neutralizzata chimicamente; Gasolio - non specificato	649-219-00-9
Distillati (petrolio), frazioni di testa di nafta di prima distillazione sottoposta a reforming catalitico; Nafta di reforming catalitico con basso punto di ebollizione	649-305-00-6
Distillati (petrolio), frazione intermedia di 'hydrotreating'; Gasolio-non specificato	649-221-00-X
Distillati (petrolio), crackizzati con vapore, frazione C5-10 miscelati con nafta leggera da petrolio crackizzato con vapore frazione C5; Nafta con basso punto di ebollizione-non specificata	649-361-00-1
Distillati (petrolio), residuo della colonna di frazionamento di un impianto di reforming catalitico, altobollenti; Gasolio - non specificato	649-228-00-8
Distillati (petrolio), aromatici pesanti; Nafta di cracking termico con basso punto di ebollizione	649-318-00-7
Distillati (petrolio), frazioni paraffiniche leggere; Olio base non raffinato o mediamente raffinato	649-050-00-0
Distillati (petrolio), frazioni di testa del depentanizzatore; Nafta con basso punto di ebollizione - non specificata	649-363-00-2
Distillati (petrolio), frazioni nafteniche pesanti; Olio base non raffinato o mediamente raffinato	649-053-00-7
Distillati (petrolio), derivati da pirolisi di raffinato e nafta, miscelazione benzine; Nafta di cracking termico con basso punto di ebollizione	649-320-00-8
Distillati (petrolio), frazione paraffinica leggera trattata con acido; Olio base non raffinato o mediamente raffinato	649-057-00-9
Distillati (petrolio), da stripper di impianto 'unfining' di nafta; Nafta con basso punto di ebollizione-non specificata	649-376-00-3
Distillati (petrolio), frazione naftenica leggera neutralizzata chimicamente; Olio base non raffinato o mediamente raffinato	649-061-00-0
Distillati (petrolio), nafta e gasolio di cracking termico, contenenti dimero C5; Nafta di cracking termico con basso punto di ebollizione	649-323-00-4
Distillati (petrolio), frazione naftenica pesante trattata con acido; Olio base non raffinato o mediamente raffinato	649-054-00-2
Distillati (petrolio), nafta crackizzata a vapore a bagno di calore, ricchi di C5; Nafta con basso punto di ebollizione-non specificata	649-381-00-0
Distillati (petrolio), intermedi idrodesolforati; Gasolio-non specificato	649-223-00-0
Distillati (petrolio), leggeri, da cracking termico, aromatici debutanizzati; Nafta di cracking termico con basso punto di ebollizione	649-325-00-5
Distillati (petrolio), frazioni nafteniche leggere; Olio base non raffinato o mediamente raffinato	649-052-00-1
Distillati (petrolio), ricchi di C6, Nafta con basso punto di ebollizione-non specificata	649-388-00-9



Nome	Numero indice
Distillati (petrolio), frazione paraffiniche leggere neutralizzate chimicamente; Olio base non raffinato o mediamente raffinato	649-059-00-X
Distillati (petrolio), frazione intermedia trattata con argilla; Gasolio - non specificato	649-220-00-4
Distillati (petrolio), residuo della colonna di frazionamento di un impianto di reforming catalitico, a punto di ebollizione intermedio; Gasolio - non specificato	649-229-00-3
Distillati (petrolio), frazione naftenica leggera trattata con acido; Olio base mediamente raffinato o mediamente raffinato	649-055-00-8
Distillati (petrolio), frazioni paraffiniche pesanti neutralizzate chimicamente; Olio base non raffinato o mediamente raffinato	649-058-00-4
Distillati (petrolio), paraffinici leggeri trattati con carbone; Gasolio - non specificato	649-239-00-8
Distillati (petrolio), crackizzati con vapore, frazione C8-12, polimerizzati, frazioni leggere della distillazione; Nafta con basso punto di ebollizione-non specificata	649-390-00-X
Distillati (petrolio), derivati da cracking con vapore di nafta, leggeri da idrotrattamento raffinati con solvente; Nafta modificata con basso punto di ebollizione	649-283-00-8
Distillati (petrolio), C7-9, ricchi di C8, idrodesolforati dearomatizzati; Nafta con basso punto di ebollizione-non specificata	649-394-00-1
Distillati (petrolio), leggeri idrotrattati da reforming catalitico, frazione aromatica C8-12; Nafta di reforming catalitico con basso punto di ebollizione	649-309-00-8
Distillati (petrolio), distillati di "steam cracking" del petrolio crackizzati; Gasolio da cracking	649-441-00-6
Distillati (petrolio), crackizzati con vapor d'acqua; Cherosene da cracking	649-408-00-6
Distillati (petrolio), paraffinici leggeri decerati con solvente; Olio base non specificato	649-469-00-9
Distillati (petrolio), distillati di petrolio crackizzati con vapore sottoposti a stripping-cracking, frazione C8-10; Cherosene da cracking	649-409-00-1
Distillati (petrolio), leggeri da cracking catalitico, degradati termicamente; Gasolio da cracking	649-447-00-9
Distillati (petrolio), dal depentanizzatore di reforming catalitico; Nafta di reforming catalitico con basso punto di ebollizione	649-301-00-4
Distillati (petrolio), naftenici pesanti decerati con solvente; Olio base-non specificato	649-472-00-5
Distillati (petrolio), da nafta e gasolio di cracking termico, estrattivi, Nafta di cracking termico con basso punto di ebollizione	649-324-00-X
Distillati (petrolio), pesanti crackizzati con vapore; Gasolio da cracking	649-452-00-6
Distillati (petrolio), distillati di petrolio crackizzati con vapore sottoposti a stripping-cracking, frazione C10-12; Cherosene da cracking	649-410-00-7

Nome	Numero indice
Distillati (petrolio), naftenici leggeri decerati con solvente; Olio base-non specificato	649-473-00-0
Distillati (petrolio), crackizzati termicamente, ricchi di idrocarburi alchilaromatici; Cherosene da cracking	649-415-00-4
Distillati (petrolio), frazione paraffinica pesante raffinata con solvente; Olio base-non specificato	649-454-00-7
Distillati (petrolio), leggeri da catrame pesante crackizzato con vapore; Cherosene da cracking	649-418-00-0
Distillati (petrolio), frazione paraffinica pesante decerata con solvente; Olio base-non specificato	649-474-00-6
Distillati (petrolio), raffinati con solvente idrocrackizzati, deparaffinati; Olio base-non specificato	649-495-00-0
Distillati (petrolio), frazione naftenica pesante raffinata con solvente; Olio base-non specificato	649-457-00-3
Distillati (petrolio), frazione leggera di "hydrotreating"; Cherosene-non specificato	649-422-00-2
Distillati (petrolio), paraffinici pesanti deparaffinati complessi; Olio base-non specificato	649-485-00-6
Distillati (petrolio), frazioni leggere di cracking catalitico; Gasolio da cracking	649-435-00-3
Distillati (petrolio), frazione peraffinica pesante trattata con argilla; Olio base-non specificato	649-460-00-X
Distillati (petrolio), frazioni leggere di idrocracking; Gasolio da cracking	649-437-00-0
Distillati (petrolio), paraffinici leggeri deparaffinati complesso; Olio base-non specificato	649-486-00-1
Distillati (petrolio), idrodesolforati leggeri crackizzati cataliticamente; Gasolio da cracking	649-439-00-5
Distillati (petrolio), frazione naftenica pesante trattata con argilla; Olio base-non specificato	649-463-00-6
Distillati (petrolio), nafta e gasolio di cracking termico; Nafta di cracking termico con basso punto di ebollizione	649-322-00-9
Distillati (petrolio), paraffinici pesanti deparaffinati con solventi, trattati con argilla; Olio base-non specificato	649-487-00-7
Distillati (petrolio), aromatici leggeri; Nafta di cracking termico con basso punto di ebollizione	649-319-00-2
Distillati (petrolio), naftenici pesanti 'hydrotreating'; Olio base-non specificato	649-465-00-7
Distillati (petrolio), crackizzati a vapore, frazione C8-12; Cherosene da cracking	649-411-00-2
Distillati (petrolio), paraffinici leggeri deparaffinati con solvente, trattati con argilla; Olio base-non specificato	649-489-00-8
Distillati (petrolio), alchilato, Cherosene-non specificato	649-419-00-6
Distillati (petrolio), paraffinici pesanti 'hydrotreating'; Olio base-non specificato	649-467-00-8
Distillati (petrolio), pesanti idrotrattati raffinati con solvente, idrogenati; Olio base-non specificato	649-504-00-8

Nome	Numero indice
Distillati (petrolio), paraffinici leggeri deparaffinati con solvente; idrotrattati; Olio base-non specificato	649-490-00-3
Distillati (petrolio), frazione leggera idrocrackizzata raffinata con solvente; Olio base-non specificato	649-512-00-1
Distillati (petrolio), idrodesolforati intermedi da "coker"; Gasolio da cracking	649-451-00-0
Distillati (petrolio), residuo della colonna di frazionamento di un impianto di reforming catalitico, bassobollenti; Gasolio-non specificato	649-230-00-9
Distillati (petrolio), paraffinici pesanti deparaffinati, idrotrattati; Olio base-non specificato	649-493-00-X
Distillati (petrolio), leggeri da cracking catalitico di catrame pesante; Cherosene da cracking	649-416-00-X
Distillati (petrolio), frazione leggera idrocrackizzata raffinata con solvente; Olio base-non specificato	649-505-00-3
Distillati (petrolio), frazione pesante idrogenata raffinata con solvente; Olio base-non specificato	649-513-00-7
Distillati (petrolio), paraffinici intermedi, trattati con argilla; Gasolio-non specificato	649-241-00-9
Distillati (petrolio), naftenici leggeri raffinati con solvente, idrotrattati; Olio base-non specificato	649-496-00-6
Distillati (petrolio), frazione paraffinica leggera raffinata con solvente; Olio base-non specificato	649-455-00-2
Distillati (petrolio), paraffinici leggeri deparaffinati, idrotrattati; Olio base-non specificato	649-494-00-5
Distillati (petrolio), frazione paraffinica leggera trattata con argilla; Olio base-non specificato	649-461-00-3
Distillati (petrolio), frazione leggera neutralizzata chimicamente; Cherosene-non specificato	649-421-00-7
Distillati (petrolio), naftenici leggeri 'hydrotreating'; Olio base-non specificato	649-466-00-2
Distillati (petrolio), da reforming catalitico, concentrato di aromatici pesanti; Gasolio-non specificato	649-232-00-X
Distillati (petrolio), frazioni di testa dallo stabilizzatore del frazionamento benzina leggera di prima distillazione; Nafta con basso punto di ebollizione	649-272-00-8
Distillati (petrolio), frazioni leggere di cracking termico, Gasolio da cracking	649-438-00-X
Distillati (petrolio), frazioni pesanti di idrocracking; Olio base-non specificato	649-453-00-1
Distillati (petrolio), frazione naftenica leggera raffinata con solvente; Olio base-non specificato	649-458-00-9
Distillati (petrolio), frazione naftenica leggera trattata con argilla; Olio base-non specificato	649-464-00-1
Distillati (petrolio), paraffinici leggeri di 'hydrotreating'; Olio di base-non specificato	649-468-00-3

Nome	Numero indice
1,3-Epossipropano	603-058-00-0
2,3-Epossì-1-propanolo	603-063-00-8
2,3-Epossipropile acrilato	607-117-00-1
2,3-Epossipropile metacrilato	607-123-00-4
1,3-bis(2,3-Epossipropossi)-2,2-dimetilpropano	603-094-00-7
1,3-bis(2,3-Epossipropossi)-benzene	603-065-00-9
1,4-bis(2,3-Epossipropossi)-butano	603-072-00-7
2,2-bis(4-(2,3-Epossipropossi)-fenil)-propano	603-073-00-2
1,2-Epossì-3-tolilossi-propano	603-056-00-X
Eptacloro	602-046-00-2
Eptacloro epossido	602-063-00-5
1,4,5,6,7,8,8-Eptacloro-2,3-epossi-3a,4,7,7a-tetraidro-4,7-metanoindano	602-063-00-5
1,4,5,6,7,8,8-Eptacloro-3a,4,7,7a-tetraidro-4,7-metanoindene	602-046-00-2
Eptano	601-008-00-2
3-Eptanone	606-003-00-9
4-Eptanone	606-027-00-X
2-Eptanone	606-024-00-3
EPTC	006-030-00-0
Eptenofos	015-126-00-1
5-Eptil-1,2,4-triazol-3-ilamina, miscela con 5-nonil-1,2,4-triazol-3-ilamina	613-077-00-6
Erbon	607-077-00-5
Erionite	650-012-00-0
Esacloroacetone	606-032-00-7
Esaclorobenzene	602-065-00-6
gamma-1,2,3,4,5,6-Esaclorocicloesano	602-043-00-6
1,2,3,4,5,6-Esaclorocicloesano	602-042-00-0
Esaclorociclopentadiene	602-078-00-7
1,2,3,4,10,10-Esacloro-6,7-epossi-1,4,4a,5,6,7,8,8a-ottaidro-1,4:5,8-dimetanonaftalene	602-051-00-X
1,2,3,4,10,10-Esacloro-1,4,4a,5,8,8a-esaidro-1,4-endo-5,8-endo-dimetanonaftalene	602-050-00-4
Esaclorofene	604-015-00-9
1,2,3,4,7,7-Esacloro-8,9,10-trinorborn-2-en-5,6-ilendimetile solfito	602-052-00-5
N-esadecil (o ottadecil )-N-esadecil (o ottadecil) benzamide	616-023-00-X
Esafuoropropene	602-061-00-4
Esafuosilicati, esclusi quelli espressamente indicati in questo allegato	009-013-00-6
Esametilendiamina	612-104-00-9
Esametilen-1,6-diisocianato	615-011-00-1
Esametilentetramina	612-101-00-2
Esametilfosforo triamide	015-106-00-2
Esan-1,6-diil bis(3-(3-benzotriazol-2-il-5-terz-butil-4-idrossifenil)propionato)	607-193-00-6
1,6-Esandioli diacrilato	607-109-00-8
Esanitrodifenilamina	612-018-00-1

Nome	Numero indice
Distillati (petrolio), frazioni leggere di nafta crackizzata con vapore d'acqua; Gasolio da cracking	649-440-00-0
Distillati (petrolio), intermedi crackizzati termicamente idrodesolforati; Gasolio da cracking	649-443-00-7
Distillati (petrolio), idrodesolforati taglio intero intermedi da 'coker'; Cherosene-non specificato	649-431-00-1
Distillati (petrolio), frazioni intermedie di cracking catalitico; Gasolio di cracking	649-436-00-9
Disul	016-025-00-5
Disulfoton	015-060-00-3
Ditalimfos	015-120-00-9
Ditianon	613-021-00-0
1,3-Ditietan-2-ilidenefosforamidato	015-124-00-0
1,3-Ditiolo(4,5,b)-chinossalin-2-tione	613-019-00-X
Diuron	006-015-00-9
Dixantogeno	006-049-00-4
DNOC	609-020-00-X
Dodecadoropentaciclo(5.2.1.0(2.6).0(3.9).0(5.8)decano bis(4-Dodecilfenil)iodonio esafluoroantimonato	602-077-00-1
Dodecil gallato	051-007-00-0
Dodecilguanidinio acetato	607-200-00-2
tris(1-Dodecil-3-metil-2-fenilbenzimidazolio) esacianoferrato	607-076-00-X
1-Dodecil-2-pirrolidone	615-014-00-8
Dodecil 3-(2,2,4,4-tetrametil-21-osso-7-ossa-3,20-diazadispiro (5.1.11.2)enicosan-20-il)propionato, miscela con tetradecile 3-(2,2,4,4-tetrametil-21-osso-7-ossa-3,20-diazadispiro (5.1,11,2)enicosan-20-il) propionato	613-099-00-6
Dodecil 3,4,5-triidrossibenzoato	607-174-00-2
Dodemorfo	607-200-00-2
Dodina	613-057-00-7
Drazoxolon	607-076-00-x
Edifenfos-	650-008-00-9
Efedrina	015-121-00-4
Endosulfan	614-023-00-4
Endotal	602-052-00-5
Endotal-sodio	607-150-00-1
Endotion	607-055-00-5
Endrina	015-049-00-3
Epicloridrina	602-051-00-X
EPN	603-026-00-6
1,2-Epossibutano	015-036-00-2
2,3-Eossi-1,4,5,6,7,8,8-eptacloro-3a,4,7,7a-tetraidro-4,7-metanoindano	603-102-00-9
(Epossietil)benzene	602-063-00-5
1-Epossietil-3,4-eossicicloesano	603-084-00-2
1,2-Eossi-3-fenossipropano	603-066-00-4
1,2-Eossipropano	603-067-00-X
	603-055-00-4

Nome	Numero indice
n-Esano	601-037-00-0
Esano, miscela di isomeri (contenente meno di 5% di n-esano)	601-007-00-7
1-Esanolo	603-059-00-6
2-Esanone	606-030-00-6
Esasodio 6,13-dicloro-3,10-bis((4-(2,5-disolfonatoanilino)-6-fluoro-1,3,5-triazin-2-ilamino)prop-3-ilamino)-5,12-diossa-7,14-diazapentacen-4,11-disolfonato	613-093-00-3
Esasodio 7-(4-(4-(4-(2,5-disolfonatoanilino)-6-fluoro-1,3,5-triazin-2-ilamino)-2-metilfenilazo)-7-solfonatoaftilazo)naftalen-1,3,5-trisolfonato	016-047-00-5
Eserina	614-020-00-8
Eserina, sali	614-021-00-3
n-Esillitio	003-002-00-X
Estratti (petrolio) solvente gasolio leggero sotto vuoto	649-005-00-5
Estratti (petrolio), frazione naftenica leggera distillata con solvente	649-001-00-3
Estratti (petrolio), frazione paraffinica pesante distillata con solvente	649-002-00-9
Estratti (petrolio), distillati naftenici pesanti con solvente	649-004-00-X
Estratti (petrolio), estrazione acida a freddo, C4-6: Nafta con basso punto di ebollizione-non specificata	649-362-00-7
Estratti (petrolio), distillati paraffinici pesanti, deasfaltati con solvente;	
Estratto aromatico distillato (trattato)	649-533-00-6
Estratti (petrolio), solvente distillato naftenico pesante, idrotrattato;	
Estratto aromatico distillato (trattato)	649-534-00-1
Estratti (petrolio), solvente nafta pesante, trattata con argilla: Nafta con basso punto di ebollizione-non specificata	649 391-00-5
Estratti (petrolio), con solvente, da distillato naftenico pesante, concentrato in aromatici; Estratto aromatico distillato (trattato)	649-531-00-5
Estratti (petrolio), con solvente, da distillato paraffinico pesante raffinato con solvente; Estratto aromatico distillato (trattato)	649-532-00-0
Estratti (petrolio), nafta solvente leggera da reforming catalitico: Nafta con basso punto di ebollizione-non specificata	649-382-00-6
Estratti (petrolio), nafta solvente pesante: Cherosene-non specificato	649-420-00-1
Estratti (petrolio), solvente distillato paraffinico pesante, idrotrattati;	
Estratto aromatico distillato (trattato)	649-535-00-7
Estratti (petrolio), solvente distillato paraffinico leggero, idrotrattati;	
Estratto aromatico distillato (trattato)	649-536-00-2
Estratti (petrolio), solvente distillato paraffinico leggero idrotrattato ;	
Estratto aromatico distillato (trattato)	649-537-00-8
Estratti (petrolio), solvente distillato paraffinico leggero, trattati con acido; Estratto aromatico distillato (trattato)	649-539-00-9
Estratti (petrolio), distillato paraffinico leggero, idrodesolforati;	
Estratto aromatico distillato (trattato)	649-540-00-4
Estratti (petrolio), solvente gasolio leggero sotto vuoto, idrotrattati;	
Estratto aromatico distillato (trattato)	649-541-00-X
Estratti (petrolio), gasolio leggero sotto vuoto solvente, trattato con argilla; Estratto aromatico distillato (trattato)	649-548-00-8

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Estratti (petrolio), distillato solvente paraffinico pesante, trattati con argilla; Estratto aromatico distillato (trattato)	649-542-00-5
Estratti (petrolio), solvente distillato paraffinico pesante decerato con solvente, idrodesolfato; Estratto aromatico distillato (trattato)	649-544-00-6
Estratti (petrolio), solvente distillato paraffinico leggero, trattato con argilla; Estratto aromatico distillato (trattato)	649-546-00-7
Estratti (petrolio), leggeri sotto vuoto, gasolio solvente, trattati con carbone; Estratto aromatico distillato (trattato)	649-547-00-2
Estratti (petrolio), solvente distillato naftenico pesante, idrodesolfato; Estratto aromatico distillato (trattato)	649-543-00-0
Estratti (petrolio), distillato paraffinico leggero solvente, trattato con carbone; Estratto aromatico distillato (trattato)	649-545-00-1
Estratti (petrolio), solvente di distillato naftenico leggero, idrodesolfato; Estratto aromatico distillato (trattato)	649-538-00-3
Estratti residui (carbone), catrame di carbone alcalino a bassa temperatura	648-110-00-3
Estratti, olio di catrame di carbone, alcalini; Estratto alcalino	648-113-00-X
Etanale	605-003-00-6
Etano	601-002-00-X
Etanolamina	603-030-00-8
Etanolo	603-002-00-5
Etantiolo	016-022-00-9
Etere etilico	603-022-00-4
Ethoxyquin	613-014-00-2
Etilamina	612-002-00-4
2-Etilamino-4-isopropilamino-6-metiltio-1,3,5-tri azina	613-010-00-0
2,4-bis(Etilamino)-6-metiltio-1,3,5-triazina	613-065-00-0
N-etilanilina	612-053-00-2
Etilati alcalini	603-041-00-8
Etilbenzene	601-023-00-4
Etil N-benzoil-N-(3,4-diclorofenil)-DL-alaninato	607-154-00-3
2-Etilbutanolo	603-051-00-2
Etil carbammato	607-149-00-6
Etilcarbamoilmetil O,O-dimetil ditiofosfato	015-089-00-1
Etil-cicloesil-glicidil-etere	603-068-00-5
1-(2-Etilcicloesilossi)-2,3-epossipropano	603-068-00-5
Etil 5-(1,2,3,5,6,7,8,9,10,10-decacloro-4-idrossipentaciclo (5,2,1,O(2,6).O(3,9).O(5,8)dec-4-il)-4-ossovalerato	607-079-00-6
Etil 4,4'-diclorobenzilato	607-159-00-0
Etil S,S-difenil ditiofosfato	015-121-00-4
Etil dimetilamina	612-076-00-8
S-Etil N-(dimetilaminopropil)tiocarbammato, cloridrato	006-061-00-X
Etil 2-(dimetossifosfinotioil)-2-fenilacetato	015-097-00-5
Etil S,S-dipropil ditiofosfato	015-107-00-8
S-Etil dipropil-tiocarbammato	006-030-00-0
Etile acetato	607-022-00-5
Etile acrilato	607-032-00-X

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Etile bromoacetato	607-069-00-1
Etile bromuro	602-055-00-1
Etile cloroacetato	607-070-00-7
Etile cloroformiato	607-020-00-4
Etile cloruro	602-009-00-0
Etile trans-3-dimetilaminoacrilato	607-185-00-2
Etile formiato	607-015-00-7
Etile lattato	607-129-00-7
Etile metacrilato	607-071-00-2
N,N'-Etilenbis(vinilsolfonilacetamide)	616-029-00-2
Etilendiamina	612-006-00-6
Etilendiammonio O,O-bis(ottile) ditiofosfato, miscela di isomeri	015-141-00-3
1,1-Etilen-2,2'-dipiridinio	613-005-00-3
Etilene	601-010-00-3
Etilene dibromuro	602-010-00-6
Etilene dicloruro	602-012-00-7
Etilene ossido	603-023-00-X
Etilene bis(tricloroacetato)	602-068-00-2
Etilen glicol	603-027-00-1
Etilenglicol dimetacrilato	607-114-00-5
Etilenglicol dimetiletere	603-031-00-3
Etilenglicol dinitrato	603-032-00-9
Etilenglicol monobutiletere	603-014-00-0
Etilenglicol monobutiletere acetato	607-038-00-2
Etilenglicol monoetiletere	607-037-00-7
Etilenglicol monoisopropiletere	603-013-00-5
Etilenglicol monometiletere	603-011-00-4
Etilenimina	613-001-00-1
Etile nitrato	007-007-00-8
Etile nitrito	007-006-00-2
Etilentiourea	613-039-00-9
Etile ossalato	607-147-00-5
Etile propionato	607-028-00-8
2-Etilesan-1,3-diolo	603-087-00-9
3-(bis(2-Etilesil)aminometil)benzotiazol-2(3H)-tione	613-080-00-2
2-Etilesil 3,5-bis(1,1-dimetiletil)-4-idrossifenilmetiltioacetato	607-203-00-9
bis(2-Etilesil)ditioacetato	607-219-00-6
2-Etilesile acrilato	607-107-00-7
Etile silicato	014-005-00-0
N,N-bis(2-Etilesil)-((1,2,4-triazol-1-il)metil)amina	613-072-00-9
O-Etil fenil etilditiofosfato	015-091-00-2
Etil glicol	603-012-00-X
Etilglicol acetato	607-037-00-7
Etilene glicol monoetiletere	603-012-00-X
Etilidene dicloruro	602-011-00-1
O-Etilidrossilamina	007-015-00-1
O-Etil O-2-isopropossicarbonilfenil N-isopropiltiofosforamidato	015-129-00-8



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O-Etil O-((isopropossicarbonil)-1-metil)vinil(etilamido)tiofosfato	015-136-00-6
Etilmercaptano	016-022-00-9
Etilmetilchetossima	616-014-00-0
Etil-metil-etere	603-020-00-3
Etil 4-metiltio-m-tolil N-isopropilfosforamidato	015-123-00-5
O-Etil O-(4-nitro-fenil)-fenil tiofosfonato	015-036-00-2
(Etil-3-ossobutanoato-O'1,O'3)(2-dimetilaminoetanolato)(1-metossi-2-propanolato)aluminio(III), dimerizzato	013-006-00-3
Etil 3,3-bis(terz-pentilperossi)butirato	607-213-00-3
S-Etil 1-peridroazepintioato	613-051-00-4
N-(1-Etilpropil)-2,6-dinitro-3,4-xilidina	609-042-00-X
S-Etilsolfinilmetil O,O-diisopropil ditiofosfato	015-128-00-2
S-2-Etil-sulfiniletil O,O-dimetil ditiofosfato	015-065-00-0
S-2-Etil-sulfinil-isopropil O,O-dimetil monotiofosfato	015-075-00-5
S-(2-Etilsulfonil-etil) O,O-dimetil tiofosfato	015-078-00-1
S-2-Etiltioetildimetil tiofosfato	015-031-00-5
O-2-Etiltioetil O,O-dimetil tiofosfato	015-030-00-X
2-Etiltiometilfenil metilcarbammato	006-048-00-9
O-Etil O-2,4,5-triclorofenil etiltiofosfonato	015-098-00-0
Etino	601-015-00-0
Etiocencarbe	006-048-00-9
Etion	015-047-00-2
Etimol	603-086-00-3
Etoato-metile	015-089-00-1
Etoprofos	015-107-00-8
4-Etossianilina	612-039-00-6
1,2-bis( Etossi-carbonil)-etil O,O-dimetil ditiofosfato	015-041-00-X
2-Etossietanolo	603-012-00-X
2-Etossietile acetato	607-037-00-7
2-Etossietile 2-(4-(3-cloro-5-trifluorometil-2-piridilossi)fenossi)propionato	607-207-00-0
2-Etossietile 2-(4-(7-fenil-2,6-diidro-2,6-diosso-1,5-diossaindacen-3-il)fenossi)acetato	607-217-00-5
O-6-Etossi-2-etilpirimidin-4-il O,O-dimetil tiofosfato	015-122-00-X
6-Etossi-2,2,4-trimetil-1,2-diidrochinolina	613-014-00-2
Etrimfos	015-122-00-X
Fenamifos	015-123-00-5
Fenaminosulf	611-003-00-7
Fenantrene, residui di distillazione: Ridistillati di olio di antracene II	648-077-00-5
1,10-Fenantrolina	613-092-00-8
Fenazaflor	613-015-00-8
Fenbutatina ossido	050-017-00-2
Fenclorfos	015-052-00-X
p-Fenetidina	612-039-00-6
Fenil 5,6-dicloro-2-trifluorometil-1-benzimidazolcarbossilato	613-015-00-8
p-Fenilendiamina	612-028-00-6
o-Fenilendiamina	612-028-00-6

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m-Fenilendiamina	612-028-00-6
m-Fenilendiamina dicloridrato	612-029-00-1
p-Fenilendiamina dicloridrato	612-029-00-1
1-Feniletilamina	612-107-00-5
1-Feniletil 3-(dimetossifosfinilossi)isocrotonato	015-109-00-9
2-Fenilfenolo	604-020-00-6
o-Fenilfenolo, sale sodico	604-021-00-1
Fenil glicol	603-098-00-9
Fenilidrazina	612-023-00-9
Fenilmercurio acetato	080-011-00-5
Fenilmercurio idrossido-fenilmercurio nitrato	080-008-00-9
S-(1-Fenil-1-metiletile) piperidin-1-carbotioato	613-110-00-4
4-Fenil-2-metilpentanolo	603-092-00-6
bis((tris(2-Fenil-2-metilpropil)stagno) ossido	050-017-00-2
Fenilossirano	603-084-00-2
1-Fenil-3-pirazolidone	606-022-00-2
S-(2-Fenilsulfonamido-etil) O,O-diisopropil ditiofosfato	015-083-00-9
6-Fenil-1,3,5-triazin-2,4-diamina	613-038-00-3
Fenitroton	015-054-00-0
Fenkapton	015-037-00-8
Fenoli, C9-11: Fenoli distillati	648-127-00-6
Fenoli, estratto di liscivio ammoniacale: Estratto alcalino	648-111-00-9
Fenolo	604-001-00-2
Fenoprop	607-047-00-1
Fenoprop, sali	607-048-00-7
m-Fenossibenzil 3-(2,2-diclorovinil)-2,2-dimetilciclopropan carbossilato	613-058-00-2
2-Fenossietanolo	603-098-00-9
Fenson	650-003-00-1
Fensulfotion	015-090-00-7
Fentin acetato	050-003-00-6
Fentin idrossido	050-004-00-1
Fention	015-048-00-8
Fentoato	015-097-00-5
Fenuron-TCA	006-050-00-X
Ferbam	006-051-00-5
Ferro tris(dimetilditiocarbammato)	006-051-00-5
Ficina	647-006-00-5
Fisostigmina	614-020-00-8
Fluonetil	607-078-00-0
Fluoro	009-001-00-0
2-Fluoroacetamide	616-002-00-5
bis(4-Fluorofenil)-metil-(1,2,4-triazol-4-ilmetil) silano, cloridrato	014-006-00-6
2-Fluoro-5-trifluorometilpiridina	613-071-00-3
Fluoruro tetrametilfosforodiamidico	015-061-00-9
Folpet	613-045-00-1
Fonofos	015-091-00-2

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Forato	015-033-00-6
Formaldeide ...%	605-001-00-5
Formaldeide, prodotti di reazione con butilfenolo	605-021-00-4
Formetanato	006-031-00-6
Formetanato cloridrato	006-052-00-0
Formotion	015-057-00-7
Fosacetima	015-092-00-8
Fosalone	015-067-00-1
Fosfamidone	015-022-00-6
Fosfolan	015-111-00-X
N,N-bis(Fosfonometil)glicina	015-125-00-6
Fosforile cloruro	015-009-00-5
Fosforo bianco	015-001-00-1
Fosforo giallo	015-001-00-1
Fosforo ossicloruro	015-009-00-5
Fosforo pentacloruro	015-008-00-X
Fosforo pentasolfuro	015-104-00-1
Fosforo rosso	015-002-00-7
Fosforo tribromuro	015-103-00-6
Fosforo tricloruro	015-007-00-4
Fosforo trisolfuro	015-012-00-1
Fosgene	006-002-00-8
Fosmet	015-101-00-5
Fostietan	015-124-00-0
Foxima	015-100-00-X
Fuberidazole	613-016-00-3
Furfurale	605-010-00-4
2-(2-Furil)benzimidazolo	613-016-00-3
Furmeciclox	006-070-00-9
Gas (petrolio) dal flashing ad alta pressione dell'effluente del reforming; Gas di raffineria	649-146-00-2
Gas (petrolio), alimentazione impianto Girbatol; Gas di petrolio	649-074-00-1
Gas (petrolio), C1-5, umidi; Gas di petrolio	649-092-00-X
Gas (petrolio), C2-3; Gas di petrolio	649-207-00-3
Gas (petrolio), C2-4, addolciti; Gas di petrolio	649-099-00-8
Gas (petrolio), C3-4; Gas di petrolio	649-177-00-1
Gas (petrolio), C3-4, ricchi di isobutano; Gas di petrolio	649-204-00-7
Gas (petrolio), C3-5, carica di alchilazione olefinica-paraffinica; Gas di petrolio	649-067-00-3
Gas (petrolio), C6-8, da reforming catalitico; Gas di raffineria	649-126-00-3
Gas (petrolio), C6-8, riciclo di reforming catalitico; Gas di raffineria	649-125-00-8
Gas (petrolio), carica di alchilazione; Gas di petrolio	649-095-00-6
Gas (petrolio), carica sistema amminico; Gas di raffineria	649-120-00-0
Gas (petrolio), condizionamento impianto reforming, ricchi di idrogeno; Gas di raffineria	649-135-00-2
Gas (petrolio), condizionamento impianto idrotrattamento-reforming, ricchi di idrogeno; Gas di raffineria	649-138-00-9

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Gas (petrolio), corrente di ritorno C2; Gas di raffineria	649-128-00-4
Gas (petrolio), cracker a vapore ricchi di C3; Gas di petrolio	649-115-00-3
Gas (petrolio), da "flash drum" di cherosene "sour" idrotrattato; Gas di raffineria	649-156-00-7
Gas (petrolio), da assorbitore secondario, frazionamento frazioni di testa cracking catalitico fluidizzato; Gas di raffineria	649-150-00-4
Gas (petrolio), da apparecchio stabilizzatore per frazionamento di benzina leggera di prima distillazione; Gas di petrolio	649-102-00-2
Gas (petrolio), da assorbitore idrogeno; Gas di raffineria	649-131-00-0
Gas (petrolio), da assorbitore secondario di scrubbing dell'impianto di cracking catalitico fluidizzato; Gas di raffineria	649-159-00-3
Gas (petrolio), da cracking catalitico; gas di petrolio	649-098-00-2
Gas (petrolio), da distillazione gas di raffineria di petrolio; Gas di raffineria	649-148-00-3
Gas (petrolio), da distillazione e cracking catalitico del grezzo; Gas di raffineria	649-168-00-2
Gas (petrolio), da frazioni leggere di cracking con vapore, concentrati in butadiene; Gas di petrolio	649-111-00-1
Gas (petrolio), da gasolio di cracking catalitico, frazioni di fondo del depropanizzatore, ricchi di C4 privi di acido; Gas di petrolio privi di acido; Gas di petrolio	649-208-00-9
Gas (petrolio), da impianto di cracking catalitico, ricchi di C1-5; Gas di petrolio	649-064-00-7
Gas (petrolio), da olio di miscela, ricco in idrogeno-azoto; Gas di raffineria	649-123-00-7
Gas (petrolio), da reforming catalitico di nafta di prima distillazione; Gas di petrolio	649-104-00-3
Gas (petrolio), da stripper di desolforazione "unifining" di nafta; Gas di petrolio	649-103-00-8
Gas (petrolio), da stripper di desolforazione di idrotrattamento di distillato pesante; Gas di raffineria	649-160-00-9
Gas (petrolio), da torre di assorbimento a spugna, frazionamento prodotti di testa impianti di cracking a letto fluido e desolforazione gasolio; Gas di raffineria	649-167-00-7
Gas (petrolio), dal frazionamento del grezzo; Gas di petrolio	649-100-00-1
Gas (petrolio), dal deesanizzatore; Gas di petrolio	649-101-00-7
Gas (petrolio), dal flashing a bassa pressione dell'effluente del reforming; Gas di raffineria	649-147-00-8
Gas (petrolio), dal separatore di prodotti di platforming; Gas di raffineria	649-154-00-6
Gas (petrolio), dal frazionamento del cracking catalitico fluidizzato; Gas di raffineria	649-157-00-2
Gas (petrolio), dal frazionamento del cracking catalitico fluidizzato; Gas di raffineria	649-158-00-8
Gas (petrolio), dal frazionamento dei residui del depropanizzatore; Gas di petrolio	649-096-00-1
Gas (petrolio), dall'impianto di cracking catalitico; Gas di petrolio	649-063-00-1

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Gas (petrolio), dalla stabilizzazione frazioni leggere di nafta di prima distillazione: Gas di petrolio	649-086-00-7
Gas (petrolio), dall'apparecchio di deesanzizzatore di nafta di prima distillazione, gamma completa di frazioni: Gas di petrolio	649-084-00-6
Gas (petrolio), dall'idrodesolforatore dell'impianto benzene: Gas di raffineria	649-121-00-6
Gas (petrolio), dallo stabilizzatore di prima distillazione: Gas di petrolio	649-106-00-4
Gas (petrolio), dalla stabilizzazione in depentanizzatore di cherosene 'sour' idrotrattato: Gas di raffineria	649-155-00-1
Gas (petrolio), dalla torre di 'preflash', distillazione del grezzo: Gas di raffineria	649-162-00-X
Gas (petrolio), dallo stripper del catrame: Gas di raffineria	649-163-00-5
Gas (petrolio), dallo stripper 'unifining': Gas di raffineria	649-164-00-0
Gas (petrolio), dallo stabilizzatore di platforming, frazionamento componenti leggeri: Gas di raffineria	649-161-00-4
Gas (petrolio), di raffineria: Gas di raffineria	649-153-00-0
Gas (petrolio), distillazione riassorbitore concentrazione gas: Gas di raffineria	649-130-00-5
Gas (petrolio), distillazione da cracking termico	649-139-00-4
Gas (petrolio), effluente da idrodesulfurazione di gasolio: Gas di raffineria	649-170-00-3
Gas (petrolio), frazione di testa stabilizzatore nafta polimerizzata cataliticamente, ricchi di C2-4: Gas di petrolio	649-065-00-2
Gas (petrolio), frazioni di testa della colonna del deisobutanizzatore: Gas di petrolio	649-070-00-X
Gas (petrolio), frazioni di testa depropanizzatore impianto recupero gas: Gas di petrolio	649-073-00-6
Gas (petrolio), frazioni di testa del depropanizzatore: Gas di petrolio	649-072-00-0
Gas (petrolio), frazioni di testa di splitter di cracking catalitico fluidizzato: Gas di petrolio	649-105-00-9
Gas (petrolio), frazioni di testa del depentanizzatore di idrotrattamento dell'unita' benzene: Gas di raffineria	649-149-00-9
Gas (petrolio), frazioni di testa del deetanizzatore: Gas di petrolio	649-069-00-4
Gas (petrolio), frazioni di testa dello splitter del butano: Gas di petrolio	649-206-00-8
Gas (petrolio), frazionati di benzina pesante isomerizzata, arricchiti in C4, esenti da idrogeno solforato: Gas di petrolio	649-075-00-7
Gas (petrolio), frazioni di testa crackizzate cataliticamente: Gas di petrolio	649-191-00-8
Gas (petrolio), hydrocracking, dal separatore a bassa pressione: Gas di raffineria	649-152-00-5
Gas (petrolio), idrotrattamento, reforming: Gas di raffineria	649-136-00-8
Gas (petrolio), idrotrattamento-reforming, ricchi di idrogeno-metano: Gas di raffineria	649-137-00-3
Gas (petrolio), impianto di reforming catalitico, ricchi di C1-4: Gas di petrolio	649-066-00-8

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Gas (petrolio), miscela di raffineria: Gas di petrolio	649-097-00-7
Gas (petrolio), nafta dal reforming catalitico, teste dello stripper Gas di raffineria	649-124-00-2
Gas (petrolio), nafta crackizzata cataliticamente, frazioni di fondo del debutanizzatore: ricchi di C3-5: Gas di petrolio	649-209-00-4
Gas (petrolio), nafta crackizzata cataliticamente, frazioni di testa del depropanizzatore, ricchi di C3 privi di acido: Gas di petrolio	649-062-00-6
Gas (petrolio), nafta di prima distillazione, frazione di testa stabilizzatore reforming catalitico: Gas di petrolio	649-112-00-7
Gas (petrolio), residui di cracking con vapore ad alta pressione di nafta: Gas di raffineria	649-173-00-X
Gas (petrolio), residuo 'visbreaking': Gas di raffineria	649-174-00-5
Gas (petrolio), ricchi di C4: Gas di petrolio	649-068-00-9
Gas (petrolio), ricchi di idrogeno: Gas di raffineria	649-132-00-6
Gas (petrolio), riciclo dall'impianto benzene, ricchi di idrogeno Gas di raffineria	649-122-00-1
Gas (petrolio), riciclo olio di miscela idrotrattato, ricchi di idrogeno-azoto: Gas di raffineria	649-133-00-1
Gas (petrolio), riciclo reformer catalitico di C6-8, arricchiti di idrogeno: Refinery gas	649-127-00-9
Gas (petrolio), riciclo, ricchi di idrogeno: Gas di raffineria	649-134-00-7
Gas (petrolio), scarico da flash drum di effluente dell'idrogenatore Gas di raffineria	649-172-00-4
Gas (petrolio), scarico di scrubber di gasolio a dietanolamina Gas di raffineria	649-169-00-8
Gas (petrolio), secchi dal depropanizzatore, ricchi di propilene Gas di petrolio	649-071-00-5
Gas (petrolio), secchi leggermente acidi, dall'impianto di concentrazione gas Gas di raffineria	649-129-00-X
Gas (petrolio), spurgo dell'idrodesolforazione del gasolio Gas di raffineria	649-171-00-9
Gas (petrolio), tagli di testa nafta di prima distillazione sottoposta a reforming catalitico Gas di raffineria	649-145-00-7
Gas (petrolio), dal depropanizzatore di idrocracking, ricchi di idrocarburi, Gas di petrolio	649-085-00-1
Gas combustibili, distillati di petrolio grezzo, Gas di petrolio	649-198-00-6
Gas combustibili, Gas di petrolio	649-197-00-0
Gas di coda (petrolio), da torre di riflusso frazionamento olio purificato di cracking catalitico e residuo sotto vuoto di cracking termico, Gas di petrolio	649-076-00-2
Gas di coda (petrolio), assorbitore di stabilizzazione nafta crackizzata cataliticamente, Gas di petrolio	649-077-00-8
Gas di coda (petrolio), dai processi di cracking e reforming catalitico e dal frazionatore combinato con l'idrodesolforatore, Gas di petrolio	649-078-00-3
Gas di coda (petrolio), dalla stabilizzazione per frazionamento di nafta riformata cataliticamente, Gas di petrolio	649-079-00-9

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Gas di coda (petrolio), idrodesolforato dall'impianto di stripping del gasolio, privi di idrogeno solforato; Gas di petrolio	649-187-00-6
Gas di coda (petrolio), nafta di prima distillazione dallo stabilizzatore, privi di idrogeno solforato; Gas di petrolio	649-188-00-1
Gas di coda (petrolio), nafta isomerizzata dallo stabilizzatore di frazionamento; Gas di petrolio	649-210-00-X
Gas di coda (petrolio), separatore nafta riformata cataliticamente; Gas di raffineria	649-141-00-5
Gas di coda (petrolio), alchilazione propano-propilene, preparazione carica deetanizzatore; Gas di petrolio	649-189-00-7
Gas di coda (petrolio), gasolio sotto vuoto dall'idrodesolforatore, privi di idrogeno solforato; Gas di petrolio	649-190-00-2
Gas di coda (petrolio), da stabilizzazione per frazionamento di idrocarburi crackizzati termicamente, coking del petrolio; Gas di petrolio	649-110-00-6
Gas di coda (petrolio), impianto di recupero di gas saturo, ricco di C1 2; Gas di petrolio	649-081-00-X
Gas di coda (petrolio), da stabilizzatore di nafta e distillato crackizzati cataliticamente; Gas di petrolio	649-108-00-5
Gas di coda (petrolio), cracking catalitico di gasolio, torre di assorbimento; Gas di petrolio	649-183-00-4
Gas di coda (petrolio), separatore nafta di prima distillazione idrodesolforata; Gas di raffineria	649-144-00-1
Gas di coda (petrolio), impianto di ricupero gas; Gas di petrolio	649-184-00-X
Gas di coda (petrolio), da idrodesolforatore di nafta di prima distillazione; Gas di raffineria	649-166-00-1
Gas di coda (petrolio), impianto di recupero gas, deetanizzatore, Gas di petrolio	649-185-00-5
Gas di coda (petrolio), nafta di polimerizzazione catalitica, stabilizzante di frazionamento; Gas di petrolio	649-179-00-2
Gas di coda (petrolio), distillato di prima distillazione dell'idrodesolforatore, privo di idrogeno solforato; Gas di petrolio	649-182-00-9
Gas di coda (petrolio), distillato idrodesolforato e nafta idrodesolforata dal frazionatore, privi di acidi; Gas di petrolio	649-186-00-0
Gas di coda (petrolio), da separatore di nafta idrodesolforata cataliticamente; Gas di raffineria	649-165-00-6
Gas di coda (petrolio), distillato crackizzato cataliticamente e nafta crackizzata cataliticamente, colonna di frazionamento ad assorbimento; Gas di petrolio	649-178-00-7
Gas di coda (petrolio), nafta riformata cataliticamente, stabilizzante di frazionamento, privi di idrogeno solforato; Gas di petrolio	649-180-00-8
Gas di coda (petrolio), distillato crackizzato, stripper di "hydrotreating"; Gas di petrolio	649-181-00-3
Gas di coda (petrolio), corrente mista impianto di gas saturo, ricco di C4; Gas di petrolio	649-080-00-4
Gas di coda (petrolio), dall'impianto di cracking termico di residui sotto vuoto; Gas di petrolio	649-082-00-5

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Gas di coda (petrolio), da assorbitore di nafta, gasolio e distillato crackizzati termicamente; Gas di petrolio	649-109-00-0
Gas di coda (petrolio), dall'assorbitore di rifrazionamento dell'apparecchiatura di cracking catalitico; Gas di raffineria	649-140-00-X
Gas di coda (petrolio), stabilizzatore nafta riformata cataliticamente; Gas di raffineria	649-142-00-0
Gas di coda (petrolio), separatore di idrotrattamento del distillato crackizzato; Gas di raffineria	649-143-00-6
Gas di petrolio, liquefatti, addolciti, frazione C4; Gas di petrolio	649-117-00-4
Gas di petrolio, liquefatti; Gas di petrolio	649-202-00-6
Gas di petrolio, liquefatti, addolciti; Gas di petrolio	649-203-00-1
Gas naturale (petrolio), miscela liquida grezza; Nafta con basso punto di ebollizione - non specificata	649-347-00-5
Gas naturale, condensati (petrolio); Nafta con basso punto di ebollizione, non specificata	649-346-00-X
Gas naturale, condensati; Nafta con basso punto di ebollizione-non specificata	649-375-00-8
Gasoli (petrolio), crackizzati con vapore d'acqua: Gasolio da cracking	649-442-00-1
Gasoli (petrolio), da hydrotreating sotto vuoto: Olio combustibile denso	649-015-00-X
Gasoli (petrolio), frazioni pesanti sotto vuoto: Olio combustibile denso	649-009-00-7
Gasoli (petrolio), idrodesolforati: Gasolio-non specificato	649-222-00-5
Gasoli (petrolio), leggeri sotto vuoto, idrodesolforati crackizzati termicamente	649-450-00-5
Gasoli (petrolio), neutralizzati chimicamente: Gasolio-non specificato	649-218-00-3
Gasoli (petrolio), pesanti sotto vuoto da coker idrodesolforati: Olio combustibile denso	649-039-00-0
Gasoli (petrolio), pesanti idrodesolforati sotto vuoto: Olio combustibile denso	649-017-00-0
Gasoli (petrolio), pesanti, distillazione atmosferica: Olio combustibile denso	649-032-00-2
Gasoli (petrolio), raffinati con solvente: Gasolio-non specificato	649-213-00-6
Gasoli (petrolio), trattati con acido: Gasolio-non specificato	649-215-00-7
Gasoli, idrotrattati: Gasolio-non specificato	649-238-00-2
Gasoli, paraffinici: Gasolio-non specificato	649-233-00-5
Giallo di piombo solfocromato	082-009-00-X
Glicerina trinitrato	603-034-00-X
Glicidile acrilato	607-117-00-1
Glicidile metacrilato	607-123-00-4
Glicidolo	603-063-00-8
Glicol etilenico	603-027-00-1
Glifosina	015-125-00-6
Gliossale ...%	605-016-00-7
Glucocloralosio	605-013-00-0



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Glucosidasi, beta	647-001-00-8
Glutaraldeide	605-022-00-X
Glutarale	605-022-00-X
Grassi lubrificanti: Grasso lubrificante	649-243-00-X
Guaiacolo	604-031-00-6
Guanidinio cloruro	607-148-00-0
Guazatina	612-087-00-8
Haloxifop-2-etossietile	607-207-00-0
HCH	602-042-00-0
HEPA	612-121-00-1
Idrazina	007-008-00-3
Idrazina bis(3-carbossi-4-idrossibenzensolfonato)	007-022-00-X
Idrazina, sali	007-014-00-6
Idrazobenzene	007-021-00-4
Idrocarburi, arricchiti in C5	649-402-00-3
Idrocarburi aromatici, C9-12, distillazione del benzene: Olio leggero ridistillato, frazione altobollente	648-013-00-6
Idrocarburi aromatici, C <sub>9</sub> =10 da cracking con vapore, idrotrattati: Cherosene da cracking	649-413-00-3
Idrocarburi aromatici, C8-9, sottoprodotto della polimerizzazione di resine idrocarburiche: olio leggero ridistillato, frazione altobollente	648-012-00-0
Idrocarburi aromatici, C20-28, policiclici, derivati da pirolisi mista pece di catrame di carbone-polietilene: Prodotti di pirolisi	648-074-00-9
Idrocarburi aromatici, C20-28, policiclici, derivati da pirolisi mista pece di catrame di carbone-polistirene: Prodotti di pirolisi	648-075-00-4
Idrocarburi aromatici, C6-10, ricchi di C8: olio leggero ridistillato frazione bassobollente	648-005-00-2
Idrocarburi aromatici, C7-12, ricchi di C8: Nafta di reforming catalitico con basso punto di ebollizione	649-311-00-9
Idrocarburi aromatici, C8, derivati da reforming catalitico: Nafta di reforming catalitico con basso punto di ebollizione	649-310-00-3
Idrocarburi aromatici, C8; Olio leggero ridistillato, frazione altobollente	648-010-00-X
Idrocarburi aromatici, C20-28, policiclici, derivati da pirolisi mista pece di catrame di carbone-polietilene-polipropilene: Prodotti di pirolisi	648-073-00-3
Idrocarburi aromatici, C6-8, derivati da pirolisi di raffinato e nafta: Nafta di cracking termico con basso punto di ebollizione	649-321-00-3
Idrocarburi aromatici, C6-10, trattati con acido, neutralizzati: Nafta con basso punto di ebollizione-non specificata	649-357-00-X
Idrocarburi aromatici, C8-10; Nafta con basso punto di ebollizione-non specificata	649-403-00-9
Idrocarburi aromatici, C7-8, prodotti di dealchilazione, residui di distillazione: Nafta con basso punto di ebollizione-non specificata	649-379-00-X
Idrocarburi C1-3; Gas di petrolio	649-090-00-9
Idrocarburi C1-4, frazione debutanizzatore; Gas di petrolio	649-091-00-4
Idrocarburi C1-4; Gas di petrolio	649-088-00-8

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Idrocarburi C16-20, residuo della distillazione di paraffine da idrocracking decerati con solvente	649-449-00-X
Idrocarburi C26-55, ricchi di aromatici	649-006-00-0
Idrocarburi C3-6, ricchi di C5, nafta crackizzata con vapore; Nafta con basso punto di ebollizione-non specificata	649-398-00-3
Idrocarburi C4-6, leggeri da depentanizzatore, hydrotreating aromatico; Nafta con basso punto di ebollizione-non specificata	649-380-00-5
Idrocarburi, C $\geq$ 5, arricchiti in C5-6	649-401-00-8
Idrocarburi, C1-4, addolciti; Gas di petrolio	649-089-00-3
Idrocarburi, C11-17, naftenici leggeri estratti con solvente; Gasolio-non specificato	649-237-00-7
Idrocarburi, C12-20, paraffinici idrotrattati, frazioni leggere della distillazione; Gasolio-non specificato	649-236-00-1
Idrocarburi, C13-17, naftenici leggeri estratti con solvente; Olio base-non specificato	649-517-00-9
Idrocarburi, C13-30, ricchi di aromatici, distillato naftenico estratto con solvente; olio base-non specificato	649-508-00-X
Idrocarburi, C14-29, naftenici leggeri estratti con solvente; Olio base-non specificato	649-518-00-4
Idrocarburi, C16-20 idrotrattati distillato intermedio, frazioni leggere della distillazione; Gasolio-non specificato	649-235-00-6
Idrocarburi, C16-32, ricchi di aromatici, distillato naftenico estratto con solvente; Olio base-non specificato	649-509-00-5
Idrocarburi, C17-30, distillati idrotrattati, frazioni leggere della distillazione; Olio base-non specificato	649-520-00-5
Idrocarburi, C17-30, residuo della distillazione atmosferica deasfaltato con solvente idrotrattato, frazioni leggere della distillazione; Olio base-non specificato	649-515-00-8
Idrocarburi, C17-40, residuo della distillazione idrotrattato deasfaltato con solvente, frazioni leggere della distillazione sotto vuoto; Olio base-non specificato	649-516-00-3
Idrocarburi, C2-4, arricchiti in C3; Gas di petrolio	649-201-00-0
Idrocarburi, C2-4; Gas di petrolio	649-093-00-5
Idrocarburi, C2-6, C6-8, da reforming catalitico di C6-8; Nafta di reforming catalitico con basso punto di ebollizione	649-302-00-X
Idrocarburi, C20-50, distillato sotto vuoto dell'idrogenazione dell'olio residuo; Olio base-non specificato	649-503-00-2
Idrocarburi, C20-50, paraffinici pesanti deparaffinati con solvente, idrotrattati; Olio base-non specificato	649-488-00-2
Idrocarburi, C20-58, idrotrattati; Olio base-non specificato	649-523-00-1
Idrocarburi, C27-42, dearomatizzati; Olio base-non specificato	649-519-00-X
Idrocarburi, C27-42, naftenici; Olio base-non specificato	649-524-00-7
Idrocarburi, C27-45, distillazione naftenica sotto vuoto; Olio base-non specificato	649-521-00-0
Idrocarburi, C27-45, dearomatizzati; Olio base-non specificato	649-522-00-6
Idrocarburi, C3; Gas di petrolio	649-094-00-0

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Idrocarburi, C3-11, distillati di cracking catalitico; Nafta di cracking catalitico con basso punto di ebollizione	649-291-00-1
Idrocarburi, C3-4; Gas di petrolio	649-199-00-1
Idrocarburi, C37-65, residui della distillazione sotto vuoto idrotrattati deasfaltati: Olio base-non specificato	649-511-00-6
Idrocarburi, C37-68, residui della distillazione sotto vuoto decerati deasfaltati idrotrattati: Olio base-non specificato	649-510-00-0
Idrocarburi, C4, distillato da cracker a vapore; Gas di petrolio	649-116-00-9
Idrocarburi, C4, Gas di petrolio	649-113-00-2
Idrocarburi, C4, privi di 1,3-butadiene e isobutene; Gas di petrolio	649-118-00-X
Idrocarburi, C4-11, cracking di nafta, privi di aromatici; Nafta con basso punto di ebollizione-non specificata	649-386-00-8
Idrocarburi, C4-12, cracking della nafta, idrotrattati; Nafta di "hydrotreating con basso punto di ebollizione	649-340-00-7
Idrocarburi, C4-5; Gas di petrolio	649-200-00-5
Idrocarburi, C5-11, ricchi di non aromatici, frazione leggera da reforming; Nafta di reforming catalitico con basso punto di ebollizione	649-314-00-5
Idrocarburi, C6-11, idrotrattati, dearomatizzati: Nafta di "hydrotreating" con basso punto di ebollizione	649-343-00-3
Idrocarburi, C6-7, cracking di nafta, raffinati con solvente, Nafta modificata con basso punto di ebollizione	649-287-00-X
Idrocarburi, C6-8, idrogenati dearomatizzati per assorbimento, raffinazione del toluene: Nafta con basso punto di ebollizione-non specificata	649-395-00-7
Idrocarburi, C7-12, ricchi di aromatici C>9, frazione pesante da reforming; Nafta di reforming catalitico con basso punto di ebollizione	649-313-00-X
Idrocarburi, C8-12, da cracking catalitico, neutralizzati chimicamente:	
Nafta di cracking catalitico con basso punto di ebollizione	649-296-00-9
Idrocarburi, C8-12, distillati da cracking catalitico: Nafta di cracking catalitico con basso punto di ebollizione	649-297-00-4
Idrocarburi, C8-12, da cracking catalitico, neutralizzati chimicamente, addolciti: Nafta di cracking catalitico con basso punto di ebollizione	649-298-00-X
Idrocarburi, C9-12, idrotrattati, dearomatizzati: Nafta di "hydrotreating" con basso punto di ebollizione	649-344-00-9
Idrocarburi, C9-16, idrotrattati, dearomatizzati, Cherosene, non specificato	649-429-00-0
Idrocarburi, distillati leggeri di nafta idrotrattati, raffinati con solvente; Nafta modificata con basso punto di ebollizione	649-285-00-9
Idrocarburi, residui paraffinici idrocrackizzati della distillazione, decerati con solvente: Olio base-non specificato	649-502-00-7
Idrocarburi, ricchi di C3-4, distillato di petrolio, Gas di petrolio	649-083-00-0
Idrocarburi, ricchi di C6, distillati leggeri di nafta idrotrattati, raffinati con solventi: Nafta modificata con basso punto di ebollizione	649-288-00-5

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3-Iodopropene	602-054-00-6
Iodossibenzene	053-003-00-4
Ioduro di idrogeno	052-002-00-9
Iosciamina	614-012-00-4
Iosciamina, sali	614-013-00-X
Ioxinil	608-007-00-6
Ioxinil ottanoato	608-018-00-6
Ipoazotide	007-002-00-0
Iprobenfos	015-127-00-7
IPSP	015-128-00-2
Isobenzan	602-053-00-0
Isobornil tiocianacetato	615-015-00-3
Isobutano	601-004-00-0
Isobutano contenente più di 0.1% di butadiene	601-004-01-8
Isobutil but-3-enoato	604-033-00-7
Isobutil 2-(4-(4-clorofenossi)fenossi)propionato	607-160-00-6
Isobutile acetato	607-026-00-7
Isobutile acrilato	607-115-00-0
Isobutile metacrilato	607-113-00-X
Isobutilene	601-012-00-4
Isobutil 3,4-epossibutirrato	607-191-00-5
Isobutile propionato	607-029-00-3
4,4'-Isobutiletilidendifenolo	604-024-00-8
Isobutilisopropildimetossisilano	014-009-00-2
Isobutilnitrito	007-017-00-2
Isobutirile cloruro	607-140-00-7
4-Isocianatosulfonil-toluene	615-012-00-7
Isodrin	602-050-00-4
Isofenfos	015-129-00-8
Isoforon diamina	612-067-00-9
Isoforon diisocianato	615-008-00-5
Isoforone	606-012-00-8
Isolan	006-009-00-6
Isopentano	601-006-00-1
Isoprene	601-014-00-5
Isoprocarb	006-053-00-6
Isopropanolamina	603-082-00-1
Isopropenilbenzene	601-027-00-6
Isopropilamina	612-007-00-1
2-Isopropilamino-4-metilamino-6-metiltio-1,3,5-triazina	613-007-00-4
Isopropilbenzene	601-024-00-X
3-Isopropil-2,1,3-benzotiazidin-4-one 2,2-diossido	613-012-00-1
Isopropile acetato	607-024-00-6
Isopropile cloroacetato	607-206-00-5
Isopropile formiato	607-016-00-2
N-Isopropil-N-fenil-2-cloroacetamide	616-008-00-8
3-(4-Isopropilfenil)-1,1-dimetilurea	006-044-00-7

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Idrocarburi, ricchi di C5, contenenti dicitopentadiene: Nafta con basso punto di ebollizione-non specificata	649-399-00-9
Idrochinone	604-005-00-4
Idrogeno	001-001-00-9
Idrogeno-2,3-bis(benzoilossi)succinato di R,R-2-idrossi-5-(1-idrossi-2 (fenilbut-2-ilamino)etil)benzamide	612-114-00-3
Idrogeno bromuro	035-002-00-0
Idrogeno perossido soluzione ...%	008-003-00-9
Idrogeno solforato	016-001-00-4
2-Idrossibifenile	604-020-00-6
4-Idrossi-3-(3-(4'-bromobifenil-4-il)-1,2,3,4-tetraidro-1-naftil)cumarina	607-172-00-1
bis(8-Idrossichinolinio) solfato	613-017-00-9
1-Idrossicicloesile perossido, miscela	617-010-00-1
4-Idrossi-3,5-diiodobenzonitrile	608-007-00-6
2-Idrossietile acrilato	607-072-00-8
2-Idrossietile metacrilato	607-124-00-X
2-Idrossietile ottil solfuro	603-088-00-4
tris(2-(2-Idrossietossi(etil)ammonio 3-acetoacetamido-4-metossibenzensolfonato	616-027-00-1
Idrossilamina	612-122-00-7
Idrossilammonio cloruro	612-123-00-2
Idrossilammonio idrogenosolfato	612-123-00-2
bis(Idrossilammonio)solfato	612-123-00-2
4-Idrossi-4-metil-pentan-2-one	603-016-00-1
2,5-bis(Idrossimetil)-tetraidrofurano	603-062-00-2
4-Idrossi-3-(3-oxo-1-(2-furil)butil)cumarina	607-058-00-1
4-Idrossi-3-(3-oxo-1-fenilbutil)-cumarina	607-056-00-0
5-(alfa-Idrossi-alfa-2-piridilbenzil)7(alfa-2-piridilbenziliden)biciclo[2.2.1]ept-5-en-2,3-dicarbossimide	650-004-00-7
alfa-Idrossipoli(metil-(3-(2,2,6,6-tetrametilpiperidin-4-ilossi)propil)silossano)	014-013-00-4
Idrossipropile acrilato (2)	607-108-00-2
Idrossipropile acrilato, miscela 1-, 2-	607-108-00-2
Idrossipropile acrilato (1)	607-108-00-2
Idrossipropile metacrilato (1)	607-125-00-5
Idrossipropile metacrilato (2)	607-125-00-5
4-Idrossi-3-(1,2,3,4-tetraidro-1-naftil)cumarina	607-059-00-7
2,2'-spirobi(6-Idrossi-4,4,7-trimetilcromano)	604-026-00-9
Imazalil	613-042-00-5
Imazalil solfato	613-043-00-0
Imidazolin-2-tione	613-039-00-9
1,1'-Iminobis(ottametilen)diguanidina	612-087-00-8
1,1'-Iminodi-2-propanolo	603-083-00-7
3,3'-Iminodi(propilamina)	612-063-00-7
Iodio	053-001-00-3
Iodometano	602-005-00-9

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Isopropilglicol	603-013-00-5
4,4'-Isopropilidendifenolo	604-030-00-0
eso-4-Isopropil-1-metil-1,4-epossicicloesan-2-olo	603-091-00-0
(1-Isopropil-3-metil-1H-pirazol-2-il)-N,N-dimetil-carbammato	006-009-00-6
tris(Isopropil/terz-butilfenil) fosfato	015-151-00-8
S-2-isopropiltioetil O,O-dimetil ditiofosfato	015-130-00-3
5-Isopropil-3-tolil metilcarbammato	006-037-00-9
2-Isopropossi-etanolo	603-013-00-5
2-Isopropossifenil metilcarbammato	006-016-00-4
Isoproturon	006-044-00-7
Isotioato	015-130-00-3
Isoxation	015-131-00-9
Kelevano	607-079-00-6
Leptofos	015-093-00-3
Ligroina: Nafta con basso punto di ebollizione	649-263-00-9
Lindano	602-043-00-6
Linuron	006-021-00-1
Liquidi di carbone, soluzione di estrazione con solvente liquido	648-143-00-3
Liquidi di carbone, estrazione con solvente liquido	648-144-00-9
Litio	003-001-00-4
Litio-alluminio idruro	001-002-00-4
tetraLitio 6-amino-4-idrossi-3-(7-solfonato-4-(4-solfonatofenilazo)-1-naftilazo)naftalen-2,7-disolfonato	611-019-00-4
triLitio 4-idrossi-3-(4-(2-metossi-4-(3-solfonatofenilazo)fenilazo)-3-metilfenilazo)-6-(3-solfonatoanilino)naftalen-2-solfonato	611-013-00-1
Litio, sodio, idrogeno 4-amino-6-(5-(5-cloro-2,6-difluoropirimidin-4-ilamino)-2-solfonatofenilazo)-5-idrossi-3-(4-(2-(solfonatoossi)etil-solfonil) fenilazo)naftalen-2,7-disolfonato	016-045-00-4
Magnesio alchili	012-003-00-4
Magnesio fosfuro	015-005-00-3
Magnesio polvere (piroforica)	012-001-00-3
Magnesio polvere (stabilizzata) o trucioli	012-002-00-9
Malation	015-041-00-X
Malononitrile	608-009-00-7
Mancozeb	006-076-00-1
Maneb	006-077-00-7
Manganese biossido	025-001-00-3
Manganese solfato	025-003-00-4
Mannitolo esanittrato	603-036-00-0
MCPA	607-051-00-3
MCPA, sali ed esteri	607-052-00-9
MCPB	607-053-00-4
MCPB, sali ed esteri	607-054-00-x
Mecarbame	015-045-00-1
Mecoprop	607-049-00-2
Mecoprop, sali	607-050-00-8
Medinoterbe acetato	607-166-00-9

Nome	Numero indice
Mefosfolan	015-094-00-9
Menazone	015-053-00-5
m-Menta-1,3(8)-diene	601-047-00-5
p-Menta-1,8(9)-diene	601-029-00-7
8-p-Mentanile idroperossido	617-012-00-2
p-Mentano idroperossido	617-012-00-2
8-p-Mentilidroperossido	617-012-00-2
Mercaptobenzotiazolo	613-108-00-3
Mercaptodimetur	006-023-00-2
Mercurio	080-001-00-0
Mercurio alchili	080-007-00-3
Mercurio composti inorganici escluso il solfuro di mercurio (cinabro) e quelli espressamente indicati in questo allegato	080-002-00-6
Mercurio composti organici esclusi quelli espressamente indicati in questo allegato	080-004-00-7
Mercurio dicloruro	080-010-00-X
Mercurio fulminato	080-005-00-2
Mercurio ossicianuro	080-006-00-8
Mesitilene	601-025-00-5
Mesitile ossido	606-009-00-1
Metacrilati, esclusi quelli espressamente indicati in questo allegato	607-134-00-4
Metacrilonitrile	608-010-00-2
Metaldeide	605-005-00-7
Metallile cloruro	602-032-00-6
Metamidofos	015-095-00-4
Metam-sodio	006-013-00-8
Metano	601-001-00-4
Metanolo	603-001-00-X
Metantiolo	016-021-00-3
Metenamina	612-101-00-2
Methazole	606-033-00-2
Metidation	015-069-00-2
Metil acrilamidoetossiacetato (contenente $\geq 0.1\%$ di acrilamide)	607-190-00-X
Metil acrilamidoglicolato (contenente $\geq 0.1\%$ acrilamide)	607-210-00-7
Metil-n-amilchetone	606-024-00-3
tri-Metilamina	612-001-00-6
mono-Metilamina	612-001-00-6
di-Metilamina	612-001-00-6
2-Metilaminoetanolo	603-080-00-0
N-metilanilina	612-015-00-5
Metilati alcalini	603-040-00-2
2-Metilaziridina	613-033-00-6
Metil-ONN-azossimetile acetato	611-004-00-2
Metilazossimetile acetato	611-004-00-2
DL-alfa-Metilbenzilamina	612-107-00-5
Metil benzimidazol-2-ilcarbammato	613-048-00-8
O-Metil O-(4-bromo-2,5-diclorofenil)fenil tiofosfato	015-093-00-3

Nome	Numero indice
2-Metilbuta-1,3-diene	601-014-00-5
Metilbutano	601-006-00-1
2-Metilbutan-2-olo	603-007-00-2
3-Metil-2-butanone	606-007-00-0
Metil 1-(butilcarbamoil)benzimidazol-2-ilcarbammato	613-049-00-3
Metil-n-butilchetone	606-030-00-6
Metilbutilchetone	606-030-00-6
6-(1-Metilbutil)-2,4-dinitrofenolo	609-033-00-0
3-(1-Metilbutil)fenil metilcarbammato-3-(1-etilpropil)fenil metilcarbammato (3:1)	006-047-00-3
Metil 3-(3-terz-butil-4-idrossi-5-metilfenil)propionato	607-211-00-2
Metilcarbamoilmetil O,O-dimetil ditiofosfato	015-051-00-4
Metilcarbofenotion	015-132-00-4
Metil 3-(chinossalin-2-ilmetilen)carbazato 1,4-diossido	613-050-00-9
Metilcicloesano	601-018-00-7
2-Metilcicloesanololo	603-010-00-9
2-Metilcicloesanonone	606-011-00-2
Metilcloroacetato	607-205-00-X
Metil 2-cloro-3-p-clorofenil propionato	607-075-00-4
Metilcloroformio	602-013-00-2
Metil 3,4-diclorofenilcarbammato	006-062-00-5
Metil 2-(4-(2,4-diclorofenossi)fenossi) propionato	607-165-00-3
N-Metildietanolamina	603-079-00-5
4-Metil-1,3-dirossolan-2-one	607-194-00-1
Metile acetato	607-021-00-X
Metile acetoacetato	607-137-00-0
Metile acrilato	607-034-00-0
Metile bromuro	602-002-00-2
Metile cloroformiato	607-019-00-9
Metile alfa-((4,6-dimetossipirimidin-2-il)ureidosulfonil)-o-toluato	607-178-00-4
Metile formiato	607-014-00-1
Metile ioduro	602-005-00-9
Metile isotiocianato	615-002-00-2
Metile lattato	607-092-00-7
4,4'-Metilenbis(2-cloroanilina), sali	612-079-00-4
4,4'-Metilenbis(2-cloroanilina)	612-078-00-9
1,1'-(Metilenbis(4,1-fenilen))dipirrol-2,5-dione, miscela con N-(4-(4-(2,5-dirossopirrol-1-il)benzil) fenil)acetamide e con 1-(4-(4-(5-osso-2H	
2-furilidenamino)benzil)fenil)pirrol-2,5-dione	613-085-00-X
3,3'-Metilen-bis(4-idrossicumarina)	607-060-00-2
2,2'-Metilen-bis(3,4,6-triclorofenolo)	604-015-00-9
4,4'-Metilendianilina	612-051-00-1
4,4'-Metilendi-o-toluidina	612-085-00-7
Metilene bromuro	602-003-00-8
Metilene cloruro	602-004-00-3
Metilene ditiocianato	615-020-00-0
Metile ossido	603-019-00-8



Nome	Numero indice
Metile picrato	609-011-00-0
Metile propionato	607-027-00-2
5-Metil-3-eptanone	606-020-00-1
5-Metil-2-esanone	606-026-00-4
N-metiletanolamina	603-080-00-0
Metiletilchetone	606-002-00-3
4-Metil-m-fenilendiamina	612-099-00-3
2-Metil-m-fenilendiamina	612-111-00-7
4-Metil-m-fenilendiamina solfato	612-126-00-9
2-Metil-p-fenilendiamina	612-125-00-3
Metilglicol	603-011-00-4
Metilglicol acetato	607-036-00-1
1-Metilimidazolo	613-035-00-7
2,2'-Metiliminodietanolo	603-079-00-5
Metilisoamilchetone	606-026-00-4
Metilisobutilchetone	606-004-00-4
Metilisocianato	615-001-00-7
Metilisopropilchetone	606-007-00-0
Metilmercaptano	016-021-00-3
Metilmetacrilato	607-035-00-6
Metil 2-(3-(6-metil-4-metossi-1,3,5-triazin-2-il)3-metilureidosolfonil) benzoato	607-177-00-9
3-(N-metil-N-(4-metilamino-3-nitrofenil)amino)propan-1,2-diolo cloridrato	603-099-00-4
eso-(+/-)-1-Metil-2-(2-metilbenzilossi)-4-isopropil-7-ossabicyclo(2.2.1)eptano	603-093-00-1
5-Metil-2-(1-metiletil)fenolo	604-032-00-1
6-Metil-2,4-bis(metiltio)fenilen-1,3-diamina	612-113-00-8
2-Metil-1-(4-metiltiofenil)-2-morfolinopropan-1-one	606-041-00-6
Metil 2-(3-nitrobenziliden) acetoacetato	607-224-00-3
1-Metil-3-nitro-nitrosoguanidina	612-083-00-6
7-(N-Metil-ossicarbamoil)-2-metil-2,3-diidrobenzofurano	006-022-00-7
Metilossirano	603-055-00-4
7-Metilotta-1,6-diene	601-046-00-X
2-Metil-2,4-pentandiolo	603-053-00-3
4-Metil-pentan-2-olo	603-008-00-8
4-Metil-pentan-2-one	606-004-00-4
4-Metilpent-3-en-2-one	606-009-00-1
2-Metil-1-pentilpiridinio bromuro	613-082-00-3
3-(3-Metilpent-3-il)isossazol-5-ilamina	613-074-00-X
S-2-Metilpiperidinocarbonilmetil O,O-dipropil ditiofosfato	015-133-00-X
(3-Metil-1H-pirazol-5-il)-N,N-dimetilcarbammato	006-040-00-5
2-Metilpiridina	613-036-00-2
4-Metilpiridina	613-037-00-8
N-Metil-2-pirrolidone	606-021-00-7
2-Metilpropan-2-olo	603-005-00-1
2-Metilpropanolo	603-004-00-6

Nome	Numero indice
2-Metilpropene	601-012-00-4
2-Metil-2-propenenitrile	608-010-00-2
6-(1-Metilpropil)-2,4-dinitrofenolo	609-025-00-7
Metil 3-solfamoi-2-tenoato	607-182-00-6
o-Metilstirene	601-028-00-1
alfa-Metilstirene	601-027-00-6
1-Metilteobromina	613-086-00-5
2-Metil-5-(1,1,3,3-tetrametilbutil)idrocchinone	604-027-00-4
N-Metil-N-2,4,6-tetranitroanilina	612-017-00-6
1-Metiltioetilidenamina metilcarbammato	006-045-00-2
2-Metil-2-tiometil-propionaldeide-O-(N-metilcarbamoil)-ossima	006-017-00-X
4-Metiltio-3,5-xilil metilcarbammato	006-023-00-2
N-Metil-m-toluidina	612-055-00-3
N-Metil-o-toluidina	612-055-00-3
N-Metil-p-toluidina	612-055-00-3
6-Metil-2-(4-(2,4,6-triaminopirimidin-5-ilazo)fenil)benzotiazol-7-solfonato di 2,2-iminodietanolo, N,N-diethylpropan-1,3-diamina, 2-metilaminoetanolo, miscela	611-012-00-6
Metiltriclorosilano	014-004-00-5
4-(1 (o 4 o 5 o 6)- Metil-8,9,10-trinorborn-5-en-2-il)piridina, miscela di isomeri	613-079-00-7
Metil-vinil-etere	603-021-00-9
Metiocarb	006-023-00-2
Metolcarb	006-056-00-2
Metomil	006-045-00-2
2-Metossianilina	612-035-00-2
4-Metossianilina	612-112-00-4
3-Metossibutil acetato	607-202-00-3
2-(Metossicarbonilidrazonometil) -chinossalina-1,4-diossido	613-050-00-9
4-Metossi-N,6-dimetil-1,3,5-triazin-2-ilamina	613-094-00-9
2-Metossietanolo	603-011-00-4
2-Metossietil acetato	607-036-00-1
2-Metossietil-carbamoilmetil O,O-dimetil ditiofosfato	015-080-00-2
bis(2-Metossietil)ftalato	607-228-00-5
2-Metossietilmercurio cloruro	080-009-00-4
2-Metossifenolo	604-031-00-6
2-Metossi-1-metiletilacetato	607-195-00-7
4-Metossi-4-metil-2-pentanone	606-023-00-8
4-Metossi-2-nitroanilina	612-038-00-0
1-Metossi-2-nitrobenzene	609-047-00-7
S-5-Metossi-4-ossopiran-2-il-metildimetil tiofosfato	015-049-00-3
1-Metossi-2-propanolo	603-064-00-3
bis-(Metossi-tiocarbonil) disolfuro	016-024-00-X
Metribuzin	606-034-00-8
Mevinphos	015-020-00-5
Mexacarbato	006-054-00-1
Mipafox	015-062-00-4

Nome	Numero indice
Mirex	602-077-00-1
Molibdeno triossido	042-001-00-9
Molinate	613-051-00-4
Molinuron	006-032-00-1
Monoclorobenzene	602-033-00-1
Monocrotofos	015-072-00-9
Mpnometilan	006-040-00-5
Monossido di carbonio	006-001-00-2
Monuron	006-042-00-6
Monuron-TCA	006-043-00-1
Morfotion	
MPMC	006-055-00-7
MTMC	006-056-00-2
Nafta (carbone), estrazione con solvente da idrocracking	648-150-00-1
Nafta (carbone), residui della distillazione: olio leggero ridistillato, frazione altobollente	648-009-00-4
Nafta (petrolio) da reforming "full-range": Nafta di reforming catalitico con basso punto di ebollizione	649-307-00-7
Nafta (petrolio) da cracking leggero con vapore, debenzenata, trattata termicamente: Nafta con basso punto di ebollizione-non specificata	649-392-00-0
Nafta (petrolio) leggera da reforming catalitico, frazione priva di aromatici: Nafta con basso punto di ebollizione-non specificata	649-377-00-9
Nafta (petrolio) leggera, ricca di C5, addolcita: Nafta con basso punto di ebollizione-non specificata	649-385-00-2
Nafta (petrolio), addolcita: Nafta con basso punto di ebollizione-non specificata	649-350-00-1
Nafta (petrolio), apparecchiatura di coking: Cherosene-non specificato	649-425-00-9
Nafta (petrolio), C4-12 butan-alchilato, ricca di isottano: Nafta modificata con basso punto di ebollizione	649-284-00-3
Nafta (petrolio), contenente aromatici: Nafta con basso punto di ebollizione-non specificata	649-372-00-1
Nafta (petrolio), crackizzata a vapore, idrotrattata, ricchi di aromatici C9-10: Cherosene da cracking	649-414-00-9
Nafta (petrolio), da reforming catalitico: Nafta di reforming catalitico con basso punto di ebollizione	649-308-00-2
Nafta (petrolio), da cracking leggero con vapore, trattata termicamente: Nafta con basso punto di ebollizione - non specificata	649-393-00-6
Nafta (petrolio), decerata cataliticamente: Nafta con basso punto di ebollizione-non specificata	649-354-00-3
Nafta (petrolio), distillazione primaria dell'intera gamma. Nafta con basso punto di ebollizione	649-265-00-X
Nafta (petrolio), distillato leggero di cracking catalitico: Nafta di cracking catalitico con basso punto di ebollizione	649-292-00-7

Nome	Numero indice
Nafta (petrolio), frazioni pesanti di distillazione primaria: Nafta con basso punto di ebollizione	649-264-00-4
Nafta (petrolio), frazioni pesanti di alchilazione: Nafta modificata con basso punto di ebollizione	649-275-00-4
Nafta (petrolio), frazioni leggere di alchilazione: Nafta modificata con basso punto di ebollizione	649-276-00-X
Nafta (petrolio), frazione leggera raffinata con solventi: Nafta modificata con basso punto di ebollizione	649-278-00-0
Nafta (petrolio), frazione pesante raffinata con solvente: Nafta modificata con basso punto di ebollizione	649-279-00-6
Nafta (petrolio), frazione leggera neutralizzata chimicamente: Nafta con basso punto di ebollizione-non specificata	649-353-00-8
Nafta (petrolio), frazione leggera crackizzata con vapore d'acqua, priva di benzene: Nafta con basso punto di ebollizione-non specificata	649-371-00-6
Nafta (petrolio), frazioni leggere di cracking catalitico: Nafta di cracking catalitico con basso punto di ebollizione	649-290-00-6
Nafta (petrolio), frazione leggera, addolcita: Nafta con basso punto di ebollizione-non specificata	649-374-00-2
Nafta (petrolio), frazioni leggere di idrocracking: Nafta con basso punto di ebollizione-Non specificata	649-348-00-0
Nafta (petrolio), frazioni leggere, distillazione primaria: Nafta con basso punto di ebollizione	649-266-00-5
Nafta (petrolio), frazioni leggere di cracking termico: Nafta di cracking termico con basso punto di ebollizione	649-317-00-1
Nafta (petrolio), frazione leggera di "hydrotreating": Nafta di "hydrotreating" con basso punto di ebollizione	649-328-00-1
Nafta (petrolio), frazioni leggere di cracking termico: Nafta di cracking termico con basso punto di ebollizione	649-316-00-6
Nafta (petrolio), frazioni pesanti da idrocracking: Nafta con basso punto di ebollizione-non specificata	649-349-00-6
Nafta (petrolio), frazione pesante neutralizzata chimicamente: Nafta con basso punto di ebollizione-non specificata	649-352-00-2
Nafta (petrolio), frazioni pesanti di cracking catalitico: Nafta di cracking catalitico con basso punto di ebollizione	649-289-00-0
Nafta (petrolio), frazioni leggere di reforming catalitico: Nafta di reforming catalitico con basso punto di ebollizione	649-299-00-5
Nafta (petrolio), frazioni pesanti di reforming catalitico: Nafta di reforming catalitico con basso punto di ebollizione	649-300-00-9
Nafta (petrolio), frazione pesante di "hydrotreating": Nafta di hydrotreating con basso punto di ebollizione	649-327-00-6
Nafta (petrolio), gamma completa idrodesolforata: Nafta di "hydrotreating" con basso punto di ebollizione	649-338-00-6
Nafta (petrolio), gamma completa di tagli da apparecchio di cokizzazione: Nafta con basso punto di ebollizione-non specificata	649-366-00-9
Nafta (petrolio), gamma completa frazioni di alchilato, contenente butano: Nafta modificata con basso punto di ebollizione	649-282-00-2

Nome	Numero indice
Nafta (petrolio), idrodesolforata taglio intero da "coker": Nafta con basso punto di ebollizione-non specificata	649-396-00-2
Nafta (petrolio), isomerizzazione: Nafta modificata con basso punto di ebollizione	649-277-00-5
Nafta (petrolio), isomerizzazione, frazione C6: Nafta modificata con basso punto di ebollizione	649-286-00-4
Nafta (petrolio), leggera crackizzata cataliticamente addolcita: Nafta di cracking catalitico con basso punto di ebollizione	649-295-00-3
Nafta (petrolio), leggera crackizzata termicamente, addolcita: Nafta di cracking termico con basso punto di ebollizione	649-326-00-0
Nafta (petrolio), leggera idrodesolforata: Nafta di "hydrotreating" con basso punto di ebollizione	649-329-00-7
Nafta (petrolio), leggera idrotrattata crackizzata a vapore: Nafta di "hydrotreating" con basso punto di ebollizione	649-339-00-1
Nafta (petrolio), leggera da cracking con vapore, idrogenata: Nafta di "hydrotreating" con basso punto di ebollizione	649-342-00-8
Nafta (petrolio), leggera crackizzata con vapore acqueo: Nafta con basso punto di ebollizione-non specificata	649-355-00-9
Nafta (petrolio), leggera idrodesolforata, dearomatizzata: Nafta con basso punto di ebollizione-non specificata	649-383-00-1
Nafta (petrolio), leggera, ricca di C5, addolcita: Nafta con basso punto di ebollizione-non specificata	649-384-00-7
Nafta (petrolio), leggera idrotrattata, contenente cicloalcani: Nafta di "hydrotreating" con basso punto di ebollizione	649-336-00-5
Nafta (petrolio), leggera addolcita: Nafta con basso punto di ebollizione-non specificata	649-397-00-8
Nafta (petrolio), leggera da bagno di calore ("heat-soaked"), da cracking con vapore: Nafta con basso punto di ebollizione-non specificata	649-387-00-3
Nafta (petrolio), leggera crackizzata termicamente idrodesolforata: Nafta di "hydrotreating" con basso punto di ebollizione	649-335-00-X
Nafta (petrolio), non addolcita: Nafta con basso punto di ebollizione	649-271-00-2
Nafta (petrolio), pesante crackizzata cataliticamente, addolcita: Nafta di cracking catalitico con basso punto di ebollizione	649-294-00-8
Nafta (petrolio), pesante crackizzata con vapore, idrogenata: Nafta di "hydrotreating" con basso punto di ebollizione	649-337-00-0
Nafta (petrolio), pesante idrodesolforata da reforming catalitico, frazione aromatica; Cherosene-non specificato	649-426-00-4
Nafta (petrolio), pesante di prima distillazione, contenente aromatici; Nafta con basso punto di ebollizione	649-273-00-3
Nafta (petrolio), pesante idrodesolforata: Nafta di "hydrotreating" con basso punto di ebollizione	649-330-00-2
Nafta (petrolio), prima distillazione, gamma completa di frazioni trattata con argilla; Nafta con basso punto di ebollizione-non specificata	649-368-00-X
Nafta (petrolio), prima distillazione, frazione leggera trattata con argilla; Nafta con basso punto di ebollizione-non specificata	649-369-00-5

Nome	Numero indice
Nafta (petrolio), raffinata con solvente idrodesolforata pesante; Gasolio-non specificato	649-234-00-0
Nafta (petrolio), taglio leggero di reforming catalitico, privi di composti aromatici; Nafta di reforming catalitico con basso punto di ebollizione	649-304-00-0
Nafta (petrolio), tagli aromatici medi crackizzati con vapore; Nafta con basso punto di ebollizione-non specificata	649-367-00-4
Nafta (petrolio), trattata con acido; Nafta con basso punto di ebollizione-non specificata	649-351-00-7
Nafta (petrolio), frazione di alchilazione dell'intera gamma: Nafta modificata con basso punto di ebollizione	649-274-00-9
Nafta (petrolio), frazione aromatica leggera crackizzata con vapore d'acqua: Nafta con basso punto di ebollizione-non specificata	649-370-00-0
Nafta solvente (carbone), contenente cumarone-indene; olio leggero ridistillato, frazione intermedia	648-008-00-9
Nafta solvente (carbone), taglio xilene-stirene; Olio leggero ridistillato, frazione intermedia	648-007-00-3
Nafta solvente (petrolio), alifatica leggera; Nafta con basso punto di ebollizione	649-267-00-0
Nafta solvente (petrolio), frazione aromatica leggera, idrotrattata; Nafta di "hydrotreating" con basso punto di ebollizione	649-334-00-4
Nafta solvente (petrolio), naftenica leggera idrotrattata; Nafta di "hydrotreating" con basso punto di ebollizione	649-341-00-2
Nafta solvente (petrolio), aromatica leggera; Nafta con basso punto di ebollizione-non specificata	649-356-00-4
Nafta solvente (petrolio), alifatica intermedia: Cherosene di prima distillazione	649-405-00-X
Nafta solvente (petrolio), alifatica pesante: Cherosene di prima distillazione	649-406-00-5
Nafta solvente (petrolio), idrocrackizzata pesante aromatica: Cherosene da cracking	649-417-00-5
Nafta solvente (petrolio), aromatica pesante: Cherosene non specificato	649-424-00-3
Nafta solvente (petrolio), aromatica pesante idrodesolforata: Cherosene non specificato	649-432-00-7
Nafta solvente (petrolio), idrodesolforata intermedia: Cherosene-non specificato	649-433-00-2
Nafta solvente,(carbone), leggera: olio leggero ridistillato, frazione basso bollente	648-006-00-8
Nafta; Nafta con basso punto di ebollizione.	649-262-00-3
1-Naftil metilcarbammato	006-011-00-7
1-Naftilamina	612-020-00-2
beta-Naftilamina	612-022-00-3
alfa-Naftilamina	612-020-00-2
2-Naftilamina	612-022-00-3
2-Naftilamina, sali	612-071-00-0
1,5-Naftilendiamina	612-089-00-9

Nome	Numero indice
Naftilen-1,5-diisocianato	615-007-00-X
2-(1-Naftil)-indan-1,3-dione	606-015-00-4
1-(1-Naftil)-2-tiourea	006-008-00-0
1-Naftolo	604-029-00-5
beta-Naftolo	604-007-00-5
2-Naftolo	604-007-00-5
Naled	015-055-00-6
Neopentano	601-005-00-6
Neopentilglicol diacrilato	607-112-00-4
Neopentilglicol diglicidil etere	603-094-00-7
Nichel	028-002-00-7
Nichel carbonato	028-010-00-0
Nichel carbonile	028-001-00-1
Nichel diidrossido	028-008-00-X
Nichel diossido	028-004-00-8
triNichel disolfuro	028-007-00-4
Nichel monossido	028-003-00-2
Nichel solfato	028-009-00-5
Nichel solfuro	028-006-00-9
Nicotina	614-001-00-4
Nicotina, sali	614-002-00-X
Nitrapyrin	006-057-00-8
Nitrile butirrico	608-005-00-5
1,1',1''-Nitrilotris-2-propanolo	603-097-00-3
5-Nitroacenaftene	609-037-00-2
o-Nitroanilina	612-012-00-9
m-Nitroanilina	612-012-00-9
p-Nitroanilina	612-012-00-9
2-Nitro-p-anisidina	612-038-00-0
2-Nitroanisolo	609-047-00-7
Nitrobenzolo	609-003-00-7
4-Nitrobifenile	609-039-00-3
Nitrocellulosa contenente non piu' del 12.6% di azoto	603-037-01-3
Nitrocellulosa contenente piu' del 12.6% di azoto	603-037-00-6
Nitroetano	609-035-00-1
Nitrofone	609-040-00-9
4-Nitrofenolo	609-015-00-2
p-Nitrofenolo	609-015-00-2
Nitroglicerina	603-034-00-X
Nitroglicol	603-032-00-9
Nitromannite	603-036-00-0
Nitrometano	609-036-00-7
2-Nitronaftalene	609-038-00-8
1-Nitropropano	609-001-00-6
2-Nitropropano	609-002-00-1
4-Nitrosoanilina	612-011-00-3
N-Nitrosodimetilamina	612-077-00-3

Nome	Numero indice
Nitrosodipropilamina	612-098-00-8
N-Nitroso-N-propil-1-propanamina	612-098-00-8
2-Nitrotoluene	609-006-00-3
4-Nitrotoluene	609-006-00-3
Nitrotoluidina	612-025-00-X
p-Nitrotoluolo	609-006-00-3
o-Nitrotoluolo	609-006-00-3
4-Nonilfenolo, prodotti di reazione con formaldeide e dodecan-1-tiolo	604-035-00-8
Norbormide	650-004-00-7
2-Norbornile acrilato	607-121-00-3
Noruron	006-058-00-3
Oleum ...% SO <sub>3</sub> (20-65% SO <sub>3</sub> )	016-019-00-2
Oli da gas (petrolio), crackizzati termicamente, idrodesolforati:	
Gasolio da cracking	649-444-00-2
Oli di assorbimento, frazione idrocarburica aromatica biciclica ed eterociclica: Olio lavaggio gas ridistillato	648-041-00-9
Oli di catrame, carbone, bassa temperatura: Olio di catrame, altobollente	648-109-00-8
Oli di catrame, carbone: olio carbolico	648-024-00-6
Oli di catrame, carbone bruno: olio leggero	648-002-00-6
Oli di estrazione (carbone), olio leggero: Estratto acido	648-028-00-8
Oli di estrazione (carbone), basi del catrame, frazione collidina: Basi distillate	648-032-00-X
Oli di estrazione (carbone), basi del catrame: Estratto acido	648-140-00-7
Oli di estrazione (carbone), acidici, privi di basi di catrame: Olio di metilnaftalene, lavato	648-096-00-9
Oli di estrazione (carbone), oli naftalenici: Estratto acido	648-130-00-2
Oli di paraffina (petrolio), pesanti decerati cataliticamente: Olio base-non specificato	649-477-00-2
Oli di paraffina (petrolio), frazioni leggere decerate cataliticamente	649-478-00-8
Oli estratti (carbone), oli residui da pirolisi di catrame di carbone, olio di naftalene, residui della distillazione: Ridistillati	648-040-00-3
Oli estratti (carbone), oli residui da pirolisi di catrame di carbone, olio di naftalene, ridistillato: Ridistillati	648-038-00-2
Oli estratti (carbone), oli residui da pirolisi di catrame di carbone, oli di naftalene: Ridistillati	648-039-00-8
Oli idrocarburici, aromatici, miscelati con polistirene, pirolizzati, frazione olio leggero: Prodotti da trattamento termico	648-136-00-5
Oli idrocarburici, aromatici, miscelati con polietilene, pirolizzati, frazione olio leggero: Prodotti da trattamento termico	648-135-00-X
Oli idrocarburici, aromatici, miscelati con polietilene e polipropilene, pirolizzati, frazione olio leggero: Prodotti da trattamento termico	648-134-00-4
Oli lubrificanti (petrolio), C20-35, estratti con solvente, decerati, idrogenati: Olio base-non specificato	649-529-00-4
Oli lubrificanti (petrolio), C20-50, a base di olio neutro, idrotrattati: Olio base-non specificato	649-483-00-5



Nome	Numero indice
Oli lubrificanti (petrolio), C>25, estratti con solvente, deasfaltati, decerati, idrogenati: Olio base-non specificato	649-527-00-3
Oli lubrificanti (petrolio), C20-50, a base di olio neutro, alta viscosità idrotrattati: Olio base-non specificato	649-481-00-4
Oli lubrificanti (petrolio), C18-40, a base distillato decerati con solvente idrocrackizzati: Olio base-non specificato	649-506-00-9
Oli lubrificanti (petrolio), C18-40, a base raffinato decerati con solventi idrogenati: Olio base-non specificato	649-507-00-4
Oli lubrificanti (petrolio), non aromatici idro-crackizzati deparaffinati con solvente: Olio base-non specificato	649-498-00-7
Oli lubrificanti (petrolio), C24-50, estratti con solvente, decerati, idrogenati: Olio base-non specificato	649-530-00-X
Oli lubrificanti (petrolio), C15-30, a base di olio neutro, idrotrattati: olio base-non specificato	649-482-00-X
Oli lubrificanti (petrolio), C17-35, estratti con solvente, decerati, idrotrattati: Olio base-non specificato	649-497-00-1
Oli lubrificanti (petrolio), C18-27, idrocrackizzati decerati con solvente: Olio base-non specificato	649-514-00-2
Oli lubrificanti (petrolio), C17-32, estratti con solvente, decerati, idrogenati: Olio base-non specificato	649-528-00-9
Oli lubrificanti (petrolio), oli di base, paraffinici: Olio base-non specificato	649-501-00-1
Oli lubrificanti: olio base-non specificato	649-484-00-0
Oli naftenici (petrolio), pesanti complessi decerati: Olio base-non specifico	649-479-00-3
Oli naftenici (petrolio), pesanti decerati cataliticamente: Olio base-non specificato	649-475-00-1
Oli naftenici (petrolio), complessi decerati leggeri: Olio base-non specificato	649-480-00-9
Oli naftenici (petrolio), frazioni leggere decerate cataliticamente: Olio base-non specificato	649-476-00-7
Oli paraffinici (petrolio), pesanti decerati raffinati con solvente: Olio base-non specificato	649-500-00-6
Oli purificati (petrolio), idrodesolforati crackizzati cataliticamente: Olio combustibile denso	649-020-00-7
Oli residui (petrolio), torre di deisobutanizzatore: Nafta con basso punto di ebollizione-non specificata	649-365-00-3
Oli residui (petrolio): Olio combustibile denso	649-045-00-3
Oli residui (petrolio), decerati cataliticamente: olio base-non specificato	649-492-00-4
Oli residui (petrolio), decerati con solventi trattati con argilla: Olio base-non specificati	649-526-00-8
Oli residui (petrolio), deasfaltazione con solvente: Olio base-non specificato	649-456-00-8
Oli residui (petrolio), "hydrotreating": Olio base-non specificato	649-470-00-4
Oli residui (petrolio), trattati con argilla: Olio base-non specificato	649-462-00-0

Nome	Numero indice
Oli residui (petrolio), idrotrattati decerati con solvente: Olio base-non specificato	649-491-00-9
Oli residui (petrolio), idrocrackizzati trattati con acido deparaffinati con solventi; Olio base-non specificato	649-499-00-2
Oli residui (petrolio), raffinati con solvente: Olio base-non specificato	649-459-00-4
Oli residui (petrolio), decerati con solvente: Olio base-non specificato	649-471-00-X
Oli residui (petrolio), decerati con solvente trattati con carbone: Olio base-non specificato	649-525-00-2
Olio combustibile n.6: Olio combustibile denso	649-030-00-1
Olio combustibile n.2: Gasolio-non specificato	649-225-00-1
Olio combustibile n.4 : Gasolio-non specificato	649-226-00-7
Olio combustibile, oli di prima distillazione da residui, ad alto contenuto di zolfo: Olio combustibile denso	649-023-00-3
Olio combustibile, pesante, alto livello di zolfo: Olio combustibile denso	649-042-00-7
Olio combustibile, residuo: Olio combustibile denso	649-024-00-9
Olio da residuo di fondo (petrolio), idrotrattato: Olio di trasudamento	649-550-00-9
Olio di antracene, a basso contenuto di antracene: Frazione di olio di antracene	648-104-00-0
Olio di antracene, estratto acido: Olio di antracene lavato	648-046-00-6
Olio di antracene, pasta di antracene, frazione carbazolo: Frazione di olio di antracene	648-107-00-7
Olio di antracene, pasta di antracene: Frazione di olio di antracene	648-103-00-5
Olio di antracene, pasta di antracene, frazione antracene; Frazione di olio di antracene	648-106-00-1
Olio di antracene, pasta di antracene, frazioni leggere della distillazione; Frazione di olio di antracene	648-108-00-2
Olio di antracene: Olio di antracene I	648-079-00-6
Olio di creosoto, distillato bassobollente; Olio lavaggio gas	648-138-00-6
Olio di creosoto, distillato altobollente; Olio lavaggio gas	648-100-00-9
Olio di creosoto, frazione acenaftene; Olio lavaggio gas	648-098-00-X
Olio di creosoto, frazione acenaftene, privo di acenaftene; Olio lavaggio gas ridistillato	648-043-00-X
Olio di creosoto; Olio lavaggio gas	648-099-00-5
Olio di morchia (petrolio), trattato con carbone; Olio di trasudamento	649-211-00-5
Olio di morchia (petrolio), trattato con acido silicico; Olio di trasudamento	649-315-00-4
Olio di sedimento (petrolio), trattato con argilla; Olio di trasudamento	649-176-00-6
Olio di sedimento (petrolio), trattato con acido; Olio di trasudamento	649-175-00-0
Olio di trasudamento (petrolio); Olio di trasudamento	649-549-00-3
Olio di trementina	650-002-00-6
Olio leggero (carbone), processo semi-coking; Olio fresco	648-156-00-4
Olio leggero (carbone), forno da coke; Benzene grezzi	648-147-00-5
Ometoato	015-066-00-6
Osmio tetrossido	076-001-00-5
Ossamil	006-059-00-9

Nome	Numero indice
4,4'-Ossibis(etilentio)difenolo	604-036-00-3
Ossidemeton metile	015-046-00-7
Ossidietilen bis(cloroformiato)	607-141-00-2
Ossigeno liquido	008-001-00-8
1,3,5-tris(Ossiranilmetil)-1,3,5-triazin-(2,4,6(1H,3H,5H)-trione	615-021-00-6
Ossirano	603-023-00-X
O-(2,4,5-Triclorofenil) O,O-dimetil tiofosfato	015-052-00-X
1,3,4,5,6,7,8,8-Ottacoloro-1,3,3a,4,7,7a-esaidro-4,7-metano-	
isobenzofurano	602-053-00-0
1,2,4,5,6,7,8,8-Ottacoloro-3a,4,7,7a-tetraidro-4,7- metanoindano	602-047-00-8
Ottametil-pirofosforamide	015-026-00-8
Ottano	601-009-00-8
4-Ottil-2,6-dinitrofenil metilcarbonato--6-ottil-2,4-dinitrofenil	
metilcarbonato, miscela di isomeri	609-027-00-8
Ottilenglicol	603-087-00-9
Ottil gallato	607-199-00-9
1-Ottil-2-pirrolidone	613-098-00-0
2-Ottiltioetanolo	603-088-00-4
Ottil 3,4,5-triidrossibenzoato	607-199-00-9
Oubaina	614-025-00-5
Oxadiazon	606-045-00-8
Oxicarboxina	006-060-00-4
Oxidisulfoton	015-096-00-X
Papaina	647-007-00-0
Papaverina	614-018-00-7
Papaverina, sali	614-019-00-2
Paraffina molle (petrolio), trattata con argilla, Paraffina molle	649-246-00-6
Paraffina molle (petrolio), trattata con acido, Paraffina molle	649-245-00-0
Paraffina molle (petrolio), Paraffina molle	649-244-00-5
Paraldeide	605-004-00-1
Paraquat	613-006-00-9
Paraquat, sali	613-090-00-7
Paration	015-034-00-1
Paration-metil	015-035-00-7
PCB	602-039-00-4
Pebulato	006-034-00-2
Pece, catrame-petrolio di carbone, Residui peciosi	648-076-00-X
Pece, catrame di carbone, alta temperatura: Pece	648-055-00-5
Pece, catrame di carbone, alta temperatura, trattata termicamente;	
Pece	648-056-00-0
Pece, catrame di carbone, alta temperatura, secondaria; Ridistillati di	
pece	648-057-00-6
Pece, catrame di carbone, bassa temperatura; Residui peciosi	648-069-00-1
Pece, catrame di carbone, bassa temperatura, ossidata; Residui	
peciosi, Pece ossidata	648-070-00-7
Pece, catrame di carbone, bassa temperatura, trattata termicamente;	
Pece ossidata: Pece termotrattata	648-071-00-2

Nome	Numero indice
Pece: Pece	648-054-00-X
Pendimetalin	609-042-00-X
Pentaclorobenzene	602-074-00-X
Pentacloroetano	602-017-00-4
Pentaclorofenolo	604-002-00-8
Pentaclorofenolo, sali	604-003-00-3
Pentacloronaftalene	602-041-00-5
Pentacloronitrobenzene	609-043-00-5
Pentaeritritol tetraacrilato	607-122-00-9
Pentaeritritol triacrilato	607-110-00-3
Pentaetilenesamina	612-064-00-2
6-(1-alfa,5a-beta,8a-beta-9-Pentaidrossi-7-beta-isopropil-2-beta,5-beta,8-beta-trimetilperidro-8b-alfa-9-epossi-5,8-etanociclopenta(1,2-b)indenile pirrol-2-carbossilato	613-061-00-9
1,1,4,7,7-Pentametilentriammina	612-109-00-6
1,5-Pentandiale	605-022-00-X
2,4-Pentandione	606-029-00-0
3-Pentanone	606-006-00-5
Pentasodio 5-anilino-3-(4-(4-(6-cloro-4-(3-solfonatoanilino)-1,3,5-triazin-2-ilamino)2,5-dimetilfenilazo-2,5-disolfonatofenilazo)-4-idrossinaftalen-2,7-disolfonato	016-035-00-X
N-terz-Pentil-benzotiazolsulfenamide	613-101-00-5
Pentile metilfosfinato miscela con 2-metilbutile metilfosfinato	015-144-00-X
Pentile nitrito	007-020-00-9
Pentrite	603-035-00-5
Pepsina A	647-008-00-6
Percloroetilene	602-028-00-4
Perfluidone	616-019-00-8
Perfluoropropene	602-061-00-4
Permetrina	613-058-00-2
Petrolato (petrolio), trattato con argilla; Petrolato	649-260-00-2
Petrolato (petrolio), trattato con allumina; Petrolato	649-256-00-0
Petrolato (petrolio), trattato con carbone; Petrolato	649-258-00-1
Petrolato (petrolio), trattato con acido silicico; Petrolato	649-259-00-7
Petrolato (petrolio), ossidato; Petrolato	649-255-00-5
Petrolato (petrolio), idrotrattato; Petrolato	649-257-00-6
Petrolato: Petrolato	649-254-00-X
Petrolio	649-049-00-5
Phosniclor	015-043-00-0
2-Picolina	613-036-00-2
4-Picolina	613-037-00-8
Picrati	609-010-00-5
Pigmento giallo 34	082-009-00-X
Pigmento rosso 104	082-010-00-5
Pilocarpina	614-016-00-6
Pilocarpina, sali	614-017-00-1

Nome	Numero indice
Pindone	606-016-00-X
Piombo acetato, basico	082-007-00-9
Piombo alchili	082-002-00-1
Piombo azoturo	082-003-00-7
Piombo bis(ortofosfato)	082-006-00-3
Piombo composti, esclusi quelli espressamente indicati in questo allegato	082-001-00-6
Piombo cromato	082-004-00-2
Piombo di(acetato)	082-005-00-8
Piombo esafluosilicato	009-014-00-1
Piombo idrogenoarsenato	082-011-00-0
Piombo(II) metansolfonato	082-008-00-4
Piombo stinato	609-019-00-4
Piombo 2,4,6-trinitroresorcinato	609-019-00-4
Piperazina	612-057-00-4
2-Piperazin-1-iletilamina	612-105-00-4
Piperidina	613-027-00-3
bis(Piperidiniotiocarbonile) disolfuro	613-109-00-0
Piperofos	015-133-00-X
Pirazofos	015-137-00-1
Pirazone	606-035-00-3
Pirazoxon	015-023-00-1
Piretrina I	613-023-00-1
Piretrina II	613-024-00-7
Piretrine, comprese le cinerine	613-022-00-6
Piridina	613-002-00-7
Piridina, alchil derivati : Basi di catrame grezze	648-029-00-3
Pirimicarb	006-035-00-8
Pirimifos-etile	015-099-00-6
Pirimifos-metile	015-134-00-5
Pirocatecolo	604-016-00-4
Pirogallolo	604-009-00-6
Policlorodifenili	602-039-00-4
Polietilenamina	612-065-00-8
Poli(ossipropilencarbonil-co-ossi(etiletilen)carbonil), contenente 27% idrossivalerato	607-212-00-8
Poli(osso(2-butossietil-3-ossobutanoato-O'1,O'3) alluminio	013-007-00-9
Potassa caustica	019-002-00-8
Potassio	019-001-00-2
tetraPotassio 2-(4-(5-(1-(2,5-disolfonatofenil)-3-etossicarbonil-5-idrossipirazol-4-il)penta-2,4-dieniliden)-3-etossicarbonil-5-osso-2-pirazolin-1-il)benzen-1,4-disolfonato	613-106-00-2
Potassio 2-idrossicarbazolo-1-carbossilato	607-180-00-5
Potassio bifluoruro	009-008-00-9
Potassio bromato	035-003-00-6
Potassio cianato	615-016-00-9
Potassio clorato	017-004-00-3

Nome	Numero indice
Potassio cromato	024-006-00-8
Potassio dicromato	024-002-00-6
Potassio esafluosilicato	009-012-00-0
Potassio fluoruro	009-005-00-2
Potassio idrogenosolfato	016-056-00-4
Potassio idrossido	019-002-00-8
Potassio mu-fluoro-bis((triethylalluminio)	009-017-00-8
Potassio nitrito	007-011-00-X
Potassio perclorato	017-008-00-5
Potassio permanganato	025-002-00-9
Potassio polisolfuri	016-007-00-7
Potassio solfuro	016-006-00-1
Potassio, sodio 5-(4-cloro-6-(N-(4-(4-cloro-6-(5-idrossi-2,7-disolfonato-6-(2-sulfonatofenilazo)-4-naftilamino)-1,3,5-triazin-2-ilamino)fenil-N-metil)amino)-1,3,5-triazin-2-ilamino)-4-idrossi-3-(2-sulfonatofenilazo)naftalen-2,7-disolfonato	016-050-00-1
Potassio 2-amino-2-metilpropionato, ottaidrato	607-227-00-X
Prodotti del petrolio, gas di raffineria: Gas di raffineria	649-151-00-X
Prodotti di petrolio, riformati di powerforming hydrofining: Nafta di reforming catalitico con basso punto di ebollizione	649-306-00-1
Prodotto di reazione Bisfenolo A - epicloridrina (peso molecolare medio <= 700)	603-074-00-8
Profenofos	015-135-00-0
Profluralin	613-059-00-8
Promecarb	006-037-00-9
Promurit	616-016-00-1
Propaclor	616-008-00-8
Propanale	605-018-00-8
Propanil	616-009-00-3
Propano	601-003-00-5
3-Propanolide	606-031-00-1
2-Propanolo	603-003-00-0
1-Propanolo	603-003-00-0
1,3-Propansultone	016-032-00-3
Propargite	607-151-00-7
Propazina	613-067-00-1
2-(3-(Prop-1-en-2-il)fenil)prop-2-il isocianato	006-074-00-0
2-Propen-1-olo	603-015-00-6
Propetamphos	015-136-00-6
S-Propil butil(etil)tiocarbammato	006-034-00-2
Propilbenzene	601-024-00-X
S-Propil dipropiltiocarbammato	006-066-00-7
Propile acetato	607-024-00-6
Propile bromuro	602-019-00-5
n-Propile cloroformiato	607-142-00-8
Propile formiato	607-016-00-2
Propile gallato	607-198-00-3

Nome	Numero indice
Propilendiamina	612-100-00-7
Propilene	601-011-00-9
Propilene carbonato	607-194-00-1
Propilene dicloruro	602-020-00-0
Propilene ossido	603-055-00-4
1,3-Propilene ossido	603-058-00-0
Propilenglicolmonometil etero	603-064-00-3
Propilenimina	613-033-00-6
Propilentiourea	613-070-00-8
n-Propile propionato	607-030-00-9
Propile 3,4,5-triidrossibenzoato	607-198-00-3
2-Propilossietanolo	603-095-00-2
Prop-2-in-1-olo	603-078-00-X
1,3-Propiolattone	606-031-00-1
Propionile cloruro	607-093-00-2
Propoxur	006-016-00-4
Proteasi, escluse quelle espressamente indicate in questo allegato	647-014-00-9
Proteinasi, microbica neutra	647-013-00-3
Protiocarb, cloridrato	006-061-00-X
Protoato	015-032-00-0
Proxan-sodio	006-024-00-8
Quinalfos	015-138-00-7
Quintozene	609-043-00-5
Raffinati (petrolio), frazione C4 crackizzata con vapore dell'estrazione con ammonio acetato di rame, C3-5 e C3-5 insaturi, privi di butadiene: Gas di petrolio	649-119-00-5
Raffinati (petrolio), impianto di reforming catalitico, estratti in controcorrente glicol etilenico-acqua: Nafta modificata con basso punto di ebollizione	649-280-00-1
Raffinati (petrolio), impianto di reforming, separazione in impianto	
Lurgi: Nafta modificata con basso punto di ebollizione	649-281-00-7
Rame cloruro (I)	029-001-00-4
Rame cloruro (oso)	029-001-00-4
Rame(I) O,O-diisopropil ditiofosfato, miscela con rame(I) O-isopropil O-(4-metilpent-2-il) ditiofosfato e con rame(I) O,O-bis(4-metilpent-2-il) ditiofosfato	015-145-00-5
Rame(II) metansolfonato	029-008-00-2
Rame naftenato	029-003-00-5
Rame ossido (oso)	029-002-00-X
Rame (I) ossido	029-002-00-X
Rame solfato	029-004-00-0
Rame (II) tris(ottadec-9-enilammonio) (trisolfonatoftalocianinato)	029-006-00-1
Rennina	647-009-00-1
Residui (carbone), estrazione con solvente liquido	648-142-00-8
Residui (catrame di carbone), distillazione di olio di antracene:	
Frazione di olio di antracene	648-105-00-6

Nome	Numero indice
Residui (catrame di carbone), distillazione di olio di creosoto: Olio di lavaggio gas ridistillato	648-080-00-1
Residui (catrame di carbone), distillazione della pece: Ridistillati di pece	648-058-00-1
Residui (petrolio) atmosferici: Olio combustibile denso	649-019-00-1
Residui (petrolio) crackizzati con vapore, resinosi: Olio combustibile denso	649-035-00-9
Residui (petrolio) leggeri crackizzati con vapore: Olio combustibile denso	649-029-00-6
Residui (petrolio), nafta crackizzata con vapore idrogenata: Gasolio da cracking	649-445-00-8
Residui (petrolio), leggeri da cracking con vapore, aromatici: Nafta con basso punto di ebollizione-non specificato	649-400-00-2
Residui (petrolio), impianto di topping, basso tenore di zolfo: Olio combustibile denso	649-031-00-7
Residui (petrolio), nafta da immersione di calore ("heat soaking") e cracking con vapore	649-448-00-4
Residui (petrolio), cracking catalitico: Olio combustibile denso	649-043-00-2
Residui (petrolio), splitter di alchilazione, ricchi di C4: Gas di petrolio	649-087-00-2
Residui (petrolio), frazionatore di reforming catalitico: Olio combustibile denso	649-048-00-X
Residui (petrolio), frazioni di coda splitter butano: Nafta con basso punto di ebollizione-non specificata	649-364-00-8
Residui (petrolio), dal reforming catalitico di C6-8: Nafta di reforming catalitico con basso punto di ebollizione	649-303-00-5
Residui (petrolio), tagli pesanti di coking e frazioni leggere sotto vuoto: Olio combustibile denso	649-027-00-5
Residui (petrolio), gasolio pesante di coking e gasolio sotto vuoto: Olio combustibile denso	649-026-00-X
Residui (petrolio), distillazione residui frazionatore Impianto di reforming catalitico: Olio combustibile denso	649-025-00-4
Residui (petrolio), crackizzati con vapor d'acqua: Olio combustibile denso	649-018-00-6
Residui (petrolio), idrodesolforati torre di distillazione atmosferica: Olio combustibile denso	649-016-00-5
Residui (petrolio), sotto vuoto, leggeri: Olio combustibile denso	649-041-00-1
Residui (petrolio), da cracking termico: Olio combustibile denso	649-013-00-9
Residui (petrolio), torre di distillazione atmosferica: Olio combustibile denso	649-008-00-1
Residui (petrolio), distillazione di nafta da cracking con vapore: Gasolio da cracking	649-446-00-3
Residui (petrolio), da scrubber impianto coking, contenenti aromatici ad anelli condensati: Olio combustibile denso	649-033-00-8
Residui (petrolio), frazioni di idrocracking: Olio combustibile denso	649-012-00-3
Residui (petrolio), crackizzati con vapore, distillati: Olio combustibile denso	649-040-00-6



Nome	Numero indice
Residui (petrolio), frazione leggera sotto vuoto: Olio combustibile denso	649-028-00-0
Residui della estrazione (carbone), olio di catrame alcalino, carbonati, trattati con calce: Fenoli grezzi	648-115-00-0
Residui di estratto (carbone), acido della frazione benzolo: olio leggero, basso bollente	648-016-00-2
Residui di estrazione (carbone), olio leggero alcalino, frazioni di testa della distillazione: olio leggero lavato, bassobollente	648-017-00-8
Residui di estrazione (carbone), frazione benzolica alcalina, estrazione con acido : olio leggero lavato, basso bollente	648-014-00-1
Residui di estrazione (catrame di carbone), frazione benzolica alcalina, estratto acido: olio leggero lavato, basso bollente	648-015-00-7
Residui di estrazione (carbone), olio di catrame alcalino, residui della distillazione del naftalene: Olio naftalinoso lavato	648-137-00-0
Residui di estrazione (carbone), olio leggero alcalino, estratto con acido: olio carbolico lavato	648-026-00-7
Residui di estrazione (carbone), olio di catrame, alcalini: olio carbolico lavato	648-027-00-2
Residui di estrazione (carbone), bruno: Catrame di carbon fossile lavato	648-064-00-4
Residui di estrazione (carbone), olio naftalenico alcalino, frazioni di testa della distillazione: Olio naftalinoso lavato	648-091-00-1
Residui di estrazione (carbone), olio naftalenico alcalino, residui della distillazione: Olio di metilnaftalene lavato	648-095-00-3
Residui di estrazione (carbone), olio leggero alcalino, frazione indene nafta: Olio leggero lavato, altobollente	648-019-00-9
Residui di estrazione (carbone), olio leggero alcalino, estratto acido, frazione indenica: Olio leggero lavato, mediobollente	648-018-00-3
Residui estratti (carbone), olio di naftalene, alcalini: Olio naftalinoso lavato	648-088-00-5
Residui estratti (carbone), olio di naftalene, alcalini, a basso tenore di naftalene: Olio naftalinoso lavato	648-089-00-0
Residui purificati (petrolio), cracking catalitico: Olio combustibile denso	649-011-00-8
Residui, crackizzati con vapore, trattati termicamente: Olio combustibile denso	649-046-00-9
Residuo estratti (carbone), olio acido di creosoto: Olio lavaggio gas lavato	648-102-00-X
Resine epossidiche (peso molecolare medio $\leq 700$ )	603-074-00-8
acidi Resinici e acidi Rosinici	650-015-00-7
Resmetrina	613-060-00-3
Resorcina	604-010-00-1
Resorcinolo diglicidil etere	603-065-00-9
Rosina di tallolio	650-015-00-7
Rotenone	650-005-00-2
Sabadilla	613-062-00-4
Safrolo	605-020-00-9

Nome	Numero indice
Scilliroside	614-027-00-6
Scopolamina	614-014-00-5
Scopolamina, sali	614-015-00-0
Scradano	015-026-00-8
Secbumeton	613-063-00-X
Selenio	034-001-00-2
Selenio composti tranne il solfoseleniuro di cadmio	034-002-00-8
Sesamex	613-064-00-5
Silicio tetracloruro	014-002-00-4
Simazina	612-088-00-3
Simetrina	613-065-00-0
Sodio	011-001-00-0
tetraSodio 4-amino-3,6-bis(5-(6-cloro-4-(2-idrossietilamino)-1,3,5-triazin-2-ilamino)-2-solfonatofenilazo)5-idrossinaftalen-2,7-solfonato (contenente >35% di sodio cloruro e sodio acetato)	016-055-00-9
tetraSodio 4-amino-5-idrossi-6-(3-(2-(2-(solfonatoossi)etilsolfonil)etilcarbamoil)fenilazo)-3-(4-(2-(solfonatoossi) etilsulfonil)fenilazo) naftalen-2,7-disolfonato	611-015-00-2
triSodio (6-anilino-2-(5-nitro-2-ossidofenilazo)-3-solfonato-1-naftolato)(4-solfonato-1,1'-azo-di-2,2'-naftolato)cromato(1-)	024-013-00-6
Sodio (1-(5-(4-(4-anilino-3-solfofenilazo)-2-metil-5-metilsolfonamidofenilazo)-3-fenilazo-4-idrossi-2-ossidofenilazo)-5-nitro-4-solfonato-2-naftolato)ferro(II)	611-009-00-X
Sodio azoturo	011-004-00-7
tetraSodio 5-benzamido-3-(5-(4-fluoro-6-(1-solfonato-2-naftilamino)-1,3,5-triazin-2-ilamino)-2-solfonatofenilazo)-4-idrossinaftalen-2,7-disolfonato	016-042-00-8
Sodio 3-(2H-benzotriazol-2-il)5-sec-butil-4-idrossibenzensolfonato	613-095-00-4
Sodio 2-bifenilato	604-021-00-1
tetraSodio 3,3'-[[1,1'-bifenil]-4,4'-diilbis(azo)]bis[5-amino-4-idrossinaftalen-2,7-disolfonato	611-026-00-2
Sodio bifluoruro	009-007-00-3
triSodio bis(3-acetamido-2-(4-nitro-2-ossidofenilazo)-3-solfonato-1-naftolato)cromato(1-)	024-012-00-0
triSodio bis(2-(5-cloro-4-nitro-2-ossidofenilazo)-5-solfonato-1-naftolato)cromato(1-)	024-014-00-1
Sodio 3,5-bis(3-(2,4-di-terz-pentilfenossi)propilcarbamoil)benzensolfonato	007-023-00-5
Sodio bisolfato	016-046-00-X
Sodio 5-n-butilbenzotriazolo	613-103-00-6
Sodio carbonato	011-005-00-2
Sodio cianato	011-006-00-8
tetraSodio 5'-(5-ciano-4,6-dicloropirimidin-2-ilamino)-4'-idrossi-2,3'-azodinaftalen-1,2',5,7'-disolfonato	016-036-00-5
Sodio clorato	017-005-00-9
Sodio cloroacetato	607-158-00-5
Sodio 3-cloroacrilato	607-167-00-4

Nome	Numero indice
tetraSodio 2-(6-cloro-4-(4-(2,5-dimetil-4-(2,5-disolfonatofenilazo)fenilazo)-3-ureidoanilino)-1,3,5-triazin-2-ilamino)benzen-1,4-disolfonato	016-039-00-1
(triSodio (2-((3-(6-(2-cloro-5-solfonato)anilino)-4-(3-carbossipiridinio)-1,3,5-triazin-2-ilamino)-2-ossido-5-solfonatofenilazo)fenilmetilazo)-4-solfonatobenzoato)rame(3-)) idrossido	029-007-00-7
Sodio deidroacetato	607-164-00-8
Sodio 3,5-dicloro-2-(5-ciano-2,6-bis(3-idrossipropilamino)-4-metilpiridin-3-ilazo)benzensolfonato	016-048-00-0
Sodio dicloroisocianurato, biidrato	613-030-01-7
diSodio 7-(4,6-dicloro-1,3,5-triazin-2-ilamino)-4-idrossi-3-(4-(2-(solfonatoossi)etilsolfonil)fenilazo)naftalen-2-solfonato	611-023-00-6
Sodio dicromato	024-004-00-7
Sodio dicromato, diidrato	024-004-01-4
Sodio 1-(3,4-diidro-6-metil-2,4-diosso-2H-piran-3-ilidene)etanolato	607-164-00-8
triSodio 6-(2,4-diidrossifenilazo)-3-(4-(4-(7-(2,4-diidrossifenilazo)-1-idrossi-3-solfonato-2-naftilazo)anilino)-3-solfonatofenilazo)4-idrossinaftalen-2-solfonato	016-040-00-7
Sodio 4-(4-dimetilamino)-benzene-diazosolfonato	611-003-00-7
Sodio esafluosilicato	009-012-00-0
Sodio 2-fenilfenato	604-021-00-1
Sodio fluoroacetato	607-169-00-5
triSodio 7-(4-(6-fluoro-4-(2-(2-vinilsolfoniletossi)etilamino)-1,3,5-triazin-2-ilamino)-2-ureidofenilazo)naftalen-1,3,6-trisolfonato	016-051-00-7
Sodio fluoruro	009-004-00-7
Sodio idrogeno N-carbossilatoetil-N-ottadec-9-enilmaleamato	607-188-00-9
Sodio idrogensolfato	016-046-00-X
Sodio idrosolfito	016-028-00-1
Sodio idrossido	011-002-00-6
tetraSodio idrossido (1-(4-(3-acetamido-4-(4'-nitro-2,2'-2,2'-disolfonatostilben-4-ilazo)anilino-6-(2,5-disolfonatoanilino)-1,3,5-triazin-2-il)-3-carbossipiridinio)	611-014-00-7
Sodio idruro	001-003-00-X
Sodio ipoclorito soluzione ...% (espressa in cloro attivo)	017-011-00-1
Sodio O-isopropil-ditiocarbonato	006-024-00-8
Sodio N-metil-ditiocarbammato	006-013-00-8
diSodio (3-metil-4-(5-nitro-2-ossidofenilazo)-1-fenilpirazololato)(1-(3-nitro-2-ossido-5-solfonatofenilazo)-2-naftolato)cromato(1-)	024-015-00-7
Sodio nitrito	007-010-00-4
Sodio 3-nitrobenzensolfonato	609-048-00-2
Sodio 7-ossabicciclo(2,2,1)eptan-2,3-dicarbossilato	607-055-00-5
Sodio perclorato	017-010-00-6
Sodio perossido	011-003-00-1
tetraSodio 3,3'-(piperazin-1,4-diilbis((6-cloro-1,3,5-triazin-4,2-diil)imino(2-acetamido)-4,1-fenilenazo))bis(naftalen-1,5-disolfonato)	016-034-00-4
Sodio polisolfuri	016-010-00-3

Nome	Numero indice
Sodio solfuro	016-009-00-8
Sodio p-toluen-N-clorosulfamide	616-010-00-9
Sodio tricloroacetato	607-005-00-2
Sodio 4-(2,4,4-trimetilpentilcarbonilossi)benzensolfonato	016-054-00-3
esaSodio 2,2'-vinilenbis((3-solfonato-4,1-fenilen)imino(6-(N-cianoetil-N-(2-idrossipropil)amino)-1,3,5-triazin-4,2-diil)imino)dibenzen-1,4-disolfonato	613-107-00-8
miscela Solfonitrica con ...% HNO <sub>3</sub> (>30% HNO <sub>3</sub> )	007-005-00-7
Solforile cloruro	016-016-00-6
Solforile difluoruro	009-015-00-7
Solfuro di idrogeno	016-001-00-4
Solidi di scarto, coking della pece di catrame di carbone: Residui solidi di carbon fossile	648-063-00-9
Stagno (II) metansolfonato	050-018-00-8
Stagno tetracloruro	050-001-00-5
Stagno tributile composti	050-008-00-3
Stagno tricicloesile composti, eccetto quelli espressamente indicati in questo allegato	050-012-00-5
Stagno triesile composti, eccetto quelli espressamente indicati in questo allegato	050-010-00-4
Stagno trietile composti, eccetto quelli espressamente indicati in questo allegato	050-006-00-2
Stagno trifenile composti, eccetto quelli espressamente indicati in questo allegato	050-011-00-X
Stagno trimetile composti, esclusi quelli espressamente indicati in questo allegato	050-005-00-7
Stagno triottile composti, eccetto quelli espressamente indicati in questo allegato	050-013-00-0
Stagno tripentile composti, eccetto quelli espressamente indicati in questo allegato	050-009-00-9
Stagno tripropile composti, eccetto quelli espressamente indicati in questo allegato	050-007-00-8
Stirene	601-026-00-0
Stirene ossido	603-084-00-2
Stirene-4-solfonil cloruro	016-057-00-X
solvente di Stoddard: Nafta con basso punto di ebollizione - non specificata	649-345-00-4
Stricnina	614-003-00-5
Stricnina, sali	614-004-00-0
K-strofantina	614-026-00-0
Stronzio cromato	024-009-00-4
Subtilsina	647-012-00-8
Sulfallate	006-038-00-4
Sulfolan	016-031-00-8
4,4'-Sulfonildianilina	612-084-00-1
Sulfotep	015-027-00-3
2,4,5-T	607-041-00-9

Nome	Numero indice
2,4,5-T, sali ed esteri	607-042-00-4
Tallio	081-001-00-3
Tallio composti, esclusi quelli espressamente indicati in questo allegato	081-002-00-9
Tallio solfato	081-003-00-4
2,3,6-TBA	607-152-00-2
TCA	607-005-00-2
Tebuthiuron	616-020-00-3
Tecnazene	609-044-00-0
TEPP	015-025-00-2
Terbufos	015-139-00-2
Terbumeton	613-066-00-6
3,6,9,12-Tetraazatetradecano-1,14-diamina	612-064-00-2
1,1,2,2-Tetrabromoetano	602-016-00-9
Tetracloro-p-benzochinone	602-066-00-1
4,4,5,5-Tetracloro-1,3-diossolan-2-one	602-075-00-0
1,1,2,2-Tetracloroetano	602-015-00-3
Tetracloroetilene	602-028-00-4
Tetracloroisofталonitrile	608-014-00-4
Tetraclorometano	602-008-00-5
2,3,5,6-Tetracloro-4-(metilsulfonil)piridina	613-032-00-0
1,2,4,5-Tetracloro-3-nitrobenzene	609-044-00-0
Tetraclorotereftalonitrile	608-016-00-5
Tetradecilammonio bis(1-(5-cloro-1-ossidofenilazo)-2-naftolato) cromato(1-)	024-016-00-2
O,O,O',O'-Tetraetil ditiopirofosfato	015-027-00-3
Tetraetilenpentamina	612-060-00-0
O,O,O',O'-Tetraetil S,S'-metilendi(ditiofosfato)	015-047-00-2
Tetraetil pirofosfato	015-025-00-2
2,3,5,6-Tetrafluorobenzil trans-2-(2,2-diclorovinil)-3,3-dimetilciclopropan carbossilato	607-223-00-8
Tetraidro-3,5-dimetil-1,3,5-tiadiazin-2-tione	613-008-00-X
Tetraidrofurano	603-025-00-0
Tetraidro-2-furilmetanolo	603-061-00-7
Tetraidro-2-isobutil-4-metilpiran-4-olo, miscela di isomeri (cis e trans)	603-101-00-3
3a,4,7,7a-Tetraidro-4,7-metano-1H-indene	601-044-00-9
1,2,3,4-Tetraidronaftalina	601-045-00-4
1,2,3,4-Tetraidro-1-naftile idroperossido	617-004-00-9
1,2,3,6-Tetraidro-N-(1,1,2,2-tetracloroetiltio)ftalimide	613-046-00-7
Tetraidrotiofene	613-087-00-0
Tetraidrotiofene-1,1-diossido	016-031-00-8
1,2,3,6-Tetraidro-N-(triclorometiltio)ftalimide	613-044-00-6
Tetralina idroperossido	617-004-00-9
tetrakis(Tetrametilammonio)6-amino-4-idrossi-3-(7-solfonato-4-(4-solfonatofenilazo)-1-naftilazo)naftalen-2,7-disolfonato	611-020-00-X

Nome	Numero indice
esakis(Tetrametilammonio)4,4'-vinilenbis ((3-solfonato-4,1-fenilen)imino(6-morfolino-1,3,5-triazin-4,2-diil)imino)bis (5-idrossi-6-fenilazonaftalen-2,7-disolfonato)	613-105-00-7
N,N,N',N'-Tetrametilditiobis(etilen) diamina, dicloridrato	016-059-00-0
N,N,N',N'-Tetrametiletilendiamina	612-103-00-3
N,N,N',N'-Tetrametil-p-fenilendiamina	612-032-00-8
bis(2,2,6,6-Tetrametil-4-piperidil)succinato	607-187-00-3
N,N,N',N'-Tetrametil-3,3'-(propilenbis(iminocarbonil)-4,1-fenilenazo(1,6-diidro-2-idrossi-4-metil-6-ossopiridin-3,1-diil))di(propilammonio) dilattato	611-011-00-0
2,4,6,8-Tetrametil-1,3,5,7-tetracicloottano	605-005-00-7
Tetrametiltiourame disolfuro	006-005-00-4
1,2,3,4-Tetranitrocarbazoletolo	613-003-00-2
Tetranitronaftalina	609-014-00-7
Tetranitropentaeritrite	603-035-00-5
O,O,O',O'-Tetrapropil-ditiopirofosfato	015-081-00-8
Tetrile	612-017-00-6
TGIC	615-021-00-6
Thioquinox	613-019-00-X
Tiazfluron	616-021-00-9
Timolo	604-032-00-1
Tioacetamide	616-026-00-6
Tiobencarb	006-063-00-0
Tiocarbamide	612-082-00-0
Tiocarbonile cloruro	607-201-00-8
Tiociclam ossalato	607-170-00-0
4,4'-Tiodi-o-cresolo	604-034-00-2
2,2'-Tiodietanolo	603-081-00-6
Tiodiglicol	603-081-00-6
Tiofanato-metil	006-069-00-3
Tiofanox	006-064-00-6
Tiofosgene	607-201-00-8
Tiometon	015-050-00-9
Tionazina	015-112-00-5
Tionile cloruro	016-015-00-0
Tionile cloruro, prodotti di reazione con 1,3,4-tiadiazol-2,5-ditiolo, terz-nonantiolo, C12-14-terz-alchilamina	016-058-00-5
Tiourea	612-082-00-0
Tiram	006-005-00-4
Titanio (4+) ossalato	022-002-00-0
Titanio tetracloruro	022-001-00-5
TNT	609-008-00-4
o-Tolidina	612-041-00-7
o-Tolidina sali	612-081-00-5
4-o-Tolilazo-o-toluidina	611-006-00-3
m-Tolil metilcarbammato	006-056-00-2
Toluen-2,4-diammonio solfato	612-126-00-9

Nome	Numero indice
2,6-Toluen-diisocianato	615-006-00-4
2,4-Toluen-diisocianato	615-006-00-4
Toluene	601-021-00-3
Toluene-2,6-diamina	612-111-00-7
o-Toluidina	612-091-00-X
p-Toluidina	612-024-00-4
m-Toluidina	612-024-00-4
m-Toluilendiamina solfato	612-030-00-7
p-Toluilendiamina solfato	612-030-00-7
Tosilisocianato	615-012-00-7
Toxafene	602-044-00-1
2,4,5-TP	607-047-00-1
Triadimefon	606-037-00-4
Trialchilborani	005-004-00-6
Triallato	006-039-00-X
Triamifos	015-024-00-7
Triarimol	603-043-00-9
3,6,9-Triazaundecano-1,11-diamina	612-060-00-0
Triazofos	015-140-00-8
1,2,4-Triazol-3-ilamina	613-011-00-6
Tribromometano	602-007-00-X
Tributil(2,4-diclorobenzil)fosfonio cloruro	015-085-00-X
Tributilfosfato	015-014-00-2
Triciclazolo	611-007-00-9
S-Triciclo(5.2.1.0'2,6)deca-3-en-8(o 9)-il O-isopropil (o isobutil o 2-etilesil) O-isopropil (o isobutil o 2-etilesil) ditiofosfato	015-146-00-0
Tricicloesilstagno idrossido	050-002-00-0
Triclorfon	015-021-00-0
Tricloroacetoneitrile	608-002-00-9
S-(2,3,3-Tricloroallil)diisopropil tiocarbammato	006-039-00-X
2,2,2-Tricloro-1,1-bis(4-clorofenil)etanolo	603-044-00-4
1,1,1-Tricloro-2,2-bis(4-clorofenil)etano	602-045-00-7
2,3,4-Triclorobut-1-ene	602-076-00-6
2,2,2-Tricloroetan-1,1-diolo	605-014-00-6
1,1,2-Tricloroetano	602-014-00-8
1,1,1-Tricloroetano	602-013-00-2
Tricloroetilene	602-027-00-9
1,2-O-(R)-(2,2,2-Tricloroetiliden)-glucofuranosio	605-013-00-0
2,4,5-Triclorofenolo	604-017-00-X
2,4,6-Triclorofenolo	604-018-00-5
2-(2,4,5-Triclorofenossi)etil 2,2-dicloropropionato	607-077-00-5
Triclorometano	602-006-00-4
N-(Triclorometiltio)ftalimide	613-045-00-1
Tricloronato	015-098-00-0
Tricloronitrometano	610-001-00-3
1,2,3-Tricloropropano	602-062-00-X
Triclorosilano	014-001-00-9

Nome	Numero indice
alfa, alfa, alfa-Triclorotoluene	602-038-00-9
2,4,6-Tricloro-1,3,5-triazina	613-009-00-5
Tricloro-s-triazina-2,4,6-trione	613-031-00-5
Tricresilfosfato (m-m-m, m-m-p, m-p-p, p-p-p)	015-016-00-3
Tricresilfosfato (o-o-o, o-o-m, o-o-p, o-m-m, o-m-p, o-p-p)	015-015-00-8
Tridemorfo	613-020-00-5
Trietilamina	612-004-00-5
Trietilenglicol diacrilato	607-126-00-0
Trietilentetramina	612-059-00-5
Trietilfosfato	015-013-00-7
Trietossiisobutilsilano	014-007-00-1
3-(Trietossisilil)-1-propanamina	612-108-00-0
Trifenilfosfito	015-105-00-7
Trifenilstagno acetato	050-003-00-6
Trifenilstagno idrossido	050-004-00-1
Trifenmorfo	613-052-00-X
1,1,1-Trifluoro-N-(4-fenilsulfonil-o-tolil)metansulfonamide	616-019-00-8
alfa, alfa, alfa-Trifluorotoluene	602-056-00-7
Trifluralina (contenente meno di 0.5 ppm NPDA)	609-046-00-1
1,2,3-Triidrossibenzene	604-009-00-6
Triisopropanolamina	603-097-00-3
3,5,5-Trimetil-2-cicloesen-(1)-one	606-012-00-8
2-(Trimetil-acetil)-indan-1,3-dione	606-016-00-X
Trimetil borato	005-005-00-1
Trimetilamina	612-001-00-6
N,N,N-Trimetilanilinio cloruro	612-124-00-8
1,2,4-Trimetilbenzene	601-043-00-3
1,3,5-Trimetilbenzene	601-025-00-5
2,4,6-Trimetilbenzofenone	606-044-00-2
1,7,7,Trimetilbicio(2,2,1)ept-2-il tiocianoacetato	615-015-00-3
tetrakis(Trimetilesadecilammonio)esa-mu-ossotetra-mu3-ossodi-mu5-ossotetradecaossotamolibdato(4-)	042-003-00-X
2,4,4-Trimetilesametilen-1,6-diisocianato	615-010-00-6
2,2,4-Trimetilesametilen-1,6-diisocianato	615-010-00-6
Trimetilolpropantriacrilato	607-111-00-9
2,4,6-Trimetil-1,3,5-triossano	605-004-00-1
1,3,7-Trimetilxantina	613-086-00-5
bis(3-(Trimetossisilil)propil)amina	014-012-00-9
S-(3-trimetossisilil)propil 19-isocianato-11-(6-isocianatoesil)-10,12-diosso-2,9,11,13-tetraazanonadecantioato	607-184-00-7
2,4,6-Trinitroanisolo	609-011-00-0
Trinitrobenzene	609-005-00-8
Trinitroclorobenzene	610-004-00-X
Trinitrocresolo	609-012-00-6
bis(2,4,6-Trinitrofenil)amina	612-018-00-1
bis(2,4,6-Trinitrofenil)amina, sale di ammonio	612-019-00-7
2,4,6-Trinitrofenolo	609-009-00-X



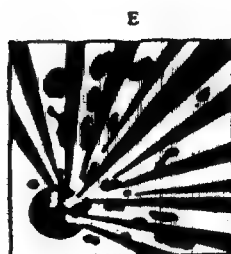
Nome	Numero indice
2,4,6-Trinitroresorcinolo	609-018-00-9
2,4,6-Trinitrotoluene	609-008-00-4
Trinitroxilene	609-013-00-1
Trinitroxilolo	609-013-00-1
1,3,5-Triossano	605-002-00-0
5-(3,6,9-Triossa-2-undecilossi)benzo(d) -1,3-diossolano	613-064-00-5
Triossimetilene	605-002-00-0
Triottilfosfina ossido, esildiottilfosfina ossido, diesilottilfosfina ossido, triesilfosfina ossido (miscela)	015-149-00-7
Tripsina	647-010-00-7
bis(1,2,3-Tritiacicloesildimetil)ammonio ossalato	607-170-00-0
4-Tritilmorfolina	613-052-00-X
Uranio	092-001-00-8
Uranio composti	092-002-00-3
Uretano	607-149-00-6
Valinamide	616-025-00-0
Vamidotion	015-059-00-8
Vanadio pentossido	023-001-00-8
Veratrina	613-062-00-4
Vernolato	006-066-00-7
Vinilcicloesan diepossido	603-066-00-4
Vinile acetato	607-023-00-0
Vinile bromuro	602-024-00-2
Vinile cloruro	602-023-00-7
Vinilidene cloruro	602-025-00-8
2-Viniltoluene	601-028-00-1
Violetto benzile 4B	650-010-00-X
Warfarin	607-056-00-0
Xilene	601-022-00-9
Xilene,m-	601-022-00-9
Xilene,o-	601-022-00-9
Xilene,p-	601-022-00-9
Xilenolo	604-006-00-X
Xilidina	612-027-00-0
N,N-bis(2,4-Xililiminometil)metilamina	612-086-00-2
3,4-Xilil metilcarbammato	006-055-00-7
XMC	006-067-00-2
Xylylcarb	006-055-00-7
Zinco in polvere (piroforica)	030-001-00-1
Zinco in polvere (stabilizzata)	030-002-00-7
Zincoalchili	030-004-00-8
Zinco bis(N,N-dimetil-ditiocarbammato)	006-012-00-2
Zinco bis(3,5-di-terz-butilsalicilato-O1,O2)	030-007-00-4
Zinco cloruro	030-003-00-2
Zinco cromato, compreso il cromato di zinco e di potassio	024-007-00-3
Zincodiaminodiisocianato	030-005-00-3
triZinco difosfuro	015-006-00-9

Nome	Numero indice
Zinco 2-idrossi-5-C13-18 alchilbenzoato	607-183-00-1
Zinco idrossi(2-(benzenesolfonamido)benzoato)	030-008-00-X
Zinco solfato	030-006-00-9
Zineb	006-078-00-2
Ziram	006-012-00-2
Zirconio in polvere (piroforica)	040-001-00-3
Zirconio in polvere (stabilizzata)	040-002-00-9
Zolfo dicloruro	016-013-00-X
Zolfo diossido	016-011-00-9
Zolfo monocloruro	016-012-00-4
Zolfo tetracloruro	016-014-00-5

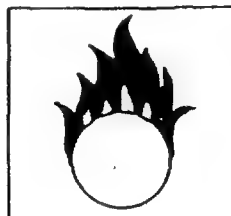


## ALLEGATO II

Simboli e indicazioni di pericolo delle sostanze e preparati pericolosi.



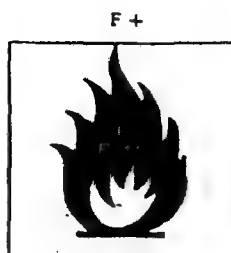
ES: Explosivo  
DA: Eksplosiv  
DE: Explosionsgefährlich  
EL: Εκρηκτικό  
EN: Explosive  
FR: Explosif  
IT: Esplosivo  
NL: Ontplofbaar  
PT: Explosivo



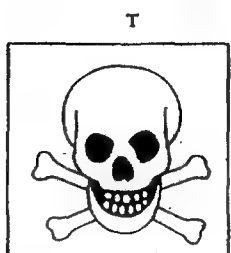
ES: Comburente  
DA: Brandnærende  
DE: Brandfördernd  
EL: Οξειδωτικό  
EN: Oxidizing  
FR: Comburant  
IT: Comburente  
NL: Oxyderend  
PT: Comburente



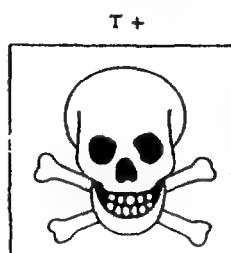
ES: Fácilmente inflamable  
DA: Meget brandfarlig  
DE: Leichtentzündlich  
EL: Πολύ εύφλεκτο  
EN: Highly flammable  
FR: Facilement inflammable  
IT: Facilmente infiammabile  
NL: Licht ontvlambaar  
PT: Facilmente inflamável



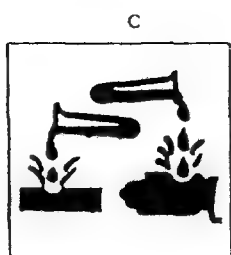
ES: Extremadamente inflamable  
DA: Yderst brandfarlig  
DE: Hochentzündlich  
EL: Εξαιρετικά εύφλεκτο  
EN: Extremely flammable  
FR: Extrêmement inflammable  
IT: Estremamente infiammabile  
NL: Zeer licht ontvlambaar  
PT: Extremamente inflamável



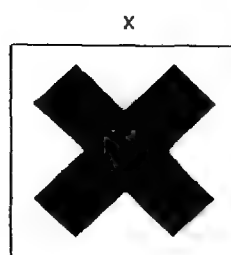
ES: Tóxico  
DA: Giftig  
DE: Giftig  
EL: Τοξικό  
EN: Toxic  
FR: Toxique  
IT: Tossico  
NL: Vergiftig  
PT: Tóxico



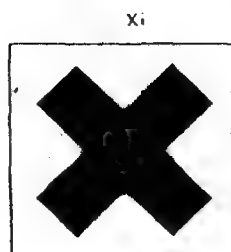
ES: Muy tóxico  
DA: Meget giftig  
DE: Sehr giftig  
EL: Πολύ τοξικό  
EN: Very toxic  
FR: Très toxique  
IT: Molto tossico  
NL: Zeer vergiftig  
PT: Muito tóxico



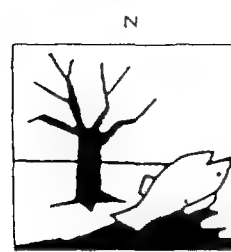
ES: Corrosivo  
DA: Ætsende  
DE: Ätzend  
EL: Διαβρωτικό  
EN: Corrosive  
FR: Corrosif  
IT: Corrosivo  
NL: Bijtend  
PT: Corrosivo



ES: Nocivo  
DA: Sundhedsskadelig  
DE: Mindergiftig  
EL: Επιβλαβές  
EN: Harmful  
FR: Nocif  
IT: Nocivo  
NL: Schadelijk  
PT: Nocivo



ES: Irritante  
DA: Lokalirriterende  
DE: Reizend  
EL: Ερεθιστικό  
EN: Irritant  
FR: Irritant  
IT: Irritante  
NL: Irriterend  
PT: Irritante



ES: Peligroso para el medio ambiente  
DA: Miljøfarlig  
DE: Umweltgefährlich  
EL: Επικίνδυνο για το περιβάλλον  
EN: Dangerous for the environment  
FR: Dangereux pour l'environnement  
IT: Pericoloso per l'ambiente  
NL: Milieugevaarlijk  
PT: Perigoso para o ambiente

Nota: Le lettere E, O, F, F+, T, T+, C, Xn, Xi, e N non fanno parte del simbolo



**ALLEGATO III****Elenco delle frasi di rischio**

- R 1 Esplosivo allo stato secco.
- R 2 Rischio di esplosione per urto, sfregamento, fuoco o altre sorgenti d'ignizione.
- R 3 Elevato rischio di esplosione per urto, sfregamento, fuoco o altre sorgenti d'ignizione.
- R 4 Forma composti metallici esplosivi molto sensibili.
- R 5 Pericolo di esplosione per riscaldamento.
- R 6 Esplosivo a contatto o senza contatto con l'aria.
- R 7 Può provocare un incendio.
- R 8 Può provocare l'accensione di materie combustibili.
- R 9 Esplosivo in miscela con materie combustibili.
- R 10 Infiammabile.
- R 11 Facilmente infiammabile.
- R 12 Estremamente infiammabile.
- R 14 Reagisce violentemente con l'acqua.
- R 15 A contatto con l'acqua libera gas estremamente infiammabili.
- R 16 Pericolo di esplosione se mescolato con sostanze comburenti.
- R 17 Spontaneamente infiammabile all'aria.
- R 18 Durante l'uso può formare con aria miscele esplosive/infiammabili.
- R 19 Può formare perossidi esplosivi.
- R 20 Nocivo per inalazione.
- R 21 Nocivo a contatto con la pelle.
- R 22 Nocivo per ingestione.
- R 23 Tossico per inalazione.
- R 24 Tossico a contatto con la pelle.
- R 25 Tossico per ingestione.
- R 26 Molto tossico per inalazione.
- R 27 Molto tossico a contatto con la pelle.
- R 28 Molto tossico per ingestione.
- R 29 A contatto con l'acqua libera gas tossici.
- R 30 Può divenire facilmente infiammabile durante l'uso.
- R 31 A contatto con acidi libera gas tossico.
- R 32 A contatto con acidi libera gas altamente tossico.
- R 33 Pericolo di effetti cumulativi.
- R 34 Provoca ustioni.
- R 35 Provoca gravi ustioni.
- R 36 Irritante per gli occhi.
- R 37 Irritante per le vie respiratorie.
- R 38 Irritante per la pelle.
- R 39 Pericolo di effetti irreversibili molto gravi.
- R 40 Possibilità di effetti irreversibili.
- R 41 Rischio di gravi lesioni oculari.
- R 42 Può provocare sensibilizzazione per inalazione.
- R 43 Può provocare sensibilizzazione per contatto con la pelle.
- R 44 Rischio di esplosione per riscaldamento in ambiente confinato.
- R 45 Può provocare il cancro.

- R 46 Può provocare alterazioni genetiche ereditarie.  
R 48 Pericolo di gravi danni per la salute in caso di esposizione prolungata.  
R 49 Può provocare il cancro per inalazione.  
R 50 Altamente tossico per gli organismi acquatici.  
R 51 Tossico per gli organismi acquatici.  
R 52 Nocivo per gli organismi acquatici.  
R 53 Può provocare a lungo termine effetti negativi per l'ambiente acquatico.  
R 54 Tossico per la flora.  
R 55 Tossico per la fauna.  
R 56 Tossico per gli organismi del terreno.  
R 57 Tossico per le api  
R 58 Può provocare a lungo termine effetti negativi per l'ambiente  
R 59 Pericoloso per lo strato di ozono.  
R 60 Può ridurre la fertilità  
R 61 Può danneggiare i bambini non ancora nati.  
R 62 Possibile rischio di ridotta fertilità.  
R 63 Possibile rischio di danni ai bambini non ancora nati.  
R 64 Possibile rischio per i bambini allattati al seno.  
R 65 Può causare danni polmonari se ingerito

#### Combinazioni delle frasi R

- R 14/15 Reagisce violentemente con l'acqua liberando gas estremamente infiammabili.  
R 15/21 A contatto con acqua libera gas tossici estremamente infiammabili.  
R 20121 Nocivo per inalazione e contatto con la pelle.  
R 20/22 Nocivo per inalazione e ingestione  
R 20/21/22 Nocivo per inalazione, contatto con la pelle e per ingestione.  
R 21/22 Nocivo a contatto con la pelle e per ingestione.  
R 23/24 Tossico per inalazione e contatto con la pelle  
R 23/25 Tossico per inalazione e ingestione.  
R 23/24/25 Tossico per inalazione, contatto con la pelle e per ingestione  
R 24/25 Tossico a contatto con la pelle e per ingestione.  
R 26/27 Molto tossico per inalazione e contatto con la pelle  
R 26/28 Molto tossico per inalazione e per ingestione.  
R 26/27/28 Molto tossico per inalazione, contatto con la pelle e per ingestione  
R 27/28 Molto tossico a contatto con la pelle e per ingestione.  
R 36/37 Irritante per gli occhi e le vie respiratorie.  
R 36/38 Irritante per gli occhi e la pelle.  
R 36/37/38 Irritante per gli occhi, le vie respiratorie e la pelle.  
R 37/38 Irritante per le vie respiratorie e la pelle.  
R 39/23 Tossico: pericolo di effetti irreversibili molto gravi per inalazione.  
R 39/24 Tossico: pericolo di effetti irreversibili molto gravi a contatto con la pelle.  
R 39/25 Tossico: pericolo di effetti irreversibili molto gravi per ingestione.  
R 39/23/24 Tossico: pericolo di effetti irreversibili molto gravi per inalazione e a contatto con la pelle.  
R 39/23/25 Tossico: pericolo di effetti irreversibili molto gravi per inalazione ed ingestione.

<b>R 39/24/25</b>	Tossico pericolo di effetti irreversibili molto gravi a contatto con la pelle e per ingestione.
<b>R 39/23/24/25</b>	Tossico pericolo di effetti irreversibili molto gravi per inalazione, a contatto con la pelle e per ingestione
<b>R 39/26</b>	Molto tossico: pericolo di effetti irreversibili molto gravi per inalazione.
<b>R 39/27</b>	Molto tossico pericolo di effetti irreversibili molto gravi a contatto con la pelle.
<b>R 39/28</b>	Molto tossico pericolo di effetti irreversibili molto gravi per ingestione.
<b>R 39/26/27</b>	Molto tossico pericolo di effetti irreversibili molto gravi per inalazione e a contatto con la pelle.
<b>R 39/26/28</b>	Molto tossico pericolo di effetti irreversibili molto gravi per inalazione ed ingestione.
<b>R 39/27/28</b>	Molto tossico pericolo di effetti irreversibili molto gravi a contatto con la pelle e per inalazione.
<b>R 39/26/27/28</b>	Molto tossico pericolo di effetti irreversibili molto gravi per inalazione, contatto con la pelle e per ingestione.
<b>R 40/20</b>	Nocivo: possibilità di effetti irreversibili per inalazione.
<b>R 40/21</b>	Nocivo: possibilità di effetti irreversibili a contatto con la pelle,
<b>R 40/22</b>	Nocivo: possibilità di effetti irreversibili per ingestione.
<b>R 40/20/21</b>	Nocivo: possibilità di effetti irreversibili inalazione e a contatto con la pelle.
<b>R 40/20/22</b>	Nocivo: possibilità di effetti irreversibili per inalazione ed ingestione.
<b>R 40/21/22</b>	Nocivo: possibilità di effetti irreversibili a contatto con la pelle e per ingestione.
<b>R 40/20/21/22</b>	Nocivo: possibilità di effetti irreversibili per inalazione, a contatto con la pelle e per ingestione.
<b>R 40/43</b>	Può provocare sensibilizzazione per inalazione e contatto con la pelle.
<b>R 48/20</b>	Nocivo: pericolo di gravi danni per la salute in caso di esposizione prolungata per inalazione.
<b>R 48/21</b>	Nocivo: pericolo di gravi danni alla salute in caso di esposizione prolungata a contatto con la pelle.
<b>R 48/22</b>	Nocivo: pericolo di gravi danni alla salute in caso di esposizione prolungata per ingestione.
<b>R 48/20/21</b>	Nocivo: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione e a contatto con la pelle
<b>R 48/20/22</b>	Nocivo: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione e ingestione.
<b>R 48/21/22</b>	Nocivo: pericolo di gravi danni alla salute in caso di esposizione prolungata a contatto con la pelle e per ingestione.
<b>R 48/20/21/22</b>	Nocivo: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione, a contatto con la pelle e per ingestione.
<b>R 48/23</b>	Tossico: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione.
<b>R 48/24</b>	Tossico: pericolo di gravi danni alla salute in caso di esposizione prolungata a contatto con la pelle.
<b>R 48/25</b>	Tossico: pericolo di gravi danni alla salute in caso di esposizione prolungata per ingestione.
<b>R 48/23/24</b>	Tossico: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione e a contatto con la pelle.



- R 48/23/25** Tossico: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione ed ingestione.
- R 48/24/25** Tossico: pericolo di gravi danni alla salute in caso di esposizione prolungata a contatto con la pelle e per ingestione.
- R 48/23/24/25** Tossico: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione, a contatto con la pelle e per ingestione.
- R 50/53** Altamente tossico per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico.
- R 51/53** Tossico per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico.
- R 52/53** Nocivo per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico.

## ALLEGATO IV

### Elenco dei consigli di prudenza

- S 1 Conservare sotto chiave
- S 2 Conservare fuori della portata dei bambini
- S 3 Conservare in luogo fresco
- S 4 Conservare lontano da locali di abitazione
- S 5 Conservare sotto (liquido appropriato da indicarsi da parte del fabbricante)
- S 8 Conservare sotto (gas inerte da indicarsi da parte del fabbricante)
- S 7 Conservare il recipiente ben chiuso
- S 8 Conservare al riparo dall'umidità
- S 9 Conservare il recipiente in luogo ben ventilato
- S 12 Non chiudere ermeticamente il recipiente
- S 13 Conservare lontano da alimenti o mangimi e da bevande
- S 14 Conservare lontano da (sostanze incompatibili da precisare da parte del produttore)
- S 15 Conservare lontano dal calore
- S 18 Conservare lontano da fiamme e scintille-Non fumare
- S 17 Tenere lontano da sostanze combustibili
- S 18 Manipolare ed aprire il recipiente con cautela
- S 20 Non mangiare né bere durante l'impiego
- S 21 Non fumare durante l'impiego
- S 22 Non respirare le polveri
- S 23 Non respirare i gas/fumi/vapori/aerosoli/[termine(i) appropriato(i) da precisare da parte del produttore]
- S 24 Evitare il contatto con la pelle
- S 25 Evitare il contatto con gli occhi
- S 26 In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico
- S 27 Togliersi di dosso immediatamente gli indumenti contaminati
- S 28 In caso di contatto con la pelle lavarsi immediatamente ed abbondantemente con (prodotti idonei da indicarsi da parte del fabbricante)
- S 29 Non gettare i residui nelle fognature
- S 30 Non versare acqua sul prodotto
- S 33 Evitare l'accumulo di cariche elettrostatiche
- S 35 Non disfarsi del prodotto e del recipiente se non con le dovute precauzioni
- S 36 Usare indumenti protettivi adatti
- S 37 Usare guanti adatti.
- S 38 In caso di ventilazione insufficiente, usare un apparecchio respiratorio adatto.
- S 39 Proteggersi gli occhi/la faccia.
- S 40 Per pulire il pavimento e gli oggetti contaminati da questo prodotto, usare.....(da precisare da parte del produttore).
- S 41 In caso di incendio e/o esplosione non respirare i fumi.
- S 42 Durante le fumigazioni/polimerizzazioni usare un apparecchio respiratorio adatto [termine(i) appropriato(i) da precisare da parte del produttore].
- S 43 In caso di incendio usare ..(mezzi estinguenti idonei da indicarsi da parte del fabbricante. Se l'acqua aumenta il rischio precisare "Non usare acqua".

- S 44** In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli etichetta).
- S 46** In caso d'ingestione consultare immediatamente il medico e mostrargli il contenitore o l'etichetta.
- S 47** Conservare a temperatura non superiore a .... °C (da precisare da parte del fabbricante).
- S 48** Mantenere umido con .... (mezzo appropriato da precisare da parte del fabbricante).
- S 49** Conservare soltanto nel recipiente originale.
- S 50** Non mescolare con..... (da specificare da parte del fabbricante).
- S 51** Usare soltanto in luogo ben ventilato.
- S 52** Non utilizzare su grandi superfici in locali abitati.
- S 53** Evitare l'esposizione-procurarsi speciali istruzioni prima dell'uso.
- S 56** Smaltire questo materiale e relativi contenitori in un punto di raccolta rifiuti pericolosi o speciali autorizzato.
- S 57** Usare contenitori adeguati per evitare l'inquinamento ambientale.
- S 59** Richiedere informazioni al produttore/fornitore per il recupero/riciclaggio.
- S 60** Questo materiale e il suo contenitore devono essere smaltiti come rifiuti pericolosi.
- S 61** Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali schede informative in materia di sicurezza.
- S 62** Non provocare il vomito: consultare immediatamente il medico e mostrargli il contenitore o l'etichetta.

### Combinazioni delle frasi S

- S 1/2** Conservare sotto chiave e fuori della portata dei bambini.
- S 3/7** Tenere il recipiente ben chiuso in luogo fresco.
- S 3/9/14** Conservare in luogo fresco e ben ventilato lontano da ... (materiali incompatibili da precisare da parte del fabbricante).
- S 3/9/14/49** Conservare soltanto nel contenitore originale in luogo fresco e ben ventilato lontano da ... (materiali incompatibili da precisare da parte del fabbricante).
- S 3/9/49** Conservare soltanto nel contenitore originale in luogo fresco e ben ventilato.
- S 3/14** Conservare in luogo fresco lontano da ... (materiali incompatibili da precisare da parte del fabbricante).
- S 7/8** Conservare il recipiente ben chiuso e al riparo dall'umidità.
- S 7/9** Tenere il recipiente ben chiuso e in luogo ben ventilato.
- S 7/47** Tenere il recipiente ben chiuso e a temperatura non superiore a ... °C (da precisare da parte del fabbricante).
- S 20/21** Non mangiare, né bere, né fumare durante l'impiego.
- S 24/25** Evitare il contatto con gli occhi e con la pelle.
- S 29/56** Non gettare i residui nelle fognature.
- S 36/37** Usare indumenti protettivi e guanti adatti.
- S 36/37/39** Usare indumenti protettivi e guanti adatti e proteggersi gli occhi/la faccia.
- S 36/39** Usare indumenti protettivi adatti e proteggersi gli occhi/la faccia.
- S 37/39** Usare guanti adatti e proteggersi gli occhi/la faccia.
- S 47/49** Conservare soltanto nel contenitore originale a temperatura non superiore a ....da parte del fabbricante).

## ALLEGATO V



## CONTENUTO

## INTRODUZIONE

## PARTE A METODI PER LA DETERMINAZIONE DELLE PROPRIETÀ FISICO-CHIMICHE

- A 1 Temperatura di fusione/congelamento
- A 2 Temperatura di ebollizione
- A 3 Densità relativa
- A 4 Tensione di vapore
- A 5 Tensione superficiale
- A 6 Idrosolubilità
- A 8 Coefficiente di ripartizione
- A 9 Punto d'infiammabilità
- A 10 Infiammabilità (solidi)
- A 11 Infiammabilità (gas)
- A 12 Infiammabilità (contatto con l'acqua)
- A 13 Proprietà profonde di solidi e liquidi
- A 14 Proprietà esplosive
- A 15 Temperatura di autoaccensione (liquidi e gas)
- A 16 Temperatura di autoaccensione relativa dei solidi
- A 17 Proprietà ossidanti (solidi)

## PARTE B METODI PER LA DETERMINAZIONE DELLA TOSSICITÀ

## Introduzione generale

- B 1 Tossicità acuta per via orale
- B 1 bis Tossicità acuta (per via orale) metodo a dose fissa
- B 1 ins Tossicità acuta per via orale Metodo della classe di tossicità acuta
- B 2 Tossicità acuta per inalazione
- B 3 Tossicità acuta per via cutanea
- B 4 Tossicità acuta (irritazione cutanea)
- B 5 Tossicità acuta (irritazione oculare)
- B 6 Sensibilizzazione cutanea
- B 7 Tossicità a dose ripetuta (28 giorni) per via orale
- B 8 Tossicità a dose ripetuta (28 giorni) per inalazione
- B 9 Tossicità a dose ripetuta (28 giorni) per via cutanea
- B 10 Mutagenicità (mammiferi saggio citogenetico in vitro)
- B 11 Mutagenicità (mammiferi midollo osseo saggio citogenetico *in vivo* analisi cromosomica)
- B 12 Mutagenicità (saggio del micronucleo)
- B 13 Mutagenicità (batteri *Escherichia coli* - saggio di reversione)
- B 14 Mutagenicità (*Salmonella typhimurium* - saggio di reversione)

- B. 15. Mutazione genica: *Saccharomyces cerevisiae*
- B. 16. Ricombinazione mitotica: *Saccharomyces cerevisiae*
- B. 17. Cellule di mammiferi in vitro: saggio di mutazione genica
- B. 18. Danno e riparazione del DNA: sintesi non programmata del DNA e cellule di mammifero in vitro
- B. 19. Saggio degli scambi tra cromatidi fratelli in vitro
- B. 20. Saggio dei letali recessivi legati al sesso: *Drosophila melanogaster*
- B. 21. Saggio in vitro di trasformazione di cellulose di mammifero in vitro
- B. 22. Saggio dei letali dominanti nei roditori
- B. 23. Analisi citogenetica delle cellule germinali: mammiferi
- B. 24. Saggio delle macchie (spot test): topi
- B. 25. Traslocazioni ereditabili: topo
- B. 26. Saggio di tossicità orale: subcronica: saggio di somministrazione orale ripetuta di dosi per 90 giorni usando specie di roditori
- B. 27. Saggio di tossicità orale: subcronica: saggio di somministrazione orale ripetuta di dosi per 90 giorni usando specie di non roditori
- B. 28. Saggio di tossicità cutanea: subcronica: saggio di somministrazione cutanea ripetuta di dosi per 90 giorni usando specie non di roditori
- B. 29. Saggio di tossicità subcronica inalatoria: saggio di somministrazione inalatoria ripetuta di dosi per 90 giorni usando specie di non roditori
- B. 30. Saggio di tossicità cronica
- B. 31. Saggio di teratogenesi: roditori e non roditori
- B. 32. Saggio di cancerogenesi
- B. 33. Saggio combinato di tossicità cronica/ cancerogenesi
- B. 34. Saggio di tossicità sulla riproduzione: una generazione
- B. 35. Saggio di tossicità sulla riproduzione: due generazioni
- B. 36. Tossicocinetica
- B. 37. Neurotossicità ritardata di sostanze organofosforiche dopo esposizione acuta
- B. 38. Neurotossicità ritardata di sostanze organofosforiche con somministrazione ripetuta per 28 giorni

#### PARTE C. Metodi per la determinazione della ecotossicità

##### Introduzione generale parte C

- C. 1. Tossicità acuta per i pesci
- C. 2. Tossicità acuta per le *Daphnia*
- C. 3. Saggio di inibizione della crescita delle alghe
- C. 4. Degradazione biologica: determinazione della <pronta> biodegradabilità
  - C. 4-A Carbonio organico disciolto (DOC) spazzione lenta
  - C. 4-B Saggio di Screening OCSE modificato
  - C. 4-C Sviluppo di biossido di carbonio (CO<sub>2</sub>)
  - C. 4-D Respirimetria manometrica
  - C. 4-E Bottiglia chiusa
  - C. 4-F MITI (Ministero del Commercio Internazionale e dell'Industria - Giappone)
- C. 5. Degradazione: domanda biochimica di ossigeno (BOD)
- C. 6. Degradazione: domanda chimica di ossigeno (COD)
- C. 7. Degradazione: degradazione abiotica idrolisi in funzione del pH
- C. 8. Tossicità per lombrichi: saggio su terreno artificiale

- 
- |      |   |
|------|---|
| C 9  | Biodegradazione Zahn-Wellens test                                     |
| C 10 | Biodegradazione saggio di simulazione con fanghi attivi               |
| C 11 | Biodegradazione fanghi attivi saggio di inibizione della respirazione |
| C 12 | Biodegradazione saggio SCAS modificato                                |



## INTRODUZIONE

L'allegato presenta dei metodi di prova per la determinazione delle proprietà chimico-fisiche, tossicologiche e ecotossicologiche elencate negli allegati VII e VIII —————. I metodi sono basati su quelli riconosciuti e raccomandati da organismi internazionali competenti (in particolare l'OCSE).

Nei casi in cui non sono disponibili tali metodi, sono stati adottati norme nazionali o metodi che godono di consenso a livello scientifico. In generale le prove devono essere eseguite con la sostanza come definito dalla direttiva. Si deve porre attenzione alla possibile influenza di impurezze sui risultati delle prove.

Nel caso in cui i metodi di questo allegato siano inappropriati per lo studio di una certa proprietà, il notificante deve giustificare il metodo alternativo utilizzato.

Prove e studi su animali saranno condotti secondo i regolamenti nazionali e dovranno tener conto di principi umani e sviluppi internazionali nel campo del benessere degli animali.

Tra metodi di prova equivalenti, si sceglie il metodo che utilizza il numero minimo di animali.

**PARTE A: METODI PER LA DETERMINAZIONE DELLE PROPRIETÀ FISICO-CHIMICHE****A.1. TEMPERATURA DI FUSIONE/CONGELAMENTO****1. METODO**

La maggior parte dei metodi descritti si basano sulle linee direttrici OCSE (1). I principi fondamentali sono riportati nei riferimenti (2) e (3).

**1.1. INTRODUZIONE**

I metodi e le apparecchiature qui illustrati si applicano alla determinazione della temperatura di fusione di sostanze senza alcuna limitazione rispetto al loro grado di purezza.

La scelta del metodo più idoneo dipende dalla natura delle sostanze in esame. Di conseguenza, il fattore limitante sarà inerente al fatto che la sostanza sia facilmente, difficilmente o per nulla polverizzabile.

Per alcune sostanze, la determinazione della temperatura di congelamento o di solidificazione risulta più appropriata e pertanto in questo metodo sono state incluse anche le norme per queste determinazioni.

Dove, a motivo delle particolari proprietà della sostanza, non sia possibile misurare in modo adatto alcuni dei parametri suddetti, può essere appropriato un punto di scorrimento.

**1.2. DEFINIZIONI E UNITÀ**

La temperatura di fusione è definita come la temperatura alla quale si verifica la transizione di fase dallo stato solido allo stato liquido a pressione atmosferica, e questa temperatura nel caso ideale corrisponde alla temperatura di congelamento.

Poiché per molte sostanze la transizione di fase si verifica in un intervallo di temperatura ampio, questo viene spesso descritto come intervallo di fusione.

Conversione delle unità (da K a °C):

$$t = T - 273,15$$

t: temperatura Celsius, gradi Celsius (°C)

T: temperatura termodinamica, kelvin (K)

**1.3. SOSTANZE DI RIFERIMENTO**

Non è necessario utilizzare sostanze di riferimento ogni volta che si esamina una nuova sostanza. Esse devono principalmente venire impiegate per controllare periodicamente i risultati ottenuti col metodo e per permettere confronti con i risultati ottenuti con altri metodi.

Alcune sostanze di riferimento sono elencate nel riferimento bibliografico (4).

**1.4. PRINCIPIO DEL METODO**

Si determina la temperatura (o l'intervallo di temperatura) della transizione di fase dallo stato solido allo stato liquido o dallo stato liquido allo stato solido. In pratica si determina la temperatura di fusione/congelamento incipiente e di fusione/congelamento finale durante il riscaldamento/raffreddamento di un campione della sostanza in esame a pressione atmosferica. Sono descritti 5 metodi, e precisamente il metodo del capillare, il metodo degli elementi riscaldanti, la determinazione del punto di congelamento, i metodi di analisi termica e la determinazione del punto di scorrimento (come è stata sviluppata per gli olii di origine petrolifera).

In alcuni casi, può essere conveniente misurare la temperatura di congelamento invece della temperatura di fusione.

**1.4.1. Metodo del capillare**

**1.4.1.1. Apparecchi per la determinazione del punto di fusione tramite bagno liquido**

Una piccola quantità della sostanza finemente macinata viene introdotta in un tubo capillare e compattata fortemente. Il tubo viene riscaldato, insieme ad un termometro, e l'aumento di temperatura viene regolato in modo che sia inferiore a circa 1 K/min durante la fusione propriamente detta. Si determinano quindi le temperature iniziale e finale di fusione.

**1.4.1.2. Apparecchi per la determinazione del punto di fusione a blocco metallico**

Si procede come indicato al punto 1.4.1.1, salvo il fatto che il tubo capillare ed il termometro sono collocati in un blocco di metallo riscaldante, attraverso alcuni fori del quale è possibile la loro osservazione.

**1.4.1.3. Determinazione tramite fotocellula**

Il campione contenuto nel tubo capillare viene riscaldato automaticamente in un cilindro metallico. Attraverso un foro praticato nel cilindro un raggio luminoso viene convogliato sulla sostanza e raggiunge poi una fotocellula accuratamente tarata. Per la maggior parte delle sostanze le proprietà ottiche si modificano durante la fusione, passando dall'opacità alla trasparenza. L'intensità della luce che raggiunge la fotocellula aumenta fino ad inviare un segnale di arresto all'indicatore numerico di un termometro a resistenza di platino collocato nella camera di riscaldamento. Questo metodo non è adatto per alcune sostanze fortemente colorate.

**1.4.2. Elementi riscaldanti**

**1.4.2.1. Banco riscaldante di Kofler**

Il banco riscaldante di Kofler fa uso di due corpi metallici di diversa conducibilità termica, riscaldati elettricamente; la sbarra è progettata in modo tale che per tutta la sua lunghezza il gradiente di temperatura è virtualmente costante. La temperatura dell'elemento riscaldante può variare da 283 K a 573 K; essa viene letta su un apposito strumento costituito da un cursore provvisto di indice e di linguetta specificamente realizzati per ogni banco. Per determinare una temperatura di fusione, la sostanza viene distribuita in uno strato sottile direttamente sulla superficie dell'elemento riscaldante. In pochi secondi appare una linea di separazione netta tra la fase solida e quella liquida. La temperatura corrispondente a questa linea di separazione viene letta facendovi coincidere l'indice dello strumento.

**1.4.2.2. Microscopio di fusione**

Numerosi sono gli elementi riscaldanti forniti di microscopio utilizzati per la determinazione del punto di fusione con quantità molto piccole di materiale. Nella maggioranza di questi strumenti, la temperatura viene determinata mediante una termocoppia sensibile, ma talvolta si usano anche termometri a mercurio. La versione tipica di un apparecchio per la determinazione del punto di fusione ad elemento riscaldante con microscopio è dotato di una camera di riscaldamento contenente una piastra metallica sopra la quale si pone il campione, distribuito su un vetrino. Al centro della piastra metallica si trova un foro che permette il passaggio della luce proveniente dallo specchio di illuminazione del microscopio. Durante la misura la camera viene chiusa da una piastra di vetro in modo da escludere l'aria dalla zona del campione.

Il riscaldamento del campione è regolato da un reostato. Per misure di grande precisione e nel caso di sostanze otticamente anisotrope, si può utilizzare luce polarizzata.

**1.4.2.3. Metodo del menisco**

Questo metodo è specifico per le poliammidi.

Si determina visivamente la temperatura alla quale si verifica lo spostamento di un menisco di olio silconico compreso tra un elemento riscaldante e un copri-oggetto sostenuto dal campione di poliammide in esame.

**1.4.3. Metodo per determinare la temperatura di congelamento**

Il campione viene posto in una provetta speciale e inserito in un apparecchio per la determinazione della temperatura di congelamento. Il campione viene agitato con delicatezza e continuità durante il raffreddamento.

e la temperatura viene misurata ad intervalli adatti. Non appena la temperatura si mantiene costante per qualche lettura, si registra tale temperatura (corretta per l'errore termometrico) come temperatura di congelamento.

Si deve evitare un sovraraffreddamento mantenendo l'equilibrio tra le fasi solida e liquida.

#### 1.4.4. Analisi termica

##### 1.4.4.1. Analisi termica differenziale (ATD)

Questa tecnica registra la differenza di temperatura tra la sostanza e un materiale di riferimento in funzione della temperatura stessa mentre la sostanza e il materiale di riferimento sono sottoposti allo stesso programma controllato di temperatura. Quando il campione subisce una transizione che implica una variazione di entalpia, tale variazione è indicata da una deviazione endotermica (fusione) o esotermica (congelamento) dalla linea di base del tracciato della temperatura.

##### 1.4.4.2. Calorimetria differenziale a scansione (CDS)

Questa tecnica registra la differenza tra l'energia introdotta in una sostanza e quella introdotta in un materiale di riferimento, in funzione della temperatura, mentre la sostanza e il materiale di riferimento sono sottoposti allo stesso programma controllato di temperatura. Questa energia è l'energia necessaria per mantenere nulla la differenza di temperatura tra la sostanza e il materiale di riferimento. Quando il campione subisce una transizione che implica una variazione di entalpia, tale variazione è indicata da una deviazione endotermica (fusione) o esotermica (congelamento) dalla linea di base del tracciato del flusso termico.

#### 1.4.5. Punto di scorrimento

Questo metodo è stato sviluppato per l'uso con gli oli di origine petrolifera ed è adatto per l'uso con sostanze oleose aventi una bassa temperatura di fusione.

Dopo un riscaldamento preliminare, il campione viene raffreddato ad una velocità specifica mentre, ad intervalli di 3 K, se ne esaminano le caratteristiche di scorrimento. La temperatura più bassa alla quale si osserva un movimento della sostanza viene registrata come punto di scorrimento.

### 1.5. CRITERI DI QUALITÀ

L'applicabilità e l'accuratezza dei vari metodi impiegati per la determinazione della temperatura di fusione/intervallo di fusione sono indicate nella seguente tabella.

TABELLA: APPLICABILITÀ DEI METODI

#### A. Metodi con impiego di capillare

Metodo di misura	Sostanze polverizzabili	Sostanze difficilmente polverizzabili	Intervallo di temperatura	Accuratezza stimata <sup>(1)</sup>	Norme esistenti
Apparecchi per il punto di fusione a bagno liquido	Sì	Soltanto per alcune	Da 273 a 573 K	± 0,3 K	JIS K 0064
Apparecchi per il punto di fusione con blocco metallico	Sì	Soltanto per alcune	Da 293 a > 573 K	± 0,5 K	ISO 1218 (E)
Determinazione con fotocellula	Sì	Svariate, con uso di accessori	Da 253 a 573 K	± 0,5 K	
<sup>(1)</sup> In funzione del tipo di strumento e del grado di purezza della sostanza.					

## B. Metodi con impiego di elementi riscaldanti e

Metodi di congelamento	Metodo di misura	Sostanze polverizzabili	Sostanze difficilmente polverizzabili	Intervallo di temperatura	Accuratezza stimata <sup>(1)</sup> / Norme esistenti
Banco riscaldante di Koffler	Sì	No	Da 283 a > 573 K	± 1,0 K	ANSI/ASTM D 345176
Microscopio di fusione	Sì	Soltanto per alcune	Da 273 a > 573 K	± 0,5 K	DIN 53736
Metodo del menisco	No	Specifico per le poliammidi	Da 293 a > 573 K	± 0,5 K	ISO 1218 (E)
Metodo del punto di congelamento	Sì	Sì	Da 223 a 573 K	± 0,5 K	per esempio BS 4695
<sup>(1)</sup> In funzione del tipo di strumento e del grado di purezza della sostanza					

## C. Analisi termica

Metodo di misura	Sostanze polverizzabili	Sostanze difficilmente polverizzabili	Intervallo di temperatura	Accuratezza stimata <sup>(1)</sup>	Norme esistenti
Analisi termica differenziale	Sì	Sì	Da 173 a 1 273 K	Fino a 600 K ± 0,5 K Fino a 1 273 K ± 2,0 K	ASTM E 53776
Calorimetria differenziale a scansione	Sì	Sì	Da 173 a 1 273 K	Fino a 600 K ± 0,5 K Fino a 1 273 K ± 2,0 K	ASTM E 53776
<sup>(1)</sup> In funzione del tipo di strumento e del grado di purezza della sostanza					

## D. Punto di scorrimento

Metodo di misura	Sostanze polverizzabili	Sostanze difficilmente polverizzabili	Intervallo di temperatura	Accuratezza stimata <sup>(1)</sup>	Norme esistenti
Punto di scorrimento	Per oli di origine petrolifera e sostanze oleose	Per oli di origine petrolifera e sostanze oleose	Da 223 a 323 K	± 3,0 K	ASTM D 9766
<sup>(1)</sup> In funzione del tipo di strumento e del grado di purezza della sostanza					

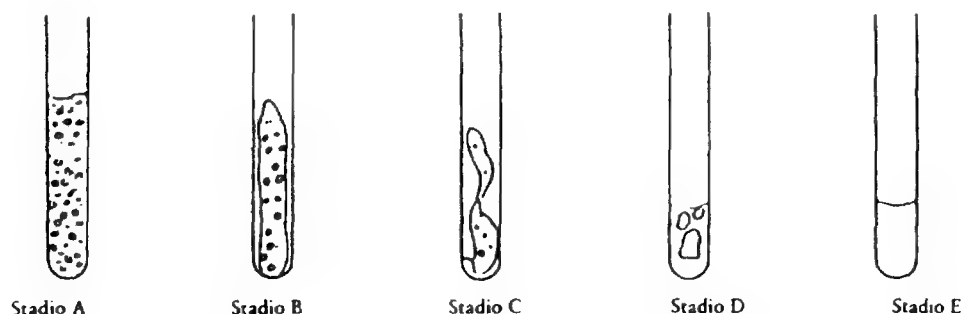
## 1.6 DESCRIZIONE DEI METODI

Le procedure relative a quasi tutti i metodi di determinazione sono state descritte in varie norme internazionali e nazionali (vedi appendice I)

## 1.6.1 Metodi con tubo capillare

Quando vengono sottoposte ad un lento aumento di temperatura, sostanze finemente polverizzate mostrano solitamente gli stadi di fusione mostrati in figura 1

Figura 1



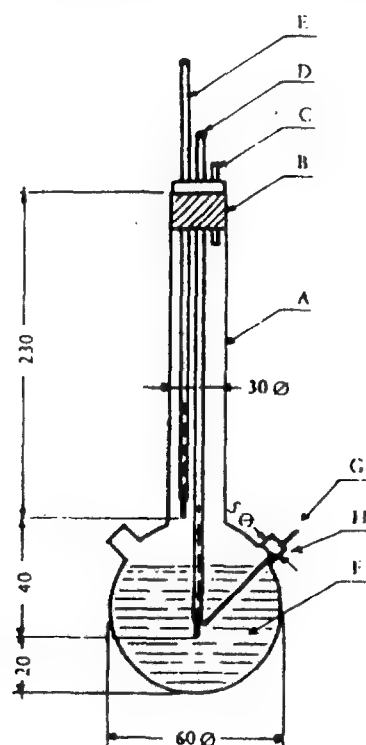
- Stadio A (inizio della fusione): minuscole goccioline aderiscono uniformemente alla parete interna del capillare;
- Stadio B: in seguito alla contrazione del fuso, va evidenziandosi uno spazio libero tra il campione e la parete interna;
- Stadio C: dopo essersi contratto, il campione inizia a scivolare in basso ed a liquefarsi;
- Stadio D: si ha la formazione di un menisco completo alla superficie, ma una quantità apprezzabile del campione rimane solida;
- Stadio E (stadio finale della fusione): non restano più particelle solide.

Durante la determinazione della temperatura di fusione viene registrata la temperatura all'inizio della fusione e nello stadio finale.

#### 1.6.1.1. Apparecchi per il punto di fusione a bagno liquido

La figura 2 presenta un tipo di apparecchio normalizzato, realizzato in vetro, per la temperatura di fusione (JIS K0064): tutte le quote sono date in mm.

Figura 2



- A: Recipiente di misura
- B: Tappo di sughero
- C: Sfogo
- D: Termometro
- E: Termometro ausiliario
- F: Bagno liquido
- G: Tubo capillare in vetro: lunghezza da 80 a 100 mm; diametro interno  $1 \pm 0,2$  mm; spessore da 0,2 a 0,3 mm
- H: Tubo laterale

*Bagno liquido:*

Si deve scegliere un liquido adatto. La scelta del liquido dipende dalla temperatura di fusione da determinare, per esempio paraffina liquida per temperature di fusione non superiori a 473 K, olio di silicone per temperature di fusione non maggiori di 573 K.

Per temperature di fusione superiori a 523 K, si può usare una miscela costituita da 3 parti di acido solforico e 2 parti di solfato di potassio (rapporto in peso). Se si usa una miscela di questo tipo occorre prendere opportune precauzioni.

*Termometro:*

Vanno impiegati soltanto termometri che soddisfano le prescrizioni delle norme ASTM E 1-71, DIN 12770, JIS K 8001, o di norme equivalenti.

ASTM E 1671, DIN 12770, JIS K 8001.

*Modalità operative:*

La sostanza secca va polverizzata finemente in un mortaio e posta in un tubo capillare, chiuso per fusione ad una estremità, in modo che, dopo assestamento nella maniera più compatta possibile, l'altezza del riempimento sia di 3 mm circa. Per ottenere un assestamento uniforme del campione, il tubo capillare deve essere lasciato cadere attraverso una canna di vetro su un vetro da orologio da un'altezza di circa 700 mm.

Il capillare riempito viene posto nel bagno in modo tale che la parte centrale del bulbo del termometro a mercurio sia in contatto con il tubo capillare nella zona dove è collocato il campione. Il tubo capillare viene di solito introdotto nell'apparecchio a temperatura inferiore di circa 10 K a quella della temperatura di fusione.

Il bagno liquido viene riscaldato in modo che l'aumento di temperatura corrisponda a circa 3 K/min. Il liquido va mantenuto sotto agitazione. A circa 10 K al di sotto della temperatura prevista di fusione, la velocità di incremento della temperatura va regolata ad un massimo di 1 K/min.

*Calcolo:*

La temperatura fusione si calcola con la formula seguente:

$$T = T_D + 0,00016 (T_D - T_E)n$$

dove:

$T$  = temperatura di fusione corretta, in K,

$T_D$  = temperatura letta sul termometro D, in K,

$T_E$  = temperatura letta sul termometro E, in K,

$n$  = numero di graduazioni della colonnina di mercurio sul termometro D sulla parte di stelo emergente.

#### 1.6.1.2. Apparecchi per la temperatura di fusione con blocco metallico

*Apparecchiatura:*

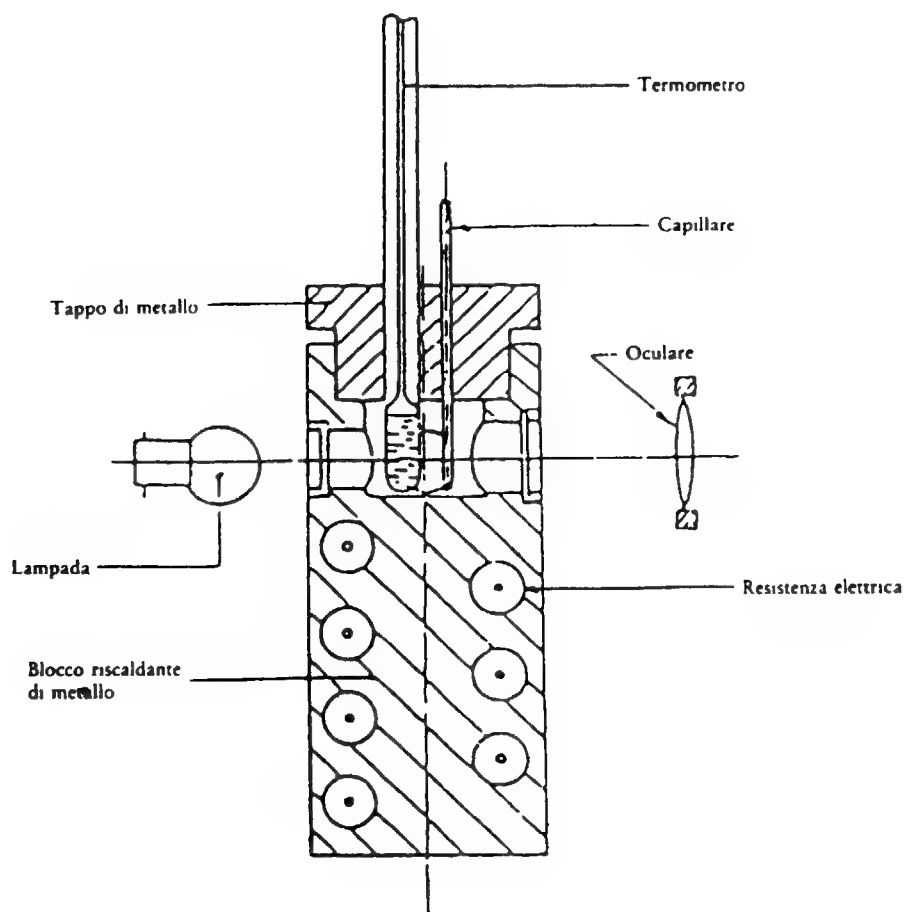
La strumentazione consiste in:

- un blocco cilindrico di metallo, la cui parte superiore è cava e forma una camera (vedi figura 3);
- un tappo metallico provvisto di due o più fori per permettere l'inserimento dei tubi capillari nel blocco metallico;
- un sistema di riscaldamento per il blocco metallico realizzato, per esempio, tramite una resistenza elettrica incorporata nel blocco;
- un reostato per la regolazione della potenza applicata, se si fa uso del riscaldamento elettrico;
- quattro finestre di vetro resistente al calore sulle pareti laterali della camera, disposte diametralmente ad angolo retto l'una rispetto all'altra. Di fronte ad una di esse è montato un oculare per l'osservazione del capillare. Le altre tre finestre vengono usate per illuminare l'interno per mezzo di lampade;
- un capillare di vetro resistente al calore chiuso ad una estremità (vedi punto 1.6.1.1).

**Termometro**

Vedi norme citate al punto 1.6.1.1. Possono utilizzarsi anche strumenti di misura termoelettrici di analoga accuratezza

Figura 3

**1.6.1.3. Determinazione tramite fotocellula****Apparecchiatura e modalità operative**

La strumentazione consiste in una camera metallica con un sistema automatico di riscaldamento. Si riempiono tre capillari secondo le indicazioni del punto 1.6.1.1 e si pongono nella camera.

Per la taratura dell'apparecchio sono disponibili diverse velocità di incremento lineare della temperatura e l'aumento di temperatura opportuno viene regolato elettricamente su una velocità costante e lineare preselezionata. La temperatura effettiva nel forno e la temperatura della sostanza nei tubi capillari sono indicate da registratori.



**1.6.2 Elementi riscaldanti****1 6 2 1 Banco riscaldante di Kofler**

Vedi appendice.

**1 6.2.2. Microscopio di fusione**

Vedi appendice.

**1.6.2.3 Metodo del menisco (per poliammidi)**

Vedi appendice.

La velocità di riscaldamento nella zona di passaggio attraverso la temperatura di fusione deve essere inferiore a 1 K/min.

**1.6.3. Metodi per la determinazione della temperatura di congelamento**

Vedi appendice

**1.6 4 Analisi termica****1.6 4.1 Analisi termica differenziale**

Vedi appendice.

**1 6 4.2. Calorimetria differenziale a scansione**

Vedi appendice

**1.6.5. Determinazione del punto di scorrimento**

Vedi appendice

**2 DATI**

In alcuni casi si rende necessaria una correzione della lettura termometrica

**3 RELAZIONE**

La relazione sulla prova deve, se possibile, includere le seguenti informazioni:

- metodo utilizzato;
- descrizione precisa della sostanza (identità e impurezze) ed eventuale stadio preliminare di purificazione,
- stima dell'accuratezza.

Come temperatura di fusione viene riportata la media di almeno due misure che cadano nel campo di accuratezza stimata (vedi tabelle)

Se la differenza tra la temperatura all'inizio e allo stadio finale della fusione ricade nei limiti di accuratezza del metodo, si prende come punto di fusione la temperatura dello stadio finale della fusione, altrimenti vengono riportate ambedue le temperature

Se la sostanza si decompone o sublima prima del raggiungimento della temperatura di fusione, si riporterà la temperatura alla quale si osserva l'effetto

Devono essere riportate tutte le informazioni e osservazioni utili per l'interpretazione dei risultati, in particolare per quanto riguarda le impurezze e lo stato fisico della sostanza

#### 4 BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guideline 102, Decision of the Council C(81) 30 final
- (2) IUPAC, B. Le Neindre, B. Vodar, eds. Experimental thermodynamics, Butterworths, London 1975, vol II, 803-834.
- (3) R. Weissberger ed. Technique of organic Chemistry, Physical Methods of Organic Chemistry, 3rd ed., Interscience Publ., New York, 1959, vol. I, Part I, Chapter VII.
- (4) IUPAC, Physicochemical measurements Catalogue of reference materials from national laboratories, Pure and applied chemistry, 1976, vol. 48, 505-515

#### Appendice

Per ulteriori particolari tecnici, si possono consultare ad esempio le seguenti norme

#### 1 Metodi basati sull'impiego di capillari

##### 1.1 Apparecchi per la determinazione del punto di fusione a bagno liquido

ASTM E 324-69	Standard test method for relative initial and final melting points and the melting range of organic chemicals
BS 4634	Method for the determination of melting point and/or melting range
DIN 53181	Bestimmung des Schmelzintervalles von Harzen nach Kapillarverfahren
JIS K 00-64	Testing methods for melting point of chemical products

##### 1.2 Apparecchi per la determinazione della temperatura di fusione a blocco di metallo

DIN 53736	Visuelle Bestimmung der Schmelztemperatur von teilkristallinen Kunststoffen
ISO 1218 (E)	Plastics — polyamides — determination of «melting point»

#### 2. Apparecchi ed elementi riscaldanti

##### 2.1 Banco riscaldante di Kofler

ANSI/ASTM D 3451-76	Standard recommended practices for testing, polymeric powder coatings
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##### 2.2. Microscopio di fusione

DIN 53736	Visuelle Bestimmung der Schmelztemperatur von teilkristallinen Kunststoffen
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##### 2.3 Metodo del menisco (poliammide)

ISO 1218 (E)	Plastics — polyamides — determination of «melting point»
ANSI/ASTM D2133-66	Standard specification for acetal resin injection, moulding and extrusion materials
NF T 51 050	Résines de polyamides Détermination du «point de fusion» Méthode du ménisque

3	Metodi per la determinazione della temperatura di congelamento	
	BS 4633	Method for the determination of crystallizing point
	BS 4695	Method for determination of melting point of petroleum wax (Cooling Curve)
	DIN 51421	Bestimmung des Gefrierpunktes von Flugkraftstoffen, Ottokraftstoffen und Motorenbenzolen
	ISO 2207	Cires de pétrole - détermination de la température de figeage
	DIN 53175	Bestimmung des Erstarrungspunktes von Fettsäuren
	NF T 60-114	Point de fusion des paraffines
	NF T 20-051	Méthode de détermination du point de cristallisation (point de congelation)
	ISO 1392	Method for the determination of the freezing point
4	Analisi termica	
4 1	Analisi termica differenziale	
	ASTM E 537 76	Standard method for assessing the thermal stability of chemicals by methods of differential thermal analysis
	ASTM E 473-85	Standard definitions of terms relating to thermal analysis
	ASTM E 472 86	Standard practice for reporting thermoanalytical data
	DIN 51005	Thermische Analyse, Begriffe
4 2	Calorimetria differenziale a scansione	
	ASTM E 537-76	Standard method for assessing the thermal stability of chemicals by methods of differential thermal analysis
	ASTM E 473-85	Standard definitions of terms relating to thermal analysis
	ASTM E 472-86	Standard practice for reporting thermoanalytical data
	DIN 51005	Thermische Analyse, Begriffe
5	Determinazione del punto di scorrimento	
	NBN 52014	Echantillonnage et analyse des produits du pétrole: Point de trouble et point d'écoulement limite — Monsterneming en ontleding van aardolieproducten Troebelingspunt en vloeipunt
	ASTM D 97-66	Standard test method for pour point of petroleum oils
	ISO 3016	Petroleum oils — Determination of pour point

## A.2. TEMPERATURA DI EBOLLIZIONE

## 1 METODO

La maggior parte dei metodi descritti sono basati sulle linee direttrici OCSE (1). I principi fondamentali sono riportati nei riferimenti (2) e (3).

## 1.1 INTRODUZIONE

I metodi e le apparecchiature qui illustrati possono essere applicati a sostanze liquide e a bassa temperatura di fusione, purché queste non siano soggette a reazioni chimiche al di sotto della temperatura di ebollizione (per esempio, autoossidazione, trasposizione, degradazione, ecc.). I metodi possono essere applicati a sostanze liquide sia pure che impure.

Si dà particolare risalto ai metodi che utilizzano la determinazione tramite fotocellula e l'analisi termica perché questi metodi permettono la determinazione sia della temperatura di fusione che della temperatura di ebollizione. Inoltre, le misure possono essere eseguite in automatico.

Il «metodo dinamico» ha il vantaggio di poter essere applicato anche alla determinazione della tensione di vapore e di non richiedere la correzione della temperatura di ebollizione per riferirla alla pressione normale (101,325 kPa) dal momento che la pressione normale può essere regolata durante la misura mediante un manostato.

*Osservazioni*

L'influenza delle impurezze sulla determinazione della temperatura di ebollizione dipende in notevole misura dalla natura delle impurezze. Quando il campione contiene impurezze volatili che possono alterare i risultati, la sostanza può venire purificata.

## 1.2 DEFINIZIONI E UNITÀ

La temperatura di ebollizione normale è definita come la temperatura alla quale la tensione di vapore di un liquido è di 101,325 kPa.

Se la temperatura di ebollizione non viene misurata alla pressione atmosferica normale, la dipendenza della tensione di vapore dalla temperatura può essere descritta mediante l'equazione di Clausius Clapeyron

$$\log p = \frac{\Delta H_v}{2,3 RT} + \text{cost}$$

dove

$p$  = tensione di vapore della sostanza in Pascal,

$\Delta H_v$  = calore di evaporazione in  $\text{J mol}^{-1}$ ,

$R$  = costante universale dei gas =  $8,314 \text{ J mol}^{-1} \text{ K}^{-1}$

$T$  = temperatura termodinamica in K.

La temperatura di ebollizione è riferita alla pressione ambiente al momento della misura.

*Fattori di conversione*

Pressione (unità: kPa)

100 kPa = 1 bar = 0,1 MPa

(«bar» è ancora ammissibile, ma non raccomandato)

133 Pa = 1 mm Hg = 1 Torr

(le unità «mm Hg» e «Torr» non sono permesse)

1 atm = atmosfera standard = 101,325 Pa

(l'unità «atm» non è permessa)

Temperatura (unità K)

$$t = T - 273,15$$

t temperatura Celsius, gradi Celsius (°C)

T temperatura termodinamica, Kelvin (K)

### 1.3 SOSTANZE DI RIFERIMENTO

Non è necessario utilizzare sostanze di riferimento in tutti i casi in cui si esamina una nuova sostanza. Esse servono principalmente per controllare periodicamente l'accuratezza del metodo e per permettere un confronto coi risultati ottenuti con altri metodi.

Alcune sostanze di riferimento sono elencate nei metodi riportati in appendice

### 1.4 PRINCIPIO DEI METODI

Cinque metodi per la determinazione della temperatura di ebollizione (intervallo di ebollizione) sono basati sulla misura della temperatura di ebollizione, altri due sono basati sull'analisi termica

#### 1.4.1 Determinazione tramite ebulliometro

Gli ebulliometri sono stati originariamente concepiti per la determinazione del peso molecolare tramite l'innalzamento della temperatura di ebollizione, ma si prestano anche per accurate misure della temperatura di ebollizione. Una apparecchiatura molto semplice è descritta nella norma ASTM D 1120-72 (vedi appendice). Con questo strumento il liquido viene riscaldato fino all'ebollizione in condizioni di equilibrio a pressione atmosferica.

#### 1.4.2 Metodo dinamico

Questo metodo implica la misura della temperatura di ricondensazione del vapore mediante un appropriato termometro nella zona di riflusso durante l'ebollizione. Questo metodo permette di variare la pressione.

#### 1.4.3 Metodo della distillazione per la temperatura di ebollizione

Il metodo si basa sulla distillazione del liquido e sulla misura della temperatura di ricondensazione del vapore con determinazione della quantità di distillato.

#### 1.4.4 Metodo di Siwoloboff

Il campione viene riscaldato in una provetta immersa a sua volta nel liquido di un bagno riscaldante. Nella provetta contenente il campione viene introdotto un capillare, chiuso per fusione ad un estremo e contenente una bollicina d'aria nella parte inferiore.

#### 1.4.5 Determinazione tramite fotocellula

Si impiega il metodo Siwoloboff, applicando tuttavia la misura fotoelettrica della fase di emissione delle bollicine.

#### 1.4.6 Analisi termica differenziale

Questa tecnica registra la differenza di temperatura tra la sostanza e un materiale di riferimento, in funzione della temperatura, mentre la sostanza e il materiale di riferimento sono sottoposti allo stesso programma controllato di variazione della temperatura. Quando il campione subisce una transizione che implica una variazione di entalpia, tale variazione è indicata da un allontanamento endotermico (ebollizione) dalla linea di base nella registrazione della temperatura.

## 1 4 7. Calorimetria differenziale a scansione

Questa tecnica registra la differenza di energia introdotta in una sostanza e in un materiale di riferimento in funzione della temperatura mentre la sostanza e il materiale di riferimento vengono sottoposti allo stesso programma controllato di variazione della temperatura. Questa energia è l'energia necessaria per mantenere a zero la differenza di temperatura tra la sostanza e il materiale di riferimento. Quando il campione subisce una transizione che implica una variazione di entalpia, tale variazione è indicata da un allontanamento endotermico (ebollizione) dalla linea di base della registrazione del flusso di calore.

## 1 5 CRITERI DI QUALITÀ

La tabella 1 riporta l'applicabilità e l'accuratezza dei vari metodi utilizzati per la determinazione della temperatura di ebollizione/intervallo di ebollizione.

TABELLA 1: CONFRONTO DEI METODI

Metodo di misura	Accuratezza stimata	Norme esistenti
Ebullimetro	$\pm 1,4$ K (fino a 373 K) <sup>(1)(2)</sup> $\pm 2,5$ K (fino a 600 K) <sup>(1)(2)</sup>	ASTM D 1120-72 <sup>(1)</sup>
Metodo dinamico	$\pm 0,5$ K (fino a 600 K) <sup>(2)</sup>	
Processo di distillazione (intervallo di ebollizione)	$\pm 0,5$ K (fino a 600 K)	ISO/R 918, DIN 53171 BS 4591/71
Metodo di Siwoloboff	$\pm 2$ K (fino a 600 K) <sup>(2)</sup>	
Rivelazione mediante fotocellula	$\pm 0,3$ K (a 373 K) <sup>(2)</sup>	
Analisi termica differenziale	$\pm 0,5$ K (fino a 600 K) $\pm 2,0$ K (fino a 1 273 K)	ASTM E 537-76
Calorimetria differenziale a scansione	$\pm 0,5$ K (fino a 600 K) $\pm 2,0$ K (fino a 1 273 K)	ASTM E 537-76

<sup>(1)</sup> Questo livello di accuratezza è valido soltanto nel caso di una strumentazione semplice, come ad esempio quella descritta nella norma ASTM D 1120-72, esso può essere migliorato con ebulliometri più perfezionati.  
<sup>(2)</sup> Valida solo per sostanze pure. L'uso in altre circostanze deve essere giustificato.

## 1 6 DESCRIZIONE DEI METODI

I procedimenti relativi ad alcuni dei metodi citati sono descritti in varie norme internazionali e nazionali (vedi appendice).

## 1 6 1 Ebullimetro

Vedi appendice

## 1 6 2 Metodo dinamico

Vedi metodo A 4 per la determinazione della tensione di vapore.

Si assume come temperatura di ebollizione quella misurata in corrispondenza di una pressione di 101,325 kPa.

## 1 6 3 Metodo della distillazione (intervallo di ebollizione)

Vedi appendice

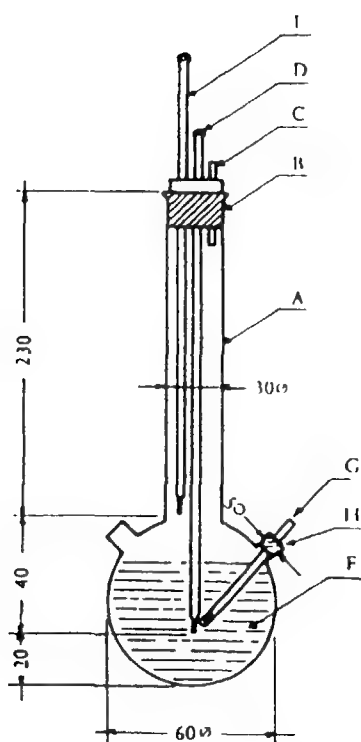
1 6 4

## Metodo di Siwoloboff

Il campione viene riscaldato in una apparecchiatura per il punto di fusione in una provetta di diametro approssimato di 5 mm (figura 1)

La figura 1 presenta un tipo di apparecchiatura standardizzata per la determinazione della temperatura di fusione e di ebollizione (JIS K 0064) (realizzata in vetro, tutte le quote sono in mm)

Figura 1



- A Recipiente di misura
- B Tappo
- C Sfogo
- D Termometro
- E Termometro ausiliario
- F Bagno liquido
- G Provetta contenente il campione diametro esterno massimo 5 mm, contenente un tubo capillare di lunghezza di 100 mm circa, diametro interno di 1 mm circa e con spessore della parete da 0,2 a 0,3 mm
- H Tubo laterale

Nella provetta viene posto un tubo capillare (capillare di ebollizione) fuso a circa 1 cm dall'estremità inferiore. Il livello di riempimento della sostanza in esame deve essere tale che la parte fusa del capillare si trovi al di sotto della superficie del liquido. La provetta contenente il capillare di ebollizione può essere assicurata al termometro con un elastico oppure fissata tramite un sostegno laterale (vedi figura 2)

Figura 2

Principio secondo Siwoloboff



Figura 3

Principio modificato



Il liquido per il bagno va scelto in funzione della temperatura di ebollizione. Per temperature fino a 573 K si può impiegare olio di silicone. La paraffina liquida può essere impiegata solo fino a 473 K. Il riscaldamento del bagno liquido deve essere regolato in modo che l'incremento di temperatura sia inizialmente di circa 3 K/min. Il liquido del bagno va tenuto in agitazione. A circa 10 K al di sotto della temperatura di ebollizione prevista, il riscaldamento va diminuito in maniera da ridurre la velocità di aumento della temperatura a meno di 1 K/min. In prossimità della temperatura di ebollizione, dal capillare in ebollizione incominciano a emergere rapidamente delle bollicine.

La temperatura di ebollizione è la temperatura alla quale, per raffreddamento temporaneo, la serie di bollicine si arresta e il fluido inizia improvvisamente a risalire nel capillare. La corrispondente lettura termometrica rappresenta la temperatura di ebollizione della sostanza.

Secondo il principio modificato (vedi figura 3) la temperatura di ebollizione viene determinata in un capillare per la temperatura di fusione. Questo viene sfilato per circa 2 cm (a) e con esso si aspira una piccola quantità del campione. L'estremità aperta della parte sfilata viene chiusa alla fiamma in modo da far restare una bollicina d'aria in vicinanza della punta. Durante il riscaldamento nell'apparecchio per la temperatura di fusione (b) la bolla d'aria si dilata. La temperatura di ebollizione corrisponde alla temperatura alla quale il menisco superiore della sostanza raggiunge il livello della superficie del bagno liquido (c).

#### 1.6.5 Determinazione tramite fotocellula

Il campione viene riscaldato in un tubicino capillare all'interno di un blocco metallico riscaldante.

Tramite opportune aperture sul blocco, un raggio di luce viene fatto passare attraverso la sostanza e colpisce una fotocellula accuratamente tarata.

Durante l'aumento della temperatura del campione, dal capillare di ebollizione emergono bollicine d'aria isolate. Quando viene raggiunta la temperatura di ebollizione, il numero di bollicine aumenta enormemente. Ciò fa variare l'intensità della luce misurata dalla fotocellula, inviando un segnale di arresto all'indice di un termometro a resistenza di platino collocato nel blocco.

Questo metodo risulta particolarmente vantaggioso poiché permette determinazioni al di sotto della temperatura ambiente fino a 253,15 K (– 20 °C) senza modifiche dell'apparecchiatura. È semplicemente necessario porre lo strumento in un bagno di raffreddamento.

#### 1.6.6 Analisi termica

##### 1.6.6.1 Analisi termica differenziale

Vedi appendice

##### 1.6.6.2 Calorimetria differenziale a scansione

Vedi appendice

## 2 DATI

Per piccole deviazioni dalla pressione normale ( $p_{\text{atm}} \pm 5 \text{ kPa}$ ), le temperature di ebollizione vengono normalizzate a  $T_n$  mediante la seguente equazione numerica di Sidney Young:

$$T_n = T + (t_1 \times \Delta p)$$

dove

$\Delta p = (101,325 - p)$  [notare il segno],

$p$  = valore misurato della pressione, in kPa,

$t_1$  = coefficiente di correzione della temperatura di ebollizione con la pressione in K/kPa,

$T$  = valore misurato della temperatura, in K

$T_n$  = temperatura di ebollizione corretta a pressione normale in K



Per molte sostanze i coefficienti di correzione della temperatura  $f_T$  e le equazioni per il calcolo approssimativo sono indicati nelle norme internazionali e nazionali prima citate

A titolo di esempio, il metodo DIN 53171 cita i seguenti coefficienti approssimativi per i solventi contenuti nelle vernici

TABELLA 2: COEFFICIENTI DI CORREZIONE DELLA TEMPERATURA  $f_T$

Temperatura T in K	Coefficiente di correzione $f_T$ (K/kPa)
323,15	0,26
348,15	0,28
373,15	0,31
398,15	0,33
423,15	0,35
448,15	0,37
473,15	0,39
498,15	0,41
523,15	0,44
548,15	0,45
573,15	0,47

### 3 RELAZIONE

La relazione sulla prova deve, se possibile, includere le seguenti informazioni:

- metodo usato,
- descrizione precisa della sostanza (identità e impurezze) e dell'eventuale stadio preliminare di purificazione,
- una stima dell'accuratezza

Come temperatura di ebollizione viene riportata la media di almeno due misure che ricadano nel campo dell'accuratezza stimata (vedi tabella 1)

Devono essere riportate le temperature di ebollizione misurate e la loro media, e le pressioni alle quali sono state effettuate le misure devono essere riportate in kPa. La pressione deve preferibilmente essere prossima alla normale pressione atmosferica

Vanno fornite tutte le informazioni e osservazioni utili per l'interpretazione dei risultati, in particolare per quanto riguarda le impurezze e lo stato fisico della sostanza

### 4 BIBLIOGRAFIA

- (1) OCDE, Paris, 1981, Test Guideline 103, Decision of the Council C(81) 30 final
- (2) IUPAC, B. Le Neindre, B. Vodar, eds. Experimental thermodynamics, Butterworths, London 1975, vol. II
- (3) R. Weissberger ed. Technique of organic Chemistry, Physical Methods of Organic Chemistry, 3rd ed., Interscience Publ., New York, 1959, vol. I, Part I, Chapter VIII

#### Appendice

Per ulteriori particolari tecnici, si possono ad esempio consultare le seguenti norme:

#### 1 Ebulliometro

ASTM D 1120 72

Standard test method for boiling point of engine anti freezers

2	<b>Metodo della distillazione (intervallo di ebollizione)</b>	
	ISO/R 918	Test Method for Distillation (Distillation Yield and Distillation Range)
	BS 4349/68	Method for determination of distillation of petroleum products
	BS 4591/71	Method for the determination of distillation characteristics
	DIN 53171	Losungsmittel für Anstrichstoffe, Bestimmung des Siedeverlaufes
	NF T 20-608	Distillation - détermination du rendement et de l'intervalle de distillation
3	<b>Analisi termica differenziale e calorimetria differenziale a scansione</b>	
	ASTM E 537-76	Standard method for assessing the thermal stability of chemicals by methods of differential thermal analysis
	ASTM E 473-85	Standard definitions of terms relating to thermal analysis
	ASTM E 472-86	Standard practice for reporting thermoanalytical data
	DIN 51005	Thermische Analyse Begriffe

### A 3 DENSITÀ RELATIVA

1	<b>METODO</b>
	I metodi descritti si basano sulle linee direttrici (OCSE) (1). I principi fondamentali sono riportati nel riferimento (2).
1.1	<b>INTRODUZIONI</b>
	I metodi qui illustrati si applicano alle sostanze solide e liquide senza alcuna limitazione rispetto al loro grado di purezza.
	I vari metodi da utilizzare sono elencati nella tabella 1.
1.2	<b>DEFINIZIONI ED UNITÀ</b>
	La densità relativa, $D_4^{20}$ , di solidi o liquidi è il rapporto tra la massa di un determinato volume della sostanza in esame, misurata a 20 °C, e la massa di un ugual volume di acqua, misurata a 4 °C. La densità relativa è una grandezza adimensionale.
	La densità, $\rho$ , di una sostanza è il rapporto tra una determinata massa $m$ e il volume corrispondente $v$ .
	In unità SI la densità, $\rho$ , viene espressa in $\text{kg/m}^3$ .
1.3	<b>SOSTANZE DI RIFERIMENTO (1) (3)</b>
	Non è necessario utilizzare sostanze di riferimento in tutti i casi in cui si esamina una nuova sostanza. Esse servono principalmente per controllare periodicamente l'accuratezza del metodo e per permettere un confronto con risultati ottenuti con altri metodi.
1.4	<b>PRINCIPIO DEI METODI</b>
	Si utilizzano quattro classi di metodi:

## 1 4 1 Metodi per galleggiamento

## 1 4 1 1 Idrometro (per sostanze liquide)

Determinazioni rapide e sufficientemente accurate della densità possono essere eseguite per mezzo di idrometri galleggianti, che permettono di dedurre la densità di un liquido dal grado di immersione desunto da una scala graduata

## 1 4 1 2 Bilancia idrostatica (per sostanze solide e liquide)

La differenza tra il peso di un campione in aria e quello in un liquido adatto (per esempio acqua) può essere utilizzata per determinare la densità

Nel caso dei solidi, la densità così misurata va considerata valida solo per il particolare campione in esame. Per la determinazione della densità dei liquidi, un corpo di volume  $V$  noto viene pesato prima in aria e poi nel liquido stesso

## 1 4 1 3 Metodo ad immersione di sfera (per sostanze liquide) (4)

In questo metodo la densità di un liquido viene determinata in base alla differenza tra i valori ottenuti pesando il liquido prima e dopo l'immersione di una sfera di volume noto nel liquido stesso

## 1 4 2 Metodi picnometrici

Per solidi o liquidi possono impiegarsi picnometri di varia forma e di volume noto. La densità si calcola in base alla differenza di peso tra il picnometro pieno e quello vuoto ed in base al suo volume noto

## 1 4 3 Picnometro di comparazione ad aria (per solidi)

La densità di un solido di forma qualsiasi può essere determinata a temperatura ambiente con il picnometro di comparazione a gas. Il volume di una sostanza viene misurato in aria o in un gas inerte all'interno di un cilindro tarato di volume variabile. Per il calcolo della densità va effettuata una misura di massa successivamente a quella di volume

## 1 4 4 Densimetro oscillante (5) (6) (7)

La densità di un liquido può essere determinata per mezzo di un densimetro oscillante. Un oscillatore meccanico costruito a forma di un tubo a U viene fatto vibrare alla frequenza di risonanza dell'oscillatore, che dipende dalla sua massa. L'introduzione di un campione modifica la frequenza di risonanza dell'oscillatore. L'apparecchio deve essere calibrato mediante due sostanze liquide di densità nota. Tali sostanze vanno preferibilmente selezionate in modo da coprire l'intervallo di densità in cui si effettuano le misure

## 1 5 CRITERI DI QUALITÀ

L'applicabilità dei vari metodi impiegati per la determinazione della densità relativa è indicata nella tabella

## 1 6 DESCRIZIONE DEI METODI

Nell'appendice sono riportate a titolo di esempio alcune delle norme da consultare per ulteriori dettagli tecnici

Le prove vanno eseguite a 20 °C effettuando almeno due misure

## 2 DATI

Vedi norme

## 3 RELAZIONE

La relazione sulla prova deve, se possibile, includere le seguenti informazioni:

- metodo usato,
- descrizione precisa della sostanza (identità e impurezze) e dell'eventuale stadio preliminare di purificazione,

La densità relativa  $D_4^{20}$  deve essere indicata secondo quanto prescritto al punto 1.2, insieme allo stato fisico della sostanza esaminata.

Vanno fornite tutte le informazioni ed osservazioni utili per l'interpretazione dei risultati, in modo particolare per quel che riguarda le impurezze e lo stato fisico della sostanza.

TABELLA APPLICABILITÀ DEI METODI

Metodi di misura	Densità		Viscosità dinamica massima possibile	Norme esistenti
	solidi	liquidi		
1.4.1.1 Idrometro		si	5 Pa s	ISO 387, ISO 649 2, NF T 20 050
1.4.1.2 bilancia idrostatica				
a) solidi	si			ISO 1183 (A)
b) liquidi		si	5 Pa s	ISO 901 e 758
1.4.1.3 metodo della sfera immersa		si	20 Pa s	DIN 53217
1.4.2 picnometro				
a) solidi	si			ISO 3507 ISO 1183 (B), NF T 20 053
b) liquidi		si	500 Pa s	ISO 758
1.4.3 picnometro di comparazione ad aria	si			DIN 55990 parte 3, DIN 53243
1.4.4 densimetro oscillante		si	5 Pa s	

## 4 BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guideline 109, Decision of the Council C (81) 30 final
- (2) R. Weissberger ed., Technique of Organic Chemistry. Physical Methods of Organic Chemistry. 3rd ed. Chapter IV, Interscience Publ., New York, 1959, vol. I, Part I
- (3) IUPAC, Recommended reference materials for realization of physicochemical properties, Pure and applied chemistry, 1976, vol. 48, 508
- (4) Wagenbreth, H., Die Tauchkugel zur Bestimmung der Dichte von Flüssigkeiten, Technisches Messen tm 1979, vol. 11, 427-430
- (5) Leopold, H., Die digitale Messung von Flüssigkeiten, Elektronik, 1970, vol. 19, 297-302
- (6) Baumgarten, D., Fullmengenkontrolle bei vorgepackten Erzeugnissen - Verfahren zur Dichtebestimmung bei flüssigen Produkten und ihre praktische Anwendung. Die Pharmazeutische Industrie, 1975, vol. 37, 717-726
- (7) Riemann, J., Der Einsatz der digitalen Dichtemessung im Brauereilaboratorium, Brauwissenschaft, 1976, vol. 9, 253-255

## Appendice

Per ulteriori particolari tecnici, possono essere consultate, a titolo d'esempio, le seguenti norme

# 1 METODI PER GALLEGGIAMENTO

## 1.1. Idrometro

DIN 12790, ISO 387	Hydrometer; general instructions
DIN 12791	Part I: Density hydrometers construction, adjustment and use Part II: Density hydrometers standardized sizes, designation Part III. Use and test
ISO 649-2	Laboratory glassware density hydrometers for general purpose
NF T 20-050	Chemical products for industrial use Determination of density of liquids — Areometric method
DIN 12793	Laboratory glassware range find hydrometers

## 1.2 Bilancia idrostatica

### Per sostanze solide

ISO 1183	Method A Methods for determining the density and relative density of plastics excluding cellular plastics
NF T 20-049	Chemical products for industrial use — Determination of the density of solids other than powders and cellular products — Hydrostatic balance method
ASTM-D-792	Specific gravity and density of plastics by displacement
DIN 53479	Testing of plastics and elastomers, determination of density

### Per sostanze liquide

ISO 901	ISO 758
DIN 51757	Testing of mineral oils and related materials, determination of density
ASTM D 941-55, ASTM D 1296-67 and ASTM D 1481-62	
ASTM D 1298	Density, specific gravity or API gravity of crude petroleum and liquid petroleum products by hydrometer method
BS 4714	Density, specific gravity or API gravity of crude petroleum and liquid petroleum products by hydrometer method

## 1.3 Metodo della sfera immersa

DIN 53217	Testing of paints, varnishes and similar coating materials, determination of density; immersed body method
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# 2 METODI PIGNOMETRICI

## 2.1. Per sostanze liquide

ISO 3507	Pycnometers
ISO 758	Liquid chemical products, determination of density at 20 °C
DIN 12797	Gay-Lussac pycnometer (for non volatile liquids which are not too viscous)
DIN 12798	Lipkin pycnometer (for liquids with a kinematic viscosity of less than 100,10 <sup>-6</sup> m <sup>2</sup> s <sup>-1</sup> at 15 °C)

DIN 12800	Sprengel pycnometer (for liquids as DIN 12798)
DIN 12801	Reischauer pycnometer (for liquids with a kinematic viscosity of less than $100,10^{-6} \text{ m}^2 \text{ s}^{-1}$ at $20^\circ \text{C}$ , applicable in particular also to hydrocarbons and aqueous solutions as well as to liquids with higher vapour pressure, approximately 1 bar at $90^\circ \text{C}$ )
DIN 12806	Hubbard pycnometer (for viscous liquids of all types which do not have a too high vapour pressure, in particular also for paints, varnishes and bitumen)
DIN 12807	Bingham pycnometer (for liquids, as in DIN 12801)
DIN 12808	Jaulmes pycnometer (in particular for ethanol-water mixture)
DIN 12809	Pycnometer with ground-in thermometer and capillary side tube (for liquids which are not too viscous)
DIN 53217	Testing of paints, varnishes and similar products, determination of density by pycnometer
DIN 51757	Point 7: Testing of mineral oils and related materials, determination of density
ASTM D 297	Section 15. Rubber products — chemical analysis
ASTM D 2111	Method C: Halogenated organic compounds
BS 4699	Method for determination of specific gravity and density of petroleum products (graduated bicapillary pycnometer method)
BS 5903	Method for determination of relative density and density of petroleum products by the capillary-stoppered pycnometer method
NF T 20-053	Chemical products for industrial use — Determination of density of solids in powder and liquids — Pycnometric method
2 2	Per sostanze solide
ISO 1183	Method B. Methods for determining the density and relative density of plastics excluding cellular plastics
NF T 20-053	Chemical products for industrial use — Determination of density of solids in powder and liquids — Pycnometric method
DIN 19683	Determination of the density of soils
3	PICNOMETRO DI COMPARAZIONE AD ARIA
DIN 55990	Part 3 Prüfung von Anstrichstoffen und ähnlichen Beschichtungsstoffen, Pulverlack; Bestimmung der Dichte
DIN 53243	Anstrichstoffe, Chlorhaltige Polymere, Prüfung

## A.4. TENSIONE DI VAPORE

## 1 METODO

La maggior parte dei metodi descritti sono basati sulle linee direttrici OCSE (1). I principi fondamentali sono presentati nei riferimenti (2) e (3).

## 1.1 INTRODUZIONE

Per eseguire questa prova è utile avere informazioni preliminari sulla struttura, la temperatura di fusione e la temperatura di ebollizione della sostanza.

Non esiste un procedimento unico che sia applicabile a tutto l'intervallo dei valori di tensione di vapore. Si raccomanda pertanto di usare più di un metodo per la misura di tensione di vapore da  $<10^{-4}$  Pa a  $10^5$  Pa.

Le impurezze influiscono normalmente sulla tensione di vapore, e in una misura che dipende ampiamente dal tipo di impurezza.

Nel caso in cui nel campione siano presenti impurezze volatili che potrebbero influire sul risultato, la sostanza può venire purificata. Può anche essere opportuno indicare la tensione di vapore del materiale tecnico.

Alcuni dei metodi qui descritti utilizzano apparecchiature con parti metalliche, di ciò si deve tenere conto quando si analizzano sostanze corrosive.

## 1.2 DEFINIZIONI ED UNITÀ

La tensione di vapore di una sostanza è definita come la pressione di saturazione al di sopra di un solido o di un liquido. All'equilibrio termodinamico, la tensione di vapore di una sostanza pura è funzione della sola temperatura.

L'unità SI di pressione da utilizzare è il Pascal (Pa).

Altre unità impiegate in passato sono elencate qui di seguito con i relativi fattori di conversione.

1 Torr (= 1 mm Hg) =  $1,333 \times 10^2$  Pa

1 atmosfera =  $1,013 \times 10^5$  Pa

1 bar =  $10^5$  Pa

L'unità SI di temperatura è il grado Kelvin (K).

La costante universale dei gas R è  $8,314 \text{ J mol}^{-1} \text{ K}^{-1}$ .

La dipendenza della tensione di vapore dalla temperatura è descritta dalla equazione di Clausius-Clapeyron

$$\log p = \frac{\Delta H_v}{2,3 RT} + \text{cost}$$

dove

p = tensione di vapore della sostanza in Pascal

$\Delta H_v$  = calore di evaporazione in  $\text{J mol}^{-1}$

R = costante universale dei gas =  $8,314 \text{ J mol}^{-1} \text{ K}^{-1}$

T = temperatura termodinamica in K

**1.3 SOSTANZE DI RIFERIMENTO**

Non è necessario utilizzare sostanze di riferimento in tutti i casi in cui si esamina una nuova sostanza. Esse servono principalmente per controllare periodicamente l'accuratezza del metodo e per permettere un confronto con i risultati ottenuti con altri metodi.

**1.4 PRINCIPIO DEL METODO**

Per la determinazione della tensione di vapore si propongono sette metodi, che possono essere applicati a diversi intervalli della tensione di vapore. Per ciascun metodo, la tensione di vapore viene determinata a varie temperature. In un intervallo di temperatura limitato, il logaritmo della tensione di vapore di una sostanza pura è funzione lineare del reciproco della temperatura.

**1.4.1 Metodo dinamico**

Il metodo dinamico prevede la misura della temperatura di ebollizione corrispondente ad una determinata pressione.

Intervallo di valori raccomandato

da  $10^3$  a  $10^5$  Pa

Questo metodo è stato raccomandato anche per la determinazione della temperatura di ebollizione normale, ed a questo fine esso è utilizzabile fino a 600 K.

**1.4.2 Metodo statico**

Tramite il processo statico si determina la tensione di vapore che si stabilisce ad una determinata temperatura in un sistema chiuso in equilibrio termodinamico.

Questo metodo si presta per sostanze solide e liquide ad una o più fasi.

Intervallo di valori raccomandato

da 10 Pa fino a  $10^5$  Pa

Questo metodo può venire utilizzato anche nel campo di  $1 \times 10$  Pa purché si proceda con attenzione.

**1.4.3 Isoteniscopio**

Questo metodo standardizzato è a sua volta un procedimento statico, ma non è generalmente utilizzabile per sistemi a più componenti. Ulteriori dettagli sono reperibili nel metodo ASTM D-2879-86.

Intervallo di valori raccomandato

da 100 Pa a  $10^5$  Pa

**1.4.4 Metodo di effusione - bilancia a tensione di vapore**

Si determina la quantità di sostanza che, nell'unità di tempo, abbandona una cella attraverso un'apertura di dimensioni note e sotto condizioni di vuoto in modo che il ritorno della sostanza nella cella sia trascurabile (per esempio, tramite determinazione dell'impulso trasmesso ad una bilancia sensibile da un getto di vapore, oppure misurando la perdita di peso).

Intervallo di valori raccomandato

da  $10^{-3}$  Pa a 1 Pa



## 1 4 5 Metodo di effusione: per perdita di peso o per cattura del vaporizzato

Il metodo è basato sulla stima della massa della sostanza in esame che esce nell'unità di tempo da una cella di Knudsen (4) in forma di vapore, attraverso un micro-orificio, in condizioni di vuoto spinto. La massa di vapore effusa può essere ottenuta o determinando la perdita di massa della cella o condensando il vapore a bassa temperatura e determinando la quantità di sostanza volatilizzata mediante l'uso dell'analisi cromatografica. La tensione di vapore viene calcolata applicando la relazione di Hertz-Knudsen.

Intervallo di valori raccomandato.

da  $10^{-3}$  a 1 Pa

## 1 4.6. Metodo di saturazione del gas

Una corrente di gas di trasporto inerte viene fatta passare sopra alla sostanza in modo tale che detto gas si saturi del vapore della sostanza stessa. La quantità di materiale trasportata da una quantità nota di gas di trasporto può essere misurata o mediante raccolta in una trappola adatta o mediante una tecnica analitica a flusso continuo. Questo valore viene poi usato per calcolare la tensione di vapore ad una data temperatura.

Intervallo di valori raccomandato

da  $10^{-4}$  a 1 Pa

Questo metodo può venire usato anche nel campo da 1 a 10 Pa purché si proceda con attenzione.

## 1 4 7 Rotore

Nel manometro a rotore, l'elemento di misura effettivo è una pallina d'acciaio sospesa in un campo magnetico, che ruota ad alta velocità. La pressione del gas viene ricavata dal rallentamento della pallina d'acciaio, che dipende dalla pressione.

Intervallo di valori raccomandato

$10^{-4}$  a 0,5 Pa

## 1 5 CRITERI DI QUALITÀ

Si confrontano i vari metodi per la determinazione della tensione di vapore per quanto riguarda la loro applicabilità, ripetibilità, riproducibilità, intervallo di misura e standard esistenti. Il confronto è riportato nella seguente tabella.

TABELLA: CRITERI DI QUALITÀ

Metodo di misura	Sostanze		Ripetibilità stimata (1)	Riproducibilità stimata (1)	Intervallo raccomandato	Norme esistenti
	solide	liquide				
1 4 1 Metodo dinamico	basso-fondenti	sì	fino al 25 %	fino al 25 %	da $10^3$ Pa a $2 \times 10^3$ Pa	—
			1-5 %	1-5 %	da $2 \times 10^3$ Pa a $10^5$ Pa	—
1 4 2 Metodo statico	sì	sì	5-10 %	5-10 %	da 10 Pa a $10^5$ Pa (2)	NFT 20-048 (5)
1 4 3 Isoteniscopio	sì	sì	5-10 %	5-10 %	da $10^2$ Pa a $10^5$ Pa	ASTM-D 2879-86
1.4 4 Metodo di effusione bilancia a tensione di vapore	sì	sì	5-20 %	fino al 50 %	da $10^{-3}$ Pa a 1 Pa	NFT 20-047 (6)
1 4 5 Metodo di effusione perdita di peso	sì	sì	10-30 %	—	da $10^{-3}$ Pa a 1 Pa	—
1 4 6 Metodo di saturazione del gas	sì	sì	10-30 %	fino al 50 %	da $10^{-4}$ Pa a 1 Pa (2)	—
1 4 7 Metodo del rotore	sì	sì	10-20 %	—	da $10^{-4}$ Pa a 0,5 Pa	—

(1) Dipendente dal grado di purezza.

(2) Questi metodi possono essere usati anche nel campo da 1 a 10 Pa a condizione di operare con attenzione.

## 1 6 DESCRIZIONE DEI METODI

## 1 6 1 Misura dinamica

## 1 6 1 1 Apparecchiatura

L'apparecchio di misura consiste generalmente in un recipiente per l'ebollizione provvisto di un refrigerante in vetro o metallo (vedi figura 1), strumenti per misurare la temperatura e apparecchi per regolare e misurare la pressione. Un tipico apparecchio di misura è realizzato, come mostra la figura, in vetro resistente al calore ed è composto di 5 parti.

Il tubo grande, parzialmente a doppia parete, consiste in un giunto smerigliato a camicia, un recipiente di raffreddamento ed un ingresso.

Il cilindro di vetro, provvisto di pompa Cottrell, è montato sulla sezione di ebollizione del tubo ed è fornito di una superficie scabra di frammenti di vetro per evitare la formazione di grosse bolle durante il processo di ebollizione.

La temperatura viene misurata con un adatto sensore di temperatura (per esempio un termometro a resistenza, una termocoppia incamiciata) immerso nell'apparecchiatura fino al punto di misurazione (figura 1, numero 5) attraverso un passaggio adatto (per esempio un giunto smerigliato maschio).

Devono essere realizzati i necessari collegamenti con l'apparecchiatura di regolazione e misura della flessione.

Il bulbo, che agisce da polmone, è collegato allo strumento di misura mediante un tubo capillare.

Il recipiente di ebollizione è riscaldato mediante un elemento riscaldante (per esempio un riscaldatore a cartuccia) inserito dal basso nell'apparecchiatura di vetro. La corrente di riscaldamento richiesta viene fissata e regolata tramite una termocoppia.

Il vuoto necessario tra  $10^2$  Pa e approssimativamente  $10^5$  Pa viene prodotto mediante una pompa a vuoto.

Per dosare l'aria o l'azoto per la regolazione della pressione (campo di misura approssimativamente  $10^2 - 10^5$  Pa) e per la ventilazione si usa una valvola adatta.

La pressione viene misurata con un manometro.

## 1 6 1 2 Procedimento di misura

La tensione di vapore viene misurata determinando la temperatura di ebollizione del campione a varie pressioni prestabilite approssimativamente tra  $10^3$  e  $10^5$  Pa. Una temperatura costante a pressione costante indica che è stata raggiunta la temperatura di ebollizione. Questo metodo non è adatto per la determinazione nel caso di sostanze che fanno schiuma.

La sostanza viene posta in un porta campioni pulito ed asciutto. Con solidi non in forma di polvere si possono incontrare dei problemi, ma questi possono talvolta essere risolti riscaldando la camicia di raffreddamento. Dopo che il recipiente è stato riempito, l'apparecchiatura viene sigillata in corrispondenza della flangia e la sostanza viene degassata. Viene poi impostata la pressione minima desiderata e si accende il riscaldamento. Nello stesso tempo, il sensore di temperatura è collegato ad un registratore.

L'equilibrio è raggiunto quando viene registrata una temperatura di ebollizione costante a pressione costante. Bisogna porre una particolare cura per evitare una formazione di grosse bolle durante l'ebollizione. Inoltre, sul refrigerante deve avvenire una condensazione completa. Quando si determina la tensione di vapore di solidi basso-fondenti, bisogna porre attenzione ad evitare il bloccaggio del condensatore.

Dopo aver registrato il punto di equilibrio così raggiunto, si regola la pressione su un valore più elevato. Questa procedura va ripetuta fino a raggiungere una pressione di  $10^5$  Pa (per un totale da 5 a 10 punti di misura). A titolo di controllo, la determinazione dei punti di equilibrio deve essere ripetuta a pressioni decrescenti.

## 1 6 2 Misura statica

## 1 6 2 1 Apparecchiatura

L'apparecchiatura comprende un contenitore per il campione, un sistema di riscaldamento e raffreddamento per regolare la temperatura del campione e per misurare la temperatura. L'apparecchio comprende anche strumenti per impostare e misurare la pressione. Le figure 2a e 2b illustrano i principi fondamentali implicati.

La camera del campione (figura 2a) è collegata da una parte con un'adatta valvola per alto vuoto e dall'altra con un tubo ad U contenente un opportuno fluido manometrico. Una estremità del tubo ad U è collegata con la pompa da vuoto, la bombola dell'azoto o la valvola di ventilazione, ed un manometro.

Al posto del tubo ad U si può usare un manometro con indicatore di pressione (figura 2b).

Allo scopo di regolare la temperatura del campione, il recipiente del campione, insieme con la valvola e il tubo ad U o il manometro, viene posto in un bagno mantenuto ad una temperatura costante  $\pm 0,2$  K. Le misure di temperatura vengono effettuate sulla parete esterna del recipiente contenente il campione o nel recipiente stesso.

Per evacuare l'apparecchio si utilizza una pompa da vuoto a monte della quale vi è una trappola refrigerante.

Nel metodo 2a, la tensione di vapore della sostanza viene misurata indirettamente utilizzando un indicatore di zero. Questo tiene conto del fatto che la densità del fluido nel tubo ad U risulta alterata se la temperatura cambia in maniera consistente.

Come indicatori di zero per il tubo ad U, sono adatti secondo il campo di pressioni e il comportamento chimico della sostanza in esame, i seguenti fluidi: fluidi siliconici, ftalati. La sostanza in esame non deve sciogliersi in maniera apprezzabile o reagire con il fluido del tubo ad U.

Per il manometro può venire usato il mercurio nel campo dalla normale pressione atmosferica fino a  $10^2$  Pa, mentre per l'uso tra  $10^2$  Pa e 10 Pa sono adatti i fluidi siliconici e gli ftalati. I manometri capacitivi a membrana riscaldabile possono essere usati anche al di sotto di  $10^{-1}$  Pa. Esistono anche altri manometri che possono essere usati al di sotto di  $10^2$  Pa.

## 1 6 2.2 Procedimento di misura

Prima della misura, tutti i componenti dell'apparecchio mostrato in figura 2 devono essere puliti e asciugati accuratamente.

Per il metodo 2a, riempire il tubo ad U con il liquido scelto, che deve essere degassato a temperatura elevata prima di procedere alla lettura.

La sostanza in esame viene posta nell'apparecchio, che viene poi chiuso, e la temperatura viene ridotta in modo sufficiente per il degassaggio. La temperatura deve essere sufficientemente bassa per assicurare che l'aria sia aspirata fuori ma — nel caso di sistema a componenti multipli — non deve alterare la composizione del materiale. Se richiesto, l'equilibrio può essere raggiunto più rapidamente mediante agitazione.

Il campione può essere sovraraffreddato, per esempio con azoto liquido (attenzione: condensazione dell'aria, fluido di pompaggio) o con una miscela di etanolo e ghiaccio secco. Per misure a bassa temperatura, usare un bagno con regolazione della temperatura collegato ad un ultracriostato.

Con la valvola sopra al recipiente del campione aperta, si applica il vuoto per qualche minuto per rimuovere l'aria. La valvola viene poi chiusa e la temperatura del campione viene ridotta al livello minimo desiderato. Se necessario, l'operazione di degassaggio deve essere ripetuta più volte.

Quando il campione viene riscaldato, la tensione di vapore aumenta. Ciò altera l'equilibrio del fluido nel tubo ad U. Per compensare questo effetto, lasciare entrare azoto o aria nell'apparecchio attraverso una valvola fino a che il fluido indicatore di pressione è nuovamente a zero. La pressione richiesta a questo scopo può essere letta da un manometro di precisione a temperatura ambiente. Questa pressione corrisponde alla tensione di vapore della sostanza a quella particolare temperatura di misura.

Il metodo 2b è simile, ma la tensione di vapore viene letta direttamente.

La dipendenza dalla temperatura della tensione di vapore viene determinata ad intervalli adeguatamente piccoli (approssimativamente da 5 a 10 punti di misura in totale) fino al valore massimo desiderato. Le letture a bassa temperatura devono essere ripetute per verifica.

Se i valori ottenuti dalla ripetizione delle letture non coincidono con la curva ottenuta per la temperatura crescente, la ragione può essere una delle seguenti:

- 1 Il campione contiene ancora aria (per esempio materiali ad elevata viscosità) o sostanze basso-bollenti, che vengono liberate durante il riscaldamento e possono essere rimosse mediante applicazione di vuoto dopo ulteriore sovraraffreddamento.
  - 2 La temperatura di raffreddamento non è sufficientemente bassa. In questo caso si usa come agente refrigerante azoto liquido.
- Se vale il caso 1 o 2, le misure devono essere ripetute.
- 3 La sostanza subisce una reazione chimica nel campo di temperature studiato (per esempio decomposizione, polimerizzazione).

#### 1 6 3 Isoteniscope

Una descrizione completa del metodo è reperibile in letteratura (7). Il principio dell'apparecchio di misura è illustrato nella figura 3. Analogamente al metodo statico descritto al punto 1 6 2, l'isoteniscope si presta all'esame di solidi e liquidi.

Nel caso dei liquidi, la sostanza in esame serve essa stessa da fluido nel manometro ausiliario. Una quantità di liquido sufficiente per riempire il bulbo e il gambo corto della sezione del manometro viene introdotta nell'isoteniscope. L'isoteniscope viene poi collegato ad un sistema di vuoto, l'isoteniscope viene evacuato e poi riempito con azoto. L'evacuazione e la bonifica del sistema vengono ripetute due volte per rimuovere l'ossigeno residuo. L'isoteniscope riempito viene posto in posizione orizzontale in modo che il campione si sparga in uno strato sottile nel bulbo del campione e nella sezione manometrica (parte ad U). La pressione del sistema viene ridotta a 133 Pa e il campione viene riscaldato delicatamente fino a quando incomincia a bollire (rimozione dei gas fissi disciolti). L'isoteniscope viene poi sistemato in modo che il campione ritorni nel bulbo e nel gambo corto del manometro, di modo che siano ambedue completamente riempiti di liquido. La pressione viene mantenuta allo stesso livello usato per il degassaggio; la punta stirata del bulbo porta campione viene riscaldata con una fiamma piccola fino a che i vapori del campione liberati si espandono in modo sufficiente per spostare parte del campione dalla parte superiore del bulbo e del braccio manometrico nella sezione manometrica dell'isoteniscope, creando uno spazio riempito di vapore ed esente da azoto.

L'isoteniscope viene posto in un bagno a temperatura costante e la pressione dell'azoto viene regolata fino a quando coincide con la pressione del campione. L'equilibrio della pressione è indicato dalla sezione manometrica dell'isoteniscope. All'equilibrio, la tensione di vapore dell'azoto è uguale alla tensione di vapore della sostanza. Nel caso di solidi, si usano i liquidi manometrici elencati in 1 6 2 1, secondo il campo di pressioni e di temperature. Il liquido manometrico degassato viene introdotto in una boccia sul braccio lungo dell'isoteniscope. Il solido in esame viene poi posto nel bulbo e degassato a temperatura elevata. Dopo di ciò si inclina l'isoteniscope in modo che il fluido manometrico possa defluire nel tubo ad U. La misura della tensione di vapore in funzione della temperatura viene effettuata come indicato al punto 1 6 2.

#### 1 6 4 Metodo di effusione: bilancia a tensione di vapore

##### 1 6 4 1 Apparecchiatura

In letteratura (1) sono descritte varie versioni dell'apparecchiatura. L'apparecchiatura qui descritta illustra il principio generale implicato (figura 4). La figura 4 mostra i componenti principali dell'apparecchiatura, che comprendono un contenitore d'acciaio inossidabile o vetro per alto vuoto, strumenti per produrre e misurare il vuoto e componenti incorporati per misurare la tensione di vapore su una bilancia. Nell'apparecchio sono incorporati i seguenti componenti:

- Un forno evaporatore provvisto di flangia e ingresso rotativo. Il forno evaporatore è un recipiente cilindrico, fatto per esempio di rame o di lega chimicamente resistente con buona conducibilità termica. Può essere usato anche un recipiente di vetro con parete di rame. Il forno ha un diametro approssimativo di 3-5 cm e un'altezza di 2-5 cm e presenta da 1 a 3 aperture di differenti dimensioni per la corrente di vapore.

Il forno è riscaldato o mediante una piastra riscaldante sottostante o mediante una spirale riscaldante avvolta intorno. Per impedire la dissipazione di calore verso la piastra di base, il riscaldatore è attaccato alla piastra di base mediante un metallo di bassa conducibilità termica (nichel argento o acciaio al cromo nichel), per esempio un tubo di nichel argento collegato ad un ingresso rotativo se si usa un forno con più aperture. Questa disposizione ha il vantaggio di permettere l'introduzione di una barra di rame. Ciò permette di effettuare il raffreddamento dall'esterno utilizzando un bagno di raffreddamento.

- Se il coperchio del forno di rame presenta tre aperture di differenti diametri, a 90° una rispetto all'altra, è possibile coprire vari intervalli di tensione di vapore all'interno dell'intervallo di misura globale (diametri delle aperture compresi approssimativamente tra 0,30 e 4,50 mm). Le aperture più grandi vengono usate per le basse tensioni di vapore, e viceversa. Ruotando il forno, si può selezionare l'apertura desiderata o una posizione intermedia per la corrente di vapore (apertura del forno — schermo — piatto della bilancia) liberando la corrente molecolare o deviandola, attraverso l'apertura del forno, sul piatto della bilancia. Allo scopo di misurare la temperatura della sostanza, in un punto opportuno si posiziona una termocoppia o un termometro a resistenza.
- Al di sopra dello schermo vi è il piatto di una microbilancia di alta sensibilità (vedi avanti). Il piatto della bilancia ha un diametro approssimativo di 30 mm. Un materiale adatto è alluminio placcato d'oro.
- Il piatto della bilancia è circondato da una cassetta di refrigerazione cilindrica di ottone o rame. Secondo il tipo di bilancia, essa presenta aperture per il giogo della bilancia e un'apertura nello schermo per la corrente molecolare, e deve garantire una condensazione completa del vapore sul piatto della bilancia. La dissipazione del calore verso l'esterno è assicurata, per esempio, mediante una barra di rame collegata alla cassetta di refrigerazione. La barra passa attraverso la piastra di base ed è isolata termicamente da essa, per esempio, con un tubo di acciaio al cromo-nichel. La barra è immersa in una bottiglia di Dewar contenente azoto liquido posta sotto la piastra di base, oppure azoto liquido viene fatto circolare attraverso la barra. La cassetta di refrigerazione viene così mantenuta a circa -120 °C. Il piatto della bilancia è raffreddato esclusivamente per irraggiamento ed è soddisfacente per il campo di pressioni in esame (raffreddare approssimativamente per 1 ora prima dell'inizio della misura).
- La bilancia viene posizionata sopra alla cassetta di refrigerazione. Bilance adatte sono, per esempio, una microbilancia elettronica a 2 bracci di alta sensibilità (8) o uno strumento a spirale mobile di elevata sensibilità (vedi linee direttrici OCSE 104, edizione 12-5-1981).
- La piastra di base contiene anche connessioni elettriche per termocoppie (o termometri a resistenza) e serpentine di riscaldamento.
- Nel recipiente viene prodotto il vuoto usando una pompa per vuoto parziale o una pompa per alto vuoto (vuoto richiesto: circa da  $1 \text{ a } 2 \cdot 10^{-3} \text{ Pa}$ , ottenuto dopo 2 ore di pompaggio). La pressione viene regolata con un adatto manometro a ionizzazione.

#### 1.6.4.2 Procedimento di misura

Il recipiente viene riempito con la sostanza in esame e il coperchio viene chiuso. Lo schermo e la cassetta di refrigerazione vengono portati sopra al forno. L'apparecchiatura viene chiusa e le pompe a vuoto vengono accese. La pressione finale prima di iniziare le misure deve essere di circa  $10^{-4} \text{ Pa}$ . Il raffreddamento della cassetta di refrigerazione parte da  $10^{-2} \text{ Pa}$ .

Dopo aver raggiunto il vuoto richiesto, partire con la serie di taratura alla temperatura più bassa richiesta. Si seleziona l'apertura corrispondente del coperchio, e la corrente di vapore passa attraverso lo schermo direttamente sopra all'apertura e colpisce il piatto della bilancia raffreddato. Il piatto della bilancia deve essere sufficientemente grande per assicurare che l'intera corrente guidata dallo schermo lo colpisca. La quantità di moto della corrente di vapore agisce da forza contro il piatto della bilancia e le molecole condensano sulla sua superficie raffreddata.

La quantità di moto e la condensazione simultanea producono un segnale sul registratore. La valutazione dei segnali fornisce due elementi di informazione.

1. Nell'apparecchiatura qui descritta la tensione di vapore è determinata direttamente dalla quantità di moto sul piatto della bilancia (a questo scopo non è necessario conoscere il peso molecolare). (2) Nella valutazione delle letture, bisogna tenere conto dei fattori geometrici, come l'apertura del forno e l'angolo della corrente molecolare.
2. Contemporaneamente si può misurare la massa del condensato e calcolare da ciò la velocità di evaporazione. La tensione di vapore può essere calcolata anche dalla velocità di evaporazione e dal peso molecolare utilizzando l'equazione di Hertz (2).

$$p = \zeta \sqrt{\frac{2}{\pi}} \frac{R T}{M} \times 10^4$$

dove

$G$  = velocità di evaporazione ( $\text{kg s}^{-1} \text{m}^{-2}$ )

$M$  = massa molare ( $\text{g mol}^{-1}$ )

$T$  = temperatura (K)

$R$  = costante universale dei gas ( $\text{J mol}^{-1} \text{K}^{-1}$ )

$p$  = tensione di vapore (Pa)

Dopo aver raggiunto il vuoto necessario, si inizia la serie delle misure alla temperatura di misurazione minima desiderata

Per ulteriori misure, la temperatura viene aumentata per piccoli incrementi fino a che si raggiunge il massimo valore desiderato della temperatura. Il campione viene poi nuovamente raffreddato e si può registrare una seconda curva della tensione di vapore. Se la seconda prova non conferma i risultati della prima prova, può darsi che la sostanza si decomponga nell'intervallo di temperature oggetto delle misure.

#### 1.6.5 Metodo di effusione per perdita di peso

##### 1.6.5.1 Apparecchiatura

L'apparecchiatura di effusione è costituita dai seguenti componenti fondamentali:

- un serbatoio che può essere termostato ed evacuato e nel quale sono posizionate le celle di effusione,
- una pompa per alto vuoto (per esempio una pompa a diffusione o una pompa turbomolecolare) con vacuometro,
- una trappola, in cui si usa azoto liquefatto o ghiaccio secco.

In figura 5 è mostrato un esempio di un recipiente da vuoto in alluminio, riscaldato elettricamente, con 4 celle di effusione in acciaio inossidabile. Il foglio d'acciaio inossidabile dello spessore di circa 0,3 mm presenta un orificio di effusione da 0,2 mm a 1,0 mm di diametro ed è collegato alla cella di effusione mediante un coperchio a vite.

##### 1.6.5.2 Procedimento di misura

La sostanza di riferimento e la sostanza in esame sono introdotte nella cella di effusione, il diaframma metallico con l'orificio viene fissato mediante il coperchio a vite e la cella viene pesata con un'approssimazione di 0,1 mg. La cella viene poi posta nell'apparecchio termostato, che viene poi evacuato a meno di 1/10 della tensione prevista. Ad intervalli di tempo definiti, che variano da 5 a 30 ore, si introduce aria nell'apparecchio e si determina la perdita di massa della cella di effusione ripesandola.

Allo scopo di assicurare che i risultati non siano influenzati da impurezze volatili, la cella viene ripesata ad intervalli di tempo definiti per controllare che la velocità di evaporazione sia costante su almeno due intervalli di tempo.

La tensione di vapore  $p$  nella cella di effusione è data da:

$$p = \frac{m}{KA\tau} \sqrt{\frac{2\pi RT}{M}}$$

dove

$p$  = tensione di vapore (Pa)

$m$  = massa della sostanza che lascia la cella nel tempo  $\tau$  (kg)

$\tau$  = tempo (s)

$A$  = area del foro ( $\text{m}^2$ )

$K$  = fattore di correzione

$R$  = costante universale dei gas ( $\text{J mol}^{-1} \text{K}^{-1}$ )

$T$  = temperatura (K)

$M$  = massa molecolare ( $\text{kg mol}^{-1}$ )

Il fattore di correzione K dipende dal rapporto tra la lunghezza e il raggio dell'orificio cilindrico

rapporto	0,1	0,2	0,6	1,0	2,0
K	0,952	0,909	0,771	0,672	0,514

L'equazione vista sopra può essere scritta nella forma

$$p = E \frac{m}{r} \sqrt{\frac{I}{M}}$$

dove  $E = \frac{1}{KA} \sqrt{2\pi R}$  è la costante di effusione della cella

Questa costante di effusione della cella E può essere determinata mediante sostanze di riferimento (2,9), usando la seguente equazione

$$I = \frac{p(r)}{m} \sqrt{\frac{M(r)}{r}}$$

dove

$p(r)$  = tensione di vapore della sostanza di riferimento (Pa)

$M(r)$  = massa molecolare della sostanza di riferimento ( $\text{kg mol}^{-1}$ )

#### 1.6.6 Metodo della saturazione del gas

##### 1.6.6.1 Apparecchiatura

Un apparecchio tipico usato per eseguire questa prova comprende un certo numero di componenti presentati in figura 6a e descritti nel seguito (1)

##### Gas inerte

Il gas di trasporto non deve reagire chimicamente con la sostanza in esame. A tale scopo è in genere sufficiente l'azoto, ma talvolta possono essere necessari altri gas (10). Il gas impiegato deve essere secco (vedi figura 6a riferimento 4 - sensore dell'umidità relativa)

##### Controllo del flusso

Per assicurare un flusso costante e regolabile del gas, attraverso la colonna del saturatore, va impiegato un adatto sistema di controllo.

##### Condensatori di raccolta del vapore

I condensatori da impiegare dipendono dalle caratteristiche del particolare campione e dal metodo di analisi prescelto. Il vapore deve essere condensato quantitativamente ed in una forma che ne consenta la successiva analisi. Per talune sostanze saranno adatti condensatori contenenti liquidi, quali l'esano od il glicol etilenico. Per altre sostanze possono essere impiegati assorbenti solidi.

In alternativa alla condensazione dei vapori e successiva analisi, si possono usare tecniche analitiche a flusso continuo, come la cromatografia, per determinare quantitativamente la quantità di materiale trasportato da una quantità nota di gas di trasporto. Inoltre, si può misurare la perdita di massa del campione.

##### Scambiatore di calore

Per misure a temperature diverse, può essere necessario includere nell'apparecchiatura uno scambiatore di calore.

##### Colonna di saturazione

La sostanza in esame, sotto forma di soluzione, viene depositata su di un adatto supporto inerte. Il supporto così ricoperto viene introdotto nella colonna di saturazione, le cui dimensioni così come la velocità di flusso del gas di trasporto devono essere tali da assicurare una completa saturazione di quest'ultimo. La colonna di saturazione va termostata. Per misure al di sopra di temperatura ambiente, la zona compresa tra la colonna del saturatore ed i dispositivi di condensazione del vapore deve essere riscaldata in modo di evitare la condensazione della sostanza in esame.

Al fine di ridurre il trasporto di massa per diffusione, a valle della colonna di saturazione si può disporre un capillare (figura 6b)

#### 1 6 6 2 Procedimento di misura

##### *Preparazione della colonna di saturazione*

Una soluzione della sostanza in esame in un solvente altamente volatile viene aggiunta ad un'adeguata quantità di supporto. Si deve impiegare una sufficiente quantità di sostanza per mantenere la saturazione per tutta la durata della prova. Si evapora completamente il solvente, in aria o mediante un evaporatore rotante, e si introduce nella colonna di saturazione il materiale ben miscelato. Dopo aver regolato il termostato, si fa passare azoto secco attraverso l'apparecchio.

##### *Misura*

I condensatori o i rivelatori a flusso continuo sono collegati alla linea di efflusso della colonna e si registra il tempo. La portata viene controllata all'inizio e ad intervalli regolari durante l'esperimento usando un misuratore a bolle (o in continuo con un flussimetro di massa).

Si deve misurare la pressione all'uscita verso il saturatore. Ciò può essere fatto:

- includendo un manometro tra il saturatore e i condensatori (questa soluzione può non essere soddisfacente in quanto aumenta lo spazio morto e la superficie di adsorbimento),
- determinando la caduta di pressione attraverso il particolare sistema di condensazione impiegato in funzione della velocità di flusso, eseguendo una determinazione a parte (questo metodo può essere non molto soddisfacente per i condensatori a liquido).

Il tempo richiesto per raccogliere la quantità di sostanza in esame necessaria per i differenti metodi d'analisi viene determinato in prove preliminari o stimato per calcolo. In alternativa alla raccolta della sostanza per l'ulteriore analisi, si può usare una tecnica analitica quantitativa a flusso continuo (per esempio la cromatografia). Prima di calcolare la tensione di vapore ad una data temperatura, vanno eseguite prove preliminari per stabilire la velocità di flusso massima ancora capace di saturare completamente il gas di trasporto con il vapore della sostanza. Ciò viene assicurato se il gas di trasporto passa attraverso la colonna di saturazione tanto lentamente che una velocità ancora minore non conduce alla misura di una tensione di vapore superiore.

Il metodo analitico specifico (per esempio gascromatografia o gravimetria) verrà scelto in funzione della sostanza in esame.

Si determina la quantità di sostanza trasportata da un volume noto di gas di trasporto.

#### 1 6 6 3 Calcolo della tensione di vapore

La tensione di vapore è calcolata in base alla densità di vapore, ( $W/V$ ), mediante l'equazione

$$p = \frac{W}{V} \times \frac{RT}{M}$$

dove

$p$  = tensione di vapore (Pa)

$W$  = massa di sostanza in esame evaporata (g)

$V$  = volume di gas saturato ( $m^3$ )

$R$  = costante universale molare dei gas ( $J \text{ mol}^{-1} K^{-1}$ )

$T$  = temperatura (K)

$M$  = massa molare della sostanza in esame ( $g \text{ mol}^{-1}$ )

I volumi misurati vanno corretti per tenere conto delle differenze di temperatura e di pressione tra il flussimetro e la colonna di saturazione termostata. Se il flussimetro si trova a valle del condensatore del vapore, possono essere necessarie correzioni che tengano conto degli eventuali prodotti di evaporazione provenienti da esso (1).



1 6 7 Rotore (8, 11, 13)

1 6 7 1 *Apparecchiatura*

La tecnica del rotore può venire messa in atto usando un viscosimetro a rotore come mostrato in figura 8. Un disegno schematico della disposizione sperimentale è mostrato in figura 7.

L'apparecchio di misura è costituito tipicamente da una testa di misurazione a rotore posta in un recipiente termostato (regolato con l'approssimazione di 0,1 °C). Il contenitore del campione viene posto in un recipiente termostato (regolato con un'approssimazione di 0,01 °C), e tutte le parti dell'apparecchiatura vengono tenute ad una temperatura più elevata del contenitore del campione per impedire la condensazione. Un dispositivo di pompa ad alto vuoto viene collegato al sistema mediante valvole per alto vuoto.

La testina di misurazione a rotore è costituita da una pallina d'acciaio (diametro da 4 a 5 mm) disposta in un tubo. La pallina è sospesa e stabilizzata in un campo magnetico, generalmente con l'uso di una combinazione di magneti permanenti e bobine di controllo.

La palla viene fatta ruotare da campi rotanti prodotti dalle bobine. Bobine di trasduzione, che misurano la leggera magnetizzazione laterale sempre presente della pallina, permettono di misurare la sua velocità di rotazione.

1 6 7 2 *Procedimento di misura*

Quando la pallina ha raggiunto una determinata velocità di rotazione  $v(0)$  (di solito circa 400 giri al secondo) si interrompe la fornitura di energia ed avviene una decelerazione dovuta all'attrito col gas.

La riduzione della velocità di rotazione viene misurata in funzione del tempo. Poiché l'attrito provocato dalla sospensione magnetica è trascurabile in confronto con l'attrito gassoso, la pressione del gas  $p$  è data da:

$$p = \frac{\pi \bar{c} r \rho}{\sigma 10 t} \times \ln \frac{v(t)}{v(0)}$$

dove

$\bar{c}$  = velocità media delle molecole del gas

$r$  = raggio della pallina

$\rho$  = densità di massa della pallina

$\sigma$  = coefficiente di trasferimento tangenziale della quantità di moto ( $\sigma = 1$  per una superficie sferica ideale della pallina)

$t$  = tempo

$v(t)$  = velocità di rotazione dopo il tempo  $t$

$v(0)$  = velocità di rotazione iniziale

Questa equazione può anche essere scritta nella forma

$$p = \frac{\pi \bar{c} r \rho}{10 \sigma} \times \frac{t_n - t_{n-1}}{t_n \times t_{n-1}}$$

dove  $t_n, t_{n-1}$  sono i tempi occorrenti per un determinato numero  $N$  di rotazioni. Questi intervalli di tempo  $t_n$  e  $t_{n-1}$  si succedono uno all'altro, e si ha  $t_n > t_{n-1}$ .

La velocità media delle molecole di gas  $\bar{c}$  è data da

$$\bar{c} = \left( \frac{8 RT}{\pi M} \right)^{\frac{1}{2}}$$

dove

$T$  = temperatura (K)

$R$  = costante molare universale dei gas

$M$  = massa molare

## 2 DATI

La tensione di vapore misurata mediante uno qualunque dei metodi precedenti deve essere determinata per almeno due temperature. Tre o più temperature diverse nell'intervallo da 0 a 50 °C sarebbero preferibili per verificare la linearità della curva di tensione di vapore.

## 3 RELAZIONE

La relazione sulla prova deve, se possibile, includere le seguenti informazioni:

- metodo usato,
- descrizione precisa della sostanza (identità e impurezze) ed eventuale stadio preliminare di purificazione,
- almeno due valori di tensione di vapore e di temperatura, preferibilmente nel campo da 0 a 50 °C,
- tutti i dati grezzi,
- una curva di  $\log p$  contro  $1/T$ ,
- una stima della tensione di vapore a 20 o 25 °C.

Qualora si osservi una transizione (cambiamento di stato, decomposizione), saranno fornite le informazioni seguenti:

- la natura del cambiamento,
- la temperatura a cui il cambiamento si verifica sotto la pressione atmosferica,
- la tensione di vapore a 10 °C e a 20 °C al di sotto della temperatura di transizione, nonché a 10 °C e a 20 °C al di sopra di tale temperatura (a meno che la transizione non consista in un passaggio dallo stato solido allo stato gassoso).

Devono essere riportate tutte le informazioni e osservazioni significative per l'interpretazione dei risultati, in particolare per quanto riguarda le impurezze e lo stato fisico della sostanza.

## 4 BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guideline 104, Decision of the Council C(81) 30 final
- (2) Ambrose, D. B. Le Neindre, B. Vodar, (Eds) Experimental Thermodynamics, Butterworths, London, 1975, vol. II
- (3) R. Weissberger ed. Technique of Organic Chemistry. Physical Methods of Organic Chemistry, 3rd ed. Chapter IX, Interscience Publ., New York, 1959, Vol. I, Part I
- (4) Knudsen, M. Ann. Phys. Lpz., 1909, vol. 29, 1979, 1911, vol. 34, 593
- (5) NF T 20 048 AFNOR (Sept. 85) Chemical products for industrial use — Determination of vapour pressure of solids and liquids within range from  $10^{-1}$  to  $10^5$  Pa — Static method
- (6) NF T 20 047 AFNOR (Sept. 85) Chemical products for industrial use — Determination of vapour pressure of solids and liquids within range from  $10^{-1}$  to 1 Pa — Vapour pressure balance method
- (7) ASTM D 2879-86, Standard test method for vapour pressure-temperature relationship and initial decomposition temperature of liquids by isotenoscope
- (8) G. Messer, P. Rohl, G. Grosse and W. Jitschin. J. Vac. Sci. Technol. (A), 1987, vol. 5 (4), 2440
- (9) Ambrose, D., Lawrenson, I. J., Sprake, C. H. S. J. Chem. Thermodynamics 1975, vol. 7, 1173
- (10) B. F. Rordorf. Thermochimica Acta, 1985, vol. 85, 435
- (11) G. Comsa, J. K. Fremercy and B. Lindenau. J. Vac. Sci. Technol., 1980, vol. 17 (2), 642
- (12) G. Reuch, J. Vac. Sci. Technol., 1982, vol. 20 (4), 1148
- (13) J. K. Fremercy, J. Vac. Sci. Technol. (A), 1985, vol. 3 (3), 1715

## Appendice 1

## Metodo di stima

## INTRODUZIONE

I valori calcolati della tensione di vapore possono essere utilizzati

- per decidere quale dei metodi sperimentali sia appropriato,
- per fornire un valore di stima o un valore limite nei casi in cui il metodo sperimentale non possa essere applicato per ragioni tecniche (incluso il caso in cui la tensione di vapore sia molto bassa),
- per aiutare ad identificare i casi nei quali è giustificato omettere la misura sperimentale perché la tensione di vapore è probabile che sia  $< 10^{-5}$  Pa a temperatura ambiente

## METODO DI STIMA

La tensione di vapore dei liquidi e solidi può essere stimata mediante l'uso della correlazione di Watson modificata (a). L'unico dato sperimentale richiesto è il punto di ebollizione normale. Questo metodo è applicato sull'intervallo di pressioni da  $10^5$  Pa a  $10^{-5}$  Pa.

Informazioni più precise sul metodo sono fornite nello «Handbook of Chemical Property Estimation Methods» (b).

## PROCEDURA DI CALCOLO

Secondo (b), la tensione di vapore viene calcolata come segue

$$\ln P_{vp} \approx \frac{\Delta H_{vb}}{\Delta Z_b R T_b} \left[ 1 - \left( 3 - 2 \frac{T}{T_b} \right)^m - 2 m \left( 3 - 2 \frac{T}{T_b} \right)^{m-1} \ln \frac{T}{T_b} \right]$$

dove

$T$  = temperatura di interesse

$T_b$  = punto di ebollizione normale

$P_{vp}$  = tensione di vapore alla temperatura  $T$

$\Delta H_{vb}$  = calore di vaporizzazione

$\Delta Z_b$  = fattore di compressibilità (stimato in 0,97)

$m$  = fattore empirico che dipende dallo stato fisico alla temperatura di interesse

inoltre

$$\frac{\Delta H_{vb}}{T_b} = K_f (8,75 + R \ln T_b)$$

dove  $K_f$  è un fattore empirico che tiene conto della polarità della sostanza. Per diversi tipi di composti i fattori  $K_f$  sono elencati nel riferimento (b).

Molto spesso, sono disponibili dei dati nei quali è fornito un punto di ebollizione a pressione ridotta. In tale caso, secondo (b), la tensione di vapore si calcola come segue

$$\ln P_{vp} \approx \ln P_1 + \frac{\Delta H_{v1}}{\Delta Z_b R T_1} \left[ 1 - \left( 3 - 2 \frac{T}{T_1} \right)^m \frac{T_1}{T} - 2 m \left( 3 - 2 \frac{T}{T_1} \right)^{m-1} \ln \frac{T}{T_1} \right]$$

dove  $T_1$  è il punto di ebollizione alla pressione ridotta  $P_1$

## RELAZIONE

Quando si usa il metodo della stima, la relazione deve includere una documentazione completa del calcolo.

## BIBLIOGRAFIA

- (a) K M Watson, Ind Eng Chem, 1943, vol 35, 398  
(b) W J Lyman, W F Reehl, D H Rosenblatt Handbook of Chemical Property Estimation Methods, McGraw Hill, 1982

## Appendice 2

Figura 1

Apparecchio per la determinazione della curva di tensione di vapore mediante il metodo dinamico

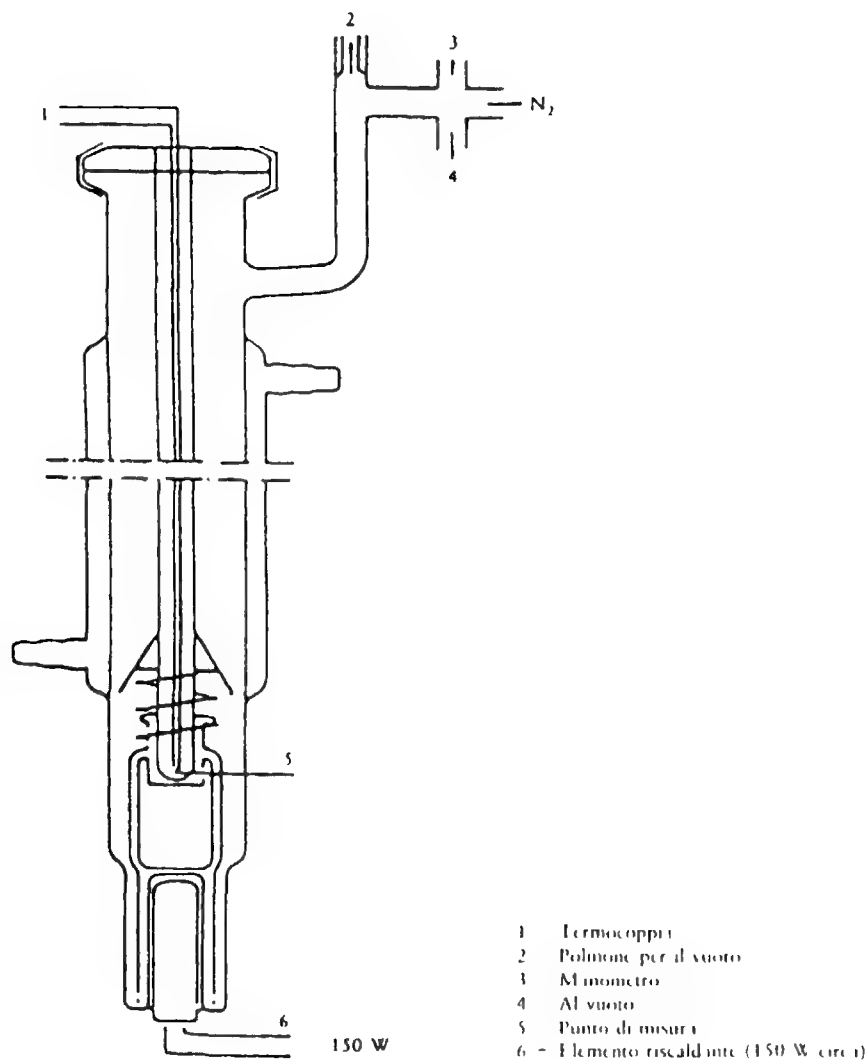
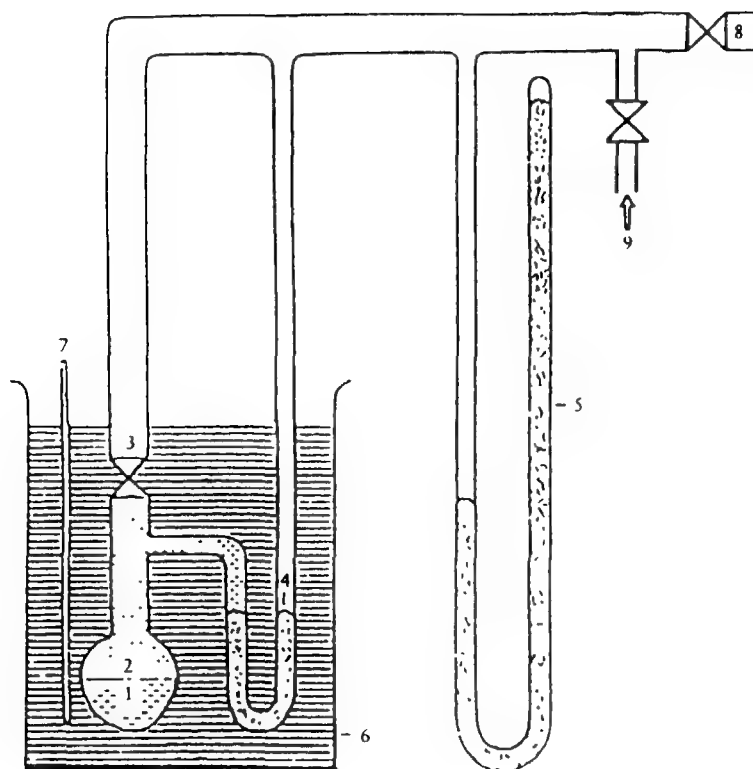


Figura 2a

Apparecchio per la determinazione della curva della tensione di vapore secondo il metodo statico (con l'uso di un manometro con tubo ad U)

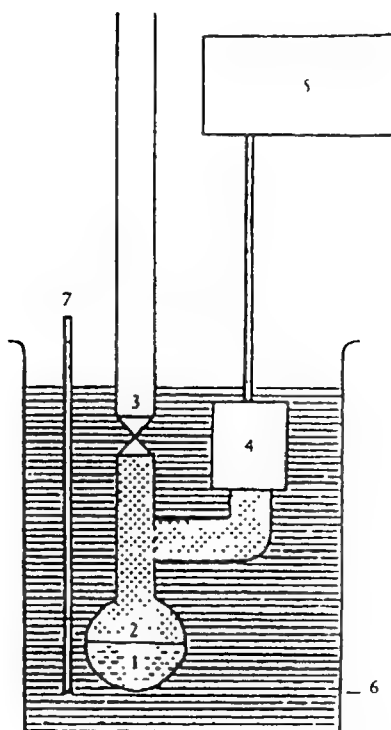


- 1 Sostanza in esame
- 2 Fase vapore
- 3 Valvola per alto vuoto
- 4 Tubo ad U (manometro ausiliario)
- 5 Manometro

- 6 Bagno termostatico
- 7 Dispositivo di misura della temperatura
- 8 Verso la pompa a vuoto
- 9 Ventilazione

Figura 2b

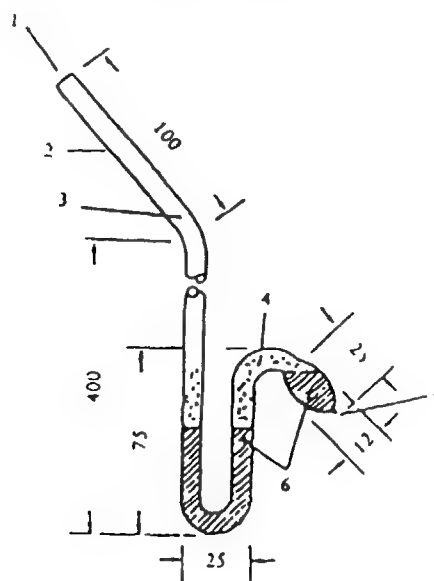
Apparecchio per la determinazione della curva della tensione di vapore secondo il metodo statico (con l'uso di un indicatore di pressione)



- 1 Sostanze in esame
- 2 Fase vapore
- 3 Valvola per alto vuoto
- 4 Manometro

- 5 Indicatore di pressione
- 6 Bagno termostatico
- 7 Dispositivo di misura della temperatura

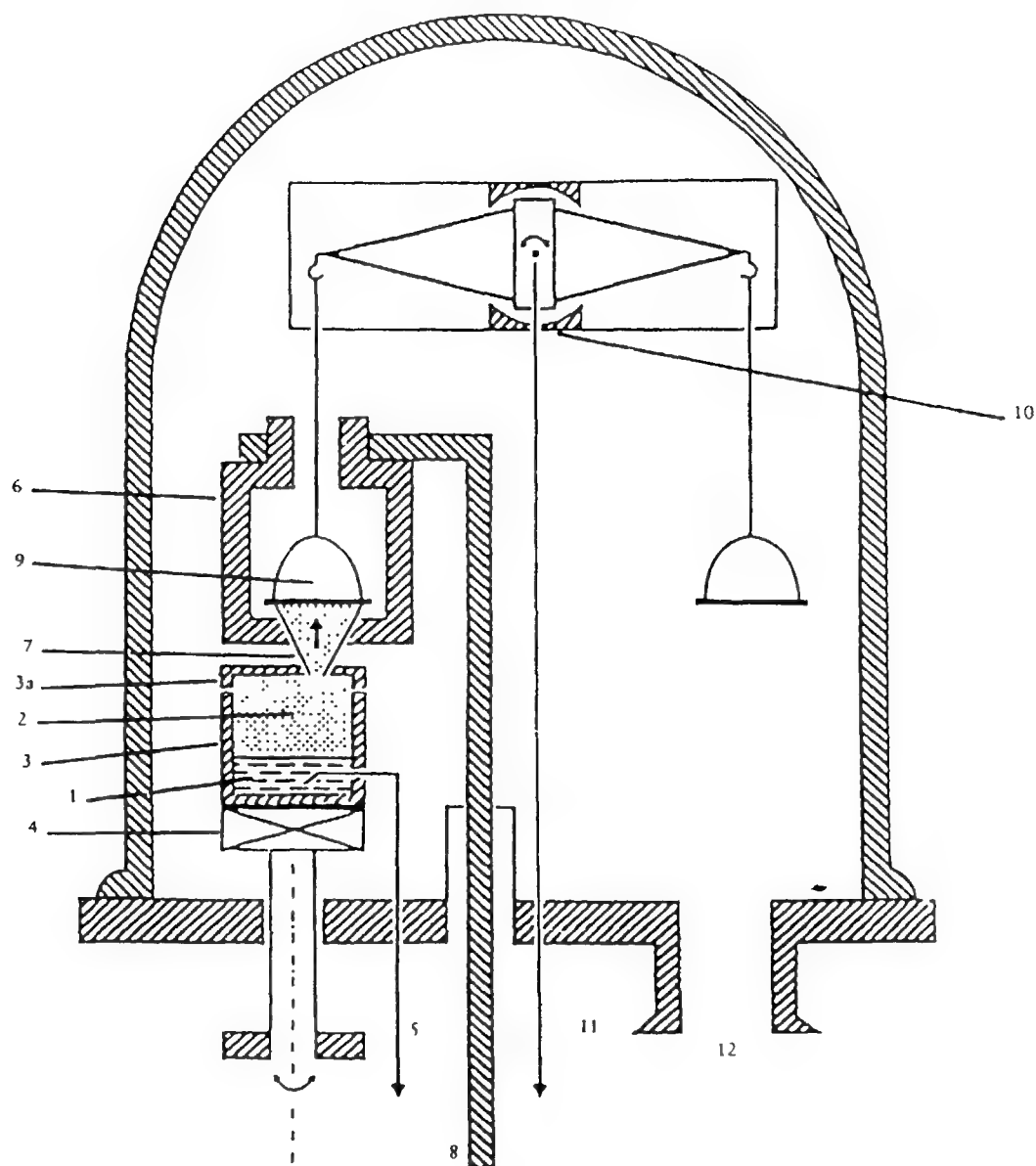
Figura 3  
Isotenisco (rif. bibl. 7)



- 1 A sistema di controllo e misura della pressione
- 2 Tubo da 8 mm di diametro esterno
- 3 Azoto secco nel sistema di pressione
- 4 Vapore del campione
- 5 Estremo inferiore
- 6 Campione liquido

Figura 4

Apparecchio per la determinazione della curva della tensione di vapore secondo il metodo della bilancia a tensione di vapore



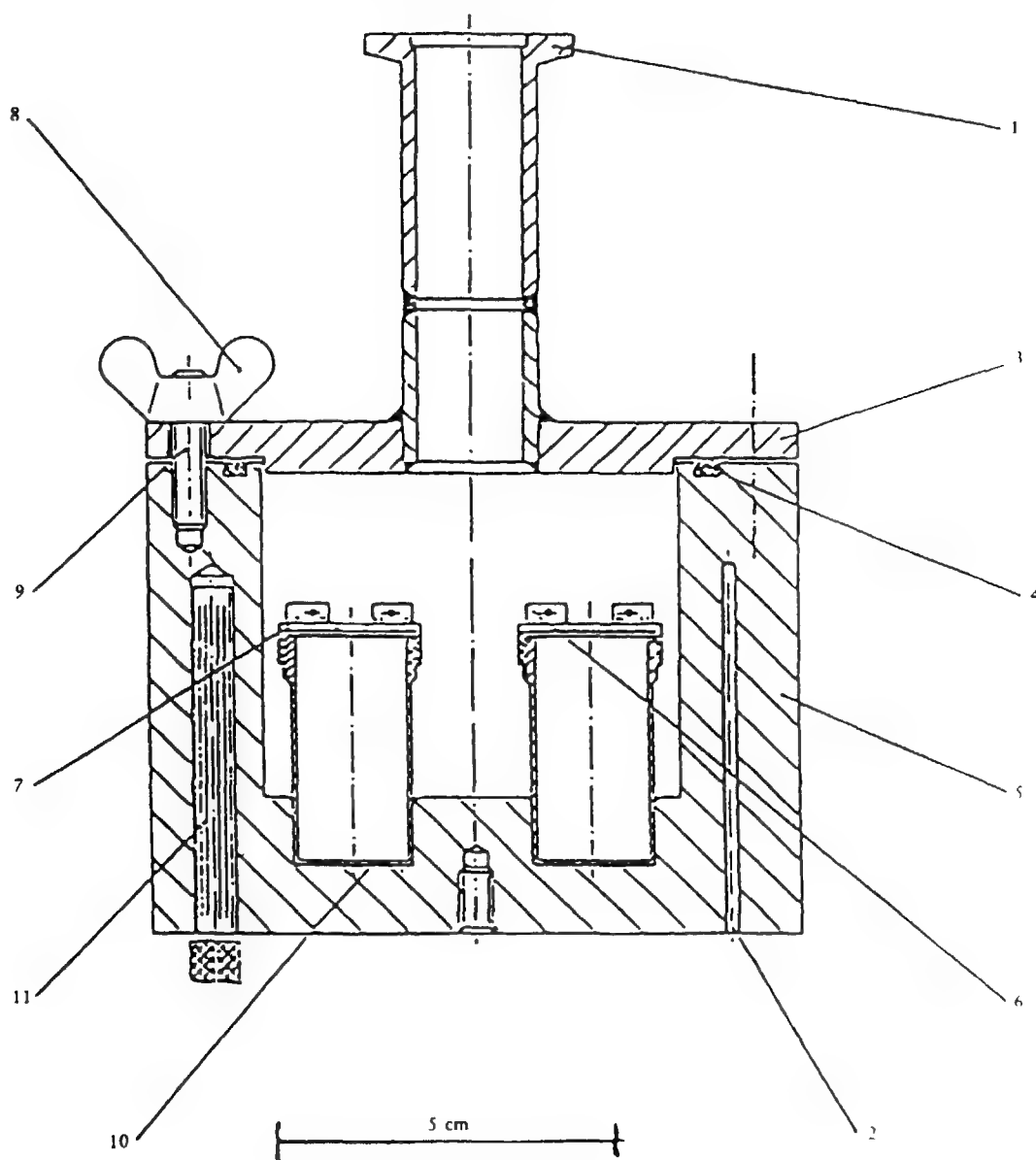
- 1 Sostanza in esame
- 2 Fuso vapore con corrente di vapore
- 3 Forno di evaporazione con ingresso rotativo
- 3a Coperchio del forno con apertura
- 4 Riscaldamento (refrigerazione) del forno
- 5 Misura della temperatura del campione
- 6 Recipiente refrigerante

- 7 Schermo
- 8 Barra di raffreddamento per il recipiente refrigerante
- 9 Piatta della bilancia
- 10 Microbilancia
- 11 Al registratore
- 12 Alle pompe ad alto vuoto



Figura 5

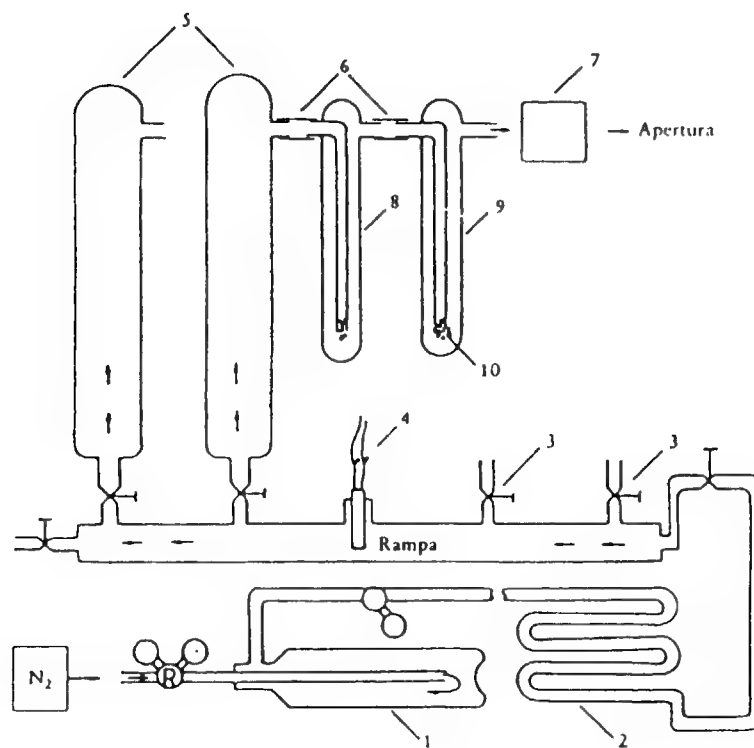
Esempio di apparecchio per l'evaporazione a bassa pressione mediante il metodo di effusione, con una cella di effusione del volume di 8 cm<sup>3</sup>



- 1 Connessione al vuoto
- 2 Pozzetti per il termometro a resistenza di platino o per la misura e il controllo della temperatura (n. 2)
- 3 Coperchio del recipiente da vuoto
- 4 O-ring
- 5 Recipiente da vuoto in alluminio
- 6 Dispositivo per installare e rimuovere le celle di effusione
- 7 Coperchio a vite
- 8 Dadi ad alette (n. 6)
- 9 Bulloni (n. 6)
- 10 Celle di effusione in acciaio inossidabile
- 11 Cartucce riscaldanti (n. 6)

Figura 6a

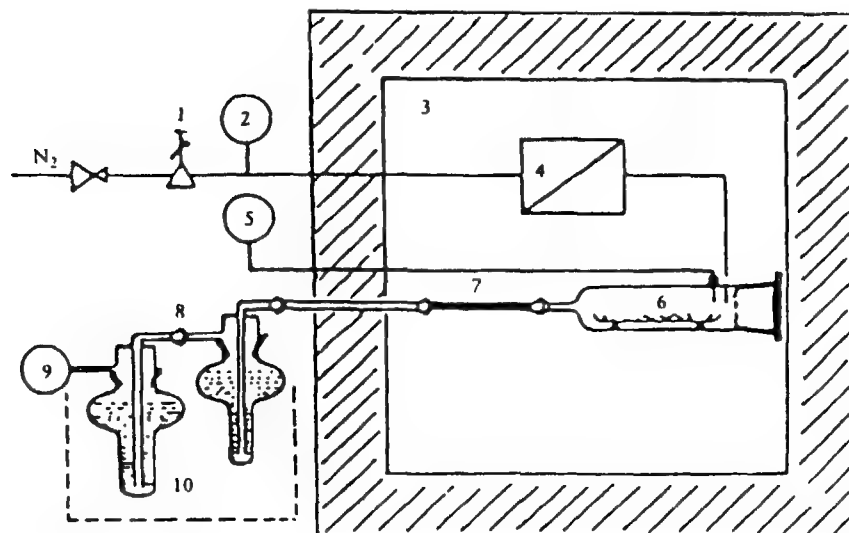
Esempio di sistema di flusso per la determinazione della tensione di vapore mediante il metodo della saturazione gassosa



- 1 = Regolatore di flusso
- 2 = Scambiatore di calore
- 3 = Valvola a spillo
- 4 = Sensore umidità relativa
- 5 = Colonne di saturazione
- 6 = Giunti in teflon
- 7 = Flussimetro
- 8 = Condensatore per il vapore (adsorbente)
- 9 = Condensatore ad olio
- 10 = Gorgogliatore in vetro sinterizzato

Figura 6b

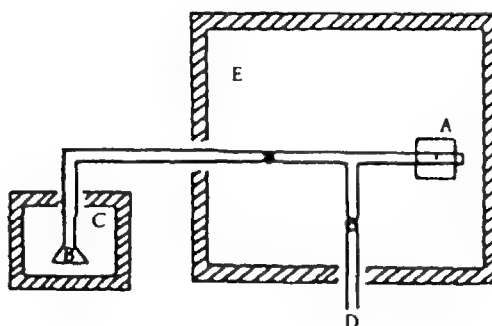
Esempio di sistema per la determinazione della tensione di vapore mediante il metodo della saturazione di gas, con un capillare disposto a valle della camera di saturazione



- |   |                                 |
|---|---------------------------------|
| 1 Flussimetro di massa termico                          | 6 Camera di saturazione del gas |
| 2 Manometro   | 7 Capillare                     |
| 3 Camera a temperatura controllata                      | 8 Vasi di adsorbimento          |
| 4 Serpentino di termostatazione per il gas di trasporto | 9 Contatore di gas              |
| 5 Termometro (Pt 100)                                   | 10 Trappola fredda              |

Figura 7

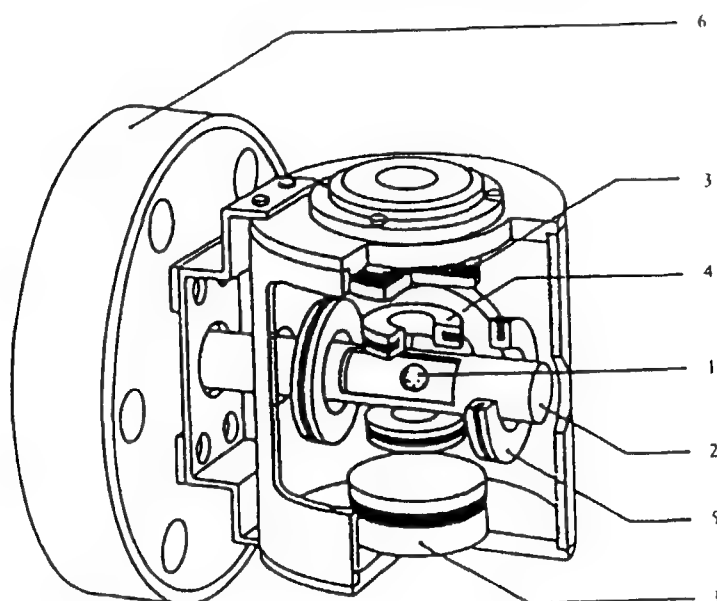
Esempio della disposizione sperimentale per il metodo del rotore



- Apparecchio per la tensione di vapore
- A Testina del sensore a rotore
  - B Cella del campione
  - C Termostato
  - D Linea del vuoto (turbopompa)
  - E Termostato ad aria

Figura 8

Esempio di testina di misurazione a rotore



- 1 Sfera,
- 2 Estensione tubolare evacuata di 6
- 3 Magneti permanenti (n° 2),
- 4 Bobine (n° 2) per la stabilizzazione verticale,
- 5 Bobine di azionamento (n° 4)
- 6 Flangia di collegamento

## A.5. TENSIONE SUPERFICIALE

## I METODO

I metodi descritti si basano sulle linee direttrici OCSE (1). I principi fondamentali sono presentati nel riferimento (2).

## 1.1 INTRODUZIONE

I metodi qui illustrati si applicano alla misura della tensione superficiale di soluzioni acquose.

Prima di effettuare le prove, è utile disporre di dati preliminari su alcune caratteristiche della sostanza in esame quali la solubilità in acqua, la struttura, il comportamento all'idrolisi e la concentrazione critica per la formazione di micelle.

I metodi qui illustrati si applicano alla maggior parte delle sostanze chimiche senza alcuna limitazione rispetto al loro grado di purezza.

La misura della tensione superficiale col metodo del tensiometro ad anello può essere effettuata soltanto su soluzioni acquose con viscosità dinamica inferiore a 200 mPa s circa.

## 1.2 DEFINIZIONI ED UNITÀ

Per tensione superficiale si intende l'entalpia libera superficiale per unità di area.

La tensione superficiale si misura in:

N/m (unità SI) oppure in

mN/m (sottomultipli della unità SI);

1 N/m =  $10^3$  dine/cm,

1 mN/m = 1 dine/cm nel vecchio sistema cgs.

### 1.3. SOSTANZE DI RIFERIMENTO

Non è necessario utilizzare sostanze di riferimento ogni volta che si esamina una nuova sostanza. Esse servono principalmente per controllare periodicamente l'attendibilità del metodo e per permettere il confronto dei risultati ottenuti con altri metodi.

Nei riferimenti bibliografici (1) e (3) sono citate varie sostanze di riferimento in grado di coprire un ampio campo di valori della tensione superficiale.

### 1.4. PRINCIPIO DEI METODI

I metodi si basano sulla misura della massima forza che è necessario esercitare in senso verticale ad una staffa o ad un anello a contatto con la superficie del liquido in esame posto in un recipiente di misura affinché detto liquido si distacchi dalla superficie stessa, ovvero ad una lamina che abbia un bordo a contatto con la superficie suddetta per sollevare la pellicola che si è formata.

Le sostanze che sono solubili in acqua ad una concentrazione di almeno 1 mg/l sono esaminate in soluzione acquosa ad un'unica concentrazione.

### 1.5. CRITERI DI QUALITÀ

I metodi descritti permettono misure più precise di quanto possa essere necessario per valutazioni <sup>1</sup>° ordine ambientale.

### 1.6. DESCRIZIONE DEI METODI

Si prepara una soluzione della sostanza in acqua distillata. La concentrazione di questa soluzione dovrebbe essere il 90 % del valore corrispondente alla concentrazione di saturazione della sostanza in acqua; quando questa concentrazione supera 1 g/l, si usa per la prova una concentrazione di 1 g/l. Non è necessario eseguire il saggio su sostanze con una solubilità in acqua minore di 1 mg/l.

#### 1.6.1. Metodo della lamina

Vedi ISO 304 e NF T 73-060 (Tensioattivi — Determinazione della tensione superficiale attraverso il sollevamento di pellicole liquide).

#### 1.6.2. Metodo della staffa

Vedi ISO 304 e NF T 73-060 (Tensioattivi — Determinazione della tensione superficiale attraverso il sollevamento di pellicole liquide).

#### 1.6.3. Metodo dell'anello

Vedi ISO 304 e NF T 73-060 (Tensioattivi — Determinazione della tensione superficiale attraverso il sollevamento di pellicole liquide).

#### 1.6.4. Metodo armonizzato dell'anello secondo l'OCSE

##### 1.6.4.1. Apparecchiatura

I tensiometri reperibili in commercio risultano adeguati a questo tipo di misura. Essi consistono delle parti seguenti:

- tavolo mobile per il campione,
- sistema di misurazione della forza,

- elemento di misura (anello),
- recipienti di misura.

#### 1.6.4.1.1 Tavolo mobile per il campione

Il tavolo mobile per il campione viene usato come piano d'appoggio per il recipiente di misura termostato contenente la soluzione in esame. Detto tavolo è montato su di un sostegno assieme al sistema di misurazione della forza.

#### 1.6.4.1.2. Sistema di misurazione della forza

Il sistema di misurazione della forza (vedi la figura) è collocato al di sopra del tavolo che sostiene il campione. L'errore nella misura della forza non deve essere maggiore di  $\pm 10^{-6} \text{ N}$ , corrispondente ad un limite d'errore di  $\pm 0,1 \text{ mg}$  in unità di massa. Nella maggioranza dei casi, la scala di misura dei tensiometri reperibili in commercio è tarata in  $\text{mN/m}$ , in modo che la tensione superficiale possa essere direttamente letta in  $\text{mN/m}$  con una incertezza di  $0,1 \text{ mN/m}$ .

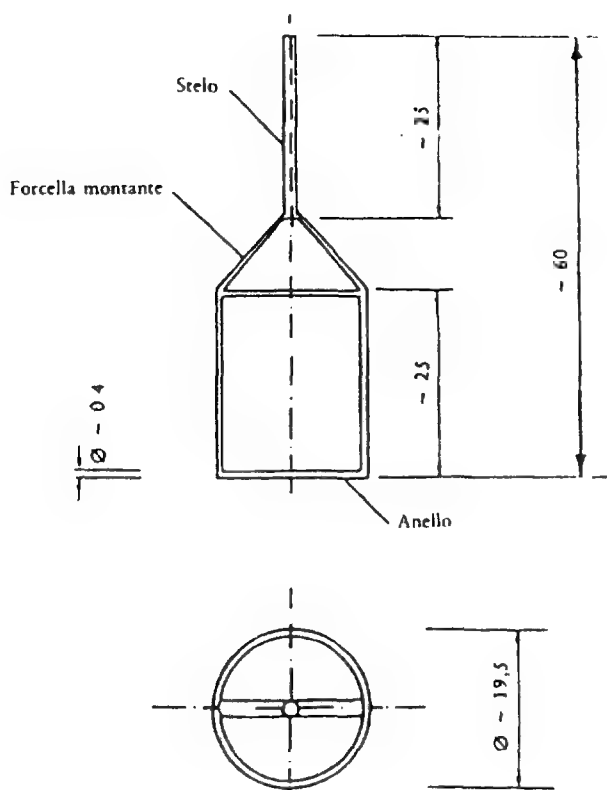
#### 1.6.4.1.3 Elemento di misura (anello)

L'anello è generalmente costituito da un filo di platino-iridio di circa  $0,4 \text{ mm}$  di spessore ed avente una circonferenza media di  $60 \text{ mm}$ . L'anello è sospeso orizzontalmente ad uno stelo metallico e ad una forcella di supporto in filo metallico che costituiscono il collegamento con il sistema di misurazione della forza (vedi la figura).

Figura

Elemento di misura

(Tutte le quote sono in mm)



## 1.6.4.1.4. Recipiente di misura

Il recipiente di misura contenente la soluzione in esame deve essere in vetro e permettere la termostatazione. Esso deve essere progettato in modo che, durante la misura, la temperatura della soluzione liquida in esame e della fase gassosa sovrastante la sua superficie rimanga costante e che il campione non possa evaporare. Sono accettabili recipienti cilindrici in vetro di diametro interno non inferiore a 45 mm.

## 1.6.4.2. Preparazione dell'apparecchiatura

## 1.6.4.2.1. Pulizia

I recipienti di vetro devono essere accuratamente puliti. Se necessario, essi vanno lavati con miscela solfo-cromica bollente, poi con acido fosforico sciropposo (dall'83 al 98 % in peso di  $H_3PO_4$ ), abbondantemente risciacquati con acqua di rubinetto, lavati con acqua bidistillata fino a reazione neutra ed infine asciugati o risciacquati con parte del campione liquido in esame.

L'anello deve essere innanzitutto abbondantemente risciacquato con acqua per eliminare ogni sostanza idrosolubile, poi immerso per breve tempo nella miscela solfo-cromica, lavato con acqua bidistillata fino a reazione neutra ed infine riscaldato brevemente su una fiamma a metanolo.

*Nota:*

Eventuali sostanze contaminanti che non possano essere disciolte o distrutte dalla miscela solfo-cromica o dall'acido fosforico, come ad esempio siliconi, vanno eliminate mediante un opportuno solvente organico.

## 1.6.4.2.2. Taratura dell'apparecchio

La convalida dell'apparecchiatura consiste nel controllo del punto di zero e nella regolazione dello strumento in modo che esso permetta determinazioni attendibili in mN/m.

*Montaggio:*

La base dell'apparecchio deve essere posta perfettamente in piano, per esempio utilizzando una livella a bolla d'aria e regolando le apposite viti di livellamento.

*Azzeramento dell'apparecchio:*

Dopo aver montato l'anello sull'apparecchio e prima di immergerlo nel liquido, il tensiometro deve essere azzerato, controllando inoltre il parallelismo dell'anello con la superficie della soluzione. A tale scopo la superficie della soluzione può essere usata come uno specchio.

*Taratura:*

La taratura può essere effettuata tramite uno dei due procedimenti seguenti:

- a) per mezzo di una massa: il procedimento si basa sull'impiego di cavalieri di massa nota compresa tra 0,1 e 1,0 g, da collocare sull'anello. Il fattore di calibrazione  $\Phi_A$ , per il quale tutte le letture dell'apparecchio devono essere moltiplicate, va determinato con la seguente equazione (1):

$$\Phi_A = \frac{\sigma_r}{\sigma_A} \quad (1)$$

dove:

$$\sigma_r = \frac{mg}{2b} \text{ (mN/m)}$$

m = massa del cavaliere (in g),

g = accelerazione di gravità ( $981 \text{ cm.s}^{-2}$  al livello del mare),

b = circonferenza dell'anello (in cm),

$\sigma_A$  = lettura al tensiometro dopo collocamento del cavaliere sull'anello (in mN/m);

- b) per mezzo dell'acqua: il procedimento si basa sull'impiego di acqua pura, la cui tensione superficiale è nota; per esempio, a 23 °C essa è di 72,3 mN/m. Questo metodo è più rapido della taratura con pesi, ma comporta sempre il rischio che la tensione superficiale dell'acqua risulti alterata a causa della contaminazione con tensioattivi in traccia.

Il fattore di taratura  $\Phi_b$ , per il quale tutte le letture dell'apparecchio devono essere moltiplicate, va determinato con la seguente equazione (2):

$$\Phi_b = \frac{\sigma_o}{\sigma_g} \quad (2)$$

dove:

$\sigma_o$  = valore riportato in letteratura per la tensione superficiale dell'acqua (in mN/m),

$\sigma_g$  = valore misurato della tensione superficiale dell'acqua (in mN/m) entrambi riferiti alla stessa temperatura.

#### 1.6.4.3. Preparazione dei campioni

Vanno preparate soluzioni acquose delle sostanze da esaminare alle concentrazioni richieste ed in assenza di alcun corpo di fondo.

La soluzione deve essere mantenuta a temperatura costante ( $\pm 0,5$  °C). Poiché la tensione superficiale di una soluzione nel recipiente di misura varia con il tempo, devono essere effettuate più misure a distanza l'una dall'altra, in modo da poter tracciare un grafico rappresentante le variazioni della tensione superficiale in funzione del tempo. Lo stato di equilibrio si considera raggiunto quando non si riscontrano più variazioni.

La polvere e la contaminazione gassosa ad opera di altre sostanze interferiscono con le misure. Queste devono pertanto essere effettuate sotto una copertura di protezione.

#### 1.6.5. Condizioni sperimentali

Le misure vanno eseguite a 20 °C circa con variazioni non superiori a  $\pm 0,5$  °C.

#### 1.6.6. Esecuzione della prova

Le soluzioni da sottoporre a misura devono essere trasferite nel recipiente di misura accuratamente pulito, avendo cura di evitare la formazione di schiuma, e successivamente il recipiente di misura va collocato sul tavolo dell'apparecchio di prova. Il piano del tavolo va alzato insieme al recipiente fino ad immergere l'anello sotto la superficie della soluzione in esame. Il piano del tavolo va poi abbassato gradualmente ed uniformemente (ad una velocità di circa 0,5 cm/min), in modo da staccare l'anello dalla superficie, fino a raggiungere il massimo della forza. Lo strato liquido attaccato all'anello non deve separarsi da esso. Al termine della misura, l'anello va nuovamente immerso sotto la superficie della soluzione ed il procedimento ripetuto finché si ottenga un valore costante della tensione superficiale. In ciascuna determinazione va registrato il tempo trascorso dal trasferimento della soluzione nel recipiente di misura. Le letture devono essere effettuate in corrispondenza dello sforzo massimo necessario per distaccare l'anello dalla superficie del liquido.

## 2. DATI

Per calcolare la tensione superficiale, il valore in mN/m letto sull'apparecchio va innanzitutto moltiplicato per il fattore di calibrazione  $\Phi_a$  o  $\Phi_b$  (secondo il procedimento di taratura adottato). Si otterrà così un valore approssimativo, che deve essere a sua volta opportunamente corretto.

Harkins e Jordan (4) hanno determinato alcuni fattori di correzione empirici per i valori della tensione superficiale misurata col metodo dell'anello, i quali dipendono dalle dimensioni dell'anello, dalla densità del liquido e dalla sua tensione superficiale.



Poiché la determinazione del fattore di correzione con le tabelle di Harkins e Jordan per ciascuna singola misura di tensione superficiale risulta troppo laboriosa, per le soluzioni acquose può applicarsi un metodo semplificato, consistente nel desumere la tensione superficiale corretta direttamente dalla tabella qui di seguito riportata (per valori compresi tra quelli tabulati si può ricorrere all'interpolazione)

**TABELLA: CORREZIONE DEI VALORI SPERIMENTALI DELLA TENSIONE SUPERFICIALE**

Valida soltanto per soluzioni acquose con  $\rho \approx 1 \text{ g/cm}^3$

$R = 9,55 \text{ mm}$  (raggio medio dell'anello)

$r = 0,185 \text{ mm}$  (spessore medio del filo metallico)

Valore sperimentale (mN/m)	Valore corretto (mN/m)	
	Taratura con pesi (vedi punto 1 6 4 2 2, lettera a)	Taratura con acqua (vedi punto 1 6 4 2 2, lettera b)
20	16,9	18,1
22	18,7	20,1
24	20,6	22,1
26	22,4	24,1
28	24,3	26,1
30	26,2	28,1
32	28,1	30,1
34	29,9	32,1
36	31,8	34,1
38	33,7	36,1
40	35,6	38,2
42	37,6	40,3
44	39,5	42,3
46	41,4	44,4
48	43,4	46,5
50	45,3	48,6
52	47,3	50,7
54	49,3	52,8
56	51,2	54,9
58	53,2	57,0
60	55,2	59,1
62	57,2	61,3
64	59,2	63,4
66	61,2	65,5
68	63,2	67,7
70	65,2	69,9
72	67,2	72,0
74	69,2	—
76	71,2	—
78	73,2	—

Questa tabella è stata compilata sulla base della correzione secondo Harkins e Jordan, in modo analogo alla norma DIN 53914 per l'acqua e le soluzioni acquose (densità  $\rho = 1 \text{ g/cm}^3$ ) e per anelli reperibili in commercio aventi dimensioni di  $R = 9,55 \text{ mm}$  (raggio medio dell'anello) e  $r = 0,185 \text{ mm}$  (spessore del filo metallico). La tabella fornisce i valori corretti per le misure di tensione superficiale effettuate dopo taratura con pesi o con acqua.

In alternativa, la tensione superficiale può essere calcolata senza taratura preliminare ricorrendo alla formula seguente

$$\sigma = \frac{f \times F}{4 \pi R}$$

dove

$F$  = forza misurata al dinamometro al punto di rottura della pellicola,

$R$  = raggio dell'anello,

$f$  = fattore di correzione (1)

## 3 RELAZIONE

## 3.1 RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- metodo usato;
- tipo d'acqua o soluzione impiegata;
- descrizione precisa della sostanza (identità e impurezze);
- risultati delle misure: tensione superficiale (lettura), indicando sia le singole letture e la loro media che la media corretta (tenendo conto del fattore specifico dell'apparecchio e della tabella di correzione);
- concentrazione della soluzione;
- temperatura di esecuzione delle prove;
- età della soluzione impiegata; in particolare il tempo trascorso tra la preparazione della soluzione e le misure;
- descrizione della variazione della tensione superficiale col tempo dopo il trasferimento della soluzione nel recipiente di misura;
- tutte le informazioni e osservazioni utili per l'interpretazione dei risultati, in particolare per quanto riguarda le impurezze e lo stato fisico della sostanza.

## 3.2 INTERPRETAZIONE DEI RISULTATI

Considerando che l'acqua distillata ha una tensione superficiale di 72,75 mN/m a 20 °C, le sostanze che presentano una tensione superficiale minore di 60 mN/m nelle condizioni di misura previste da questo metodo devono essere considerate come materiali tensioattivi.

## 4 BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guideline 115, Decision of the Council C(81) 30 final.
- (2) R. Weissberger ed., *Technique of Organic Chemistry*, Chapter XIV, Physical Methods of Organic Chemistry, 3rd, ed., Interscience Publ., New York, 1959, Vol.I, Part I.
- (3) *Pure Appl. Chem.*, 1976, vol. 48, 511.
- (4) Harkins, W.D., Jordan, H.F., *J. Amer. Chem. Soc.*, 1930, vol. 52, 1751.

## A.6. IDROSOLUBILITÀ

## 1. METODO

I metodi descritti sono basati sulle linee direttrici OCSE (1).

## 1.1. INTRODUZIONE

Per l'esecuzione della prova in oggetto è utile disporre di informazioni preliminari sulla formula di struttura, la tensione di vapore, la costante di dissociazione e l'idrolisi (in funzione del pH) della sostanza in esame.

Non esiste un procedimento unico che sia applicabile a tutto l'intervallo delle possibili solubilità in acqua.

I due metodi di prova descritti nel seguito coprono l'intera gamma della solubilità, ma non sono applicabili a sostanze volatili:

- il primo si applica a sostanze essenzialmente pure, scarsamente solubili ( $< 10^{-2}$  g/l) e stabili in acqua, e viene definito «metodo della eluizione su colonna»;
- il secondo si applica a sostanze essenzialmente pure con solubilità più elevata ( $> 10^{-2}$  g/l) e stabili in acqua, e viene definito «metodo del matraccio».

La solubilità in acqua della sostanza esaminata può essere considerevolmente alterata dalla presenza di impurezze.

## 1.2. DEFINIZIONI ED UNITÀ

La solubilità in acqua di una sostanza è definita come la concentrazione di saturazione della sostanza in acqua ad una determinata temperatura. La solubilità in acqua è espressa in unità di massa per volume di soluzione. L'unità SI è il  $\text{kg/m}^3$  (si può anche far uso del g/l).

## 1.3. SOSTANZE DI RIFERIMENTO

Non è necessario utilizzare sostanze di riferimento ogni volta che si esamina una nuova sostanza. Esse servono principalmente per controllare periodicamente l'attendibilità del metodo e per permettere il confronto con risultati ottenuti mediante altri metodi.

## 1.4. PRINCIPIO DEL METODO

Tramite una semplice prova preliminare si stabilisce la quantità approssimativa del campione ed il tempo necessario per raggiungere la concentrazione di saturazione.

## 1.4.1. Metodo dell'eluizione su colonna

Questo metodo si basa sull'eluizione con acqua della sostanza in esame da una microcolonna riempita con materiale di supporto inerte, come perline di vetro o sabbia, con un eccesso della sostanza stessa. La solubilità in acqua viene valutata quando la concentrazione della sostanza nell'eluato è costante. Ciò si deduce dal fatto che la concentrazione in funzione del tempo raggiunge un valore costante.

## 1.4.2. Metodo del matraccio

In questo metodo la sostanza (polverizzata, se solida) è disciolta in acqua ad una temperatura leggermente superiore a quella del saggio. Quando si raggiunge la saturazione, la miscela viene raffreddata e mantenuta alla temperatura della determinazione, agitando per tutto il tempo necessario a raggiungere l'equilibrio. In alternativa, la misura può essere eseguita direttamente alla temperatura di prova se, mediante un appropriato campionamento, si può essere sicuri di avere raggiunto l'equilibrio di saturazione. Successivamente, si determina mediante un opportuno metodo analitico la concentrazione della massa della sostanza nella soluzione acquosa, quest'ultima non deve contenere particelle indissolte.

## 1.5 CRITERI DI QUALITÀ

## 1.5.1 Ripetibilità

Per il metodo dell'eluizione su colonna, si può ottenere una ripetibilità inferiore al 30 %, per il metodo del matraccio essa dovrebbe essere inferiore al 15 %.

## 1.5.2 Rivelabilità

La rivelabilità dipende dal metodo d'analisi, si possono comunque effettuare determinazioni della concentrazione di massa fino a  $10^{-6}$  g/l.

## 1.6 DESCRIZIONE DEL METODO

## 1.6.1 Condizioni di determinazione

La prova deve essere eseguita preferibilmente a  $20\text{ }^{\circ}\text{C} \pm 0,5\text{ }^{\circ}\text{C}$ . Se si presume che ci sia una dipendenza della solubilità anche dalla temperatura ( $> 3\%$  per  $^{\circ}\text{C}$ ), la prova deve essere eseguita ad altre due temperature di almeno  $10\text{ }^{\circ}\text{C}$  al di sopra e al di sotto di quella scelta inizialmente. In questo caso il controllo della temperatura deve rientrare in  $\pm 0,1\text{ }^{\circ}\text{C}$ . La temperatura prescelta deve essere mantenuta costante in tutti i componenti importanti della strumentazione.

## 1.6.2 Prova preliminare

In un cilindro graduato da 10 ml, chiuso con tappo di vetro e contenente all'incirca 0,1 g del campione (le sostanze solide devono essere polverizzate), vengono versati volumi crescenti di acqua distillata a temperatura ambiente, secondo le indicazioni riportate nella seguente tabella.

0,1 g solubili in -x- ml di acqua	0,1	0,5	1	2	10	100	>100
Solubilità approssimativa (g/l)	> 1.000	1.000-200	200-100	100-50	50-10	10-1	< 1

Dopo ciascuna aggiunta delle quantità d'acqua indicate, la miscela viene vigorosamente agitata per 10 minuti e controllata visualmente per accertare la presenza di particelle non disciolte del campione. Se, dopo l'aggiunta di 10 ml d'acqua, il campione, o parte di esso, rimane indisciolto, l'esperimento deve essere ripetuto in un cilindro graduato da 100 ml con volumi d'acqua maggiori. Per solubilità inferiori, il tempo necessario per sciogliere la sostanza può essere considerevolmente più lungo (si devono prevedere almeno 24 ore). La solubilità approssimativa è indicata nella tabella in corrispondenza del volume d'acqua aggiunto per ottenere la dissoluzione completa del campione. Se la sostanza è ancora manifestamente insolubile, occorre attendere più di 24 ore (fino ad un massimo di 96 ore), oppure si deve effettuare un'ulteriore diluizione per accertarsi se debba essere usato il metodo dell'eluizione su colonna o il metodo del matraccio.

## 1.6.3 Metodo dell'eluizione su colonna

## 1.6.3.1 Materiale di supporto, solvente ed eluente

Il materiale di supporto per il metodo dell'eluizione su colonna deve essere inerte. Possibili materiali adatti allo scopo sono perline di vetro e sabbia. Per distribuire la sostanza in esame sul materiale di supporto, va utilizzato un opportuno solvente volatile di purezza analitica. Come eluente va utilizzato acqua bidistillata ottenuta tramite apparecchi in vetro od in quarzo.

## Nota

Non deve utilizzarsi acqua proveniente direttamente da scambiatore di ioni di natura organica.

#### 1.6.3.2. *Caricamento del supporto*

Si pesano circa 600 mg del materiale di supporto, che si trasferiscono poi in un pallone a base tonda da 50 ml.

Si scioglie nel solvente prescelto una quantità pesata opportuna della sostanza da esaminare. Una quantità appropriata di questa soluzione viene aggiunta al materiale di supporto. Il solvente deve essere completamente evaporato, per esempio in un evaporatore rotante. In caso contrario non si raggiunge la saturazione con acqua del supporto a causa degli effetti di ripartizione sulla superficie del materiale di supporto.

Il caricamento del materiale di supporto può causare problemi (risultati erranei) se la sostanza di prova si deposita sotto forma di olio o di una differente fase cristallina. Il problema deve essere esaminato sperimentalmente e i dettagli riportati nella relazione.

Il materiale di supporto così caricato viene lasciato a bagno approssimativamente per 2 ore in circa 5 ml di acqua, e quindi la sospensione viene introdotta nella microcolonna. In alternativa, si può versare il materiale di supporto già ricoperto della sostanza ed essiccato nella microcolonna previamente riempita d'acqua e quindi lasciare il tutto ad equilibrarsi per circa 2 ore.

##### *Procedimento di determinazione:*

L'eluizione della sostanza dal materiale di supporto può essere eseguita in due modi diversi:

- con una pompa di circolazione (si veda la figura 1),
- con un recipiente di livellamento (si veda la figura 4).

#### 1.6.3.3. *Metodo dell'eluizione su colonna con pompa di circolazione*

##### *Apparecchiatura:*

La rappresentazione schematica di un sistema convenzionale è riportata nella figura 1. La figura 2 presenta una microcolonna di adatte caratteristiche, che peraltro può avere altre misure, purché vengano rispettati i criteri di riproducibilità e sensibilità. La colonna deve comprendere uno spazio di testa pari ad almeno cinque volte il volume del letto d'acqua ed essere in grado di contenere un minimo di cinque campioni. In alternativa, le dimensioni possono anche essere ridotte qualora si impieghi un solvente di riempimento per sostituire i primi cinque volumi del letto d'acqua, scartati perché contenenti impurezze.

La colonna deve essere collegata ad una pompa di circolazione capace di assicurare una portata di circa 25 ml/h. La pompa è collegata mediante giunti in politetrafluoroetilene (PTFE) e/o in vetro. La colonna e la pompa, dopo il montaggio, devono permettere il campionamento dell'effluente e l'equilibratura dello spazio di testa a pressione atmosferica. Il materiale della colonna è sostenuto da un batuffolo di lana di vetro (5 mm), che serve anche da filtro per le particelle. La pompa di circolazione può essere per esempio una pompa peristaltica od una pompa a membrana (si deve fare attenzione affinché non ci sia contaminazione e/o adsorbimento da parte del materiale del tubo).

##### *Procedimento di misura:*

Si avvia il flusso attraverso la colonna. Si raccomanda di usare una portata di approssimativamente 25 ml/h (che corrisponde a 10 volumi del letto per ora per la colonna descritta). Si devono scartare almeno i primi cinque volumi per allontanare le impurezze solubili in acqua. Successivamente si lascia funzionare la pompa di circolazione fino al raggiungimento dell'equilibrio; ciò viene accertato sulla base di cinque campioni successivi, le concentrazioni dei quali non differiscono più del  $\pm 30\%$  con distribuzione casuale. Questi campioni devono essere prelevati l'uno dall'altro da intervalli di tempo corrispondenti al passaggio di almeno dieci volte il volume del letto di eluente.

#### 1.6.3.4. *Metodo dell'eluizione su colonna con recipiente di livellamento*

##### *Apparecchiatura (si vedano le figure 3 e 4):*

Recipiente di livellamento: il collegamento con il recipiente di livellamento si realizza tramite un giunto di vetro smerigliato, connesso con un tubo in teflon. Si raccomanda una velocità di flusso di circa 25 ml/h. Frazioni eluite consecutivamente vanno prelevate ed analizzate con il metodo prescelto.

##### *Procedimento di misura:*

Per determinare la solubilità in acqua si utilizzano le frazioni eluite nella fase centrale, dove le concentrazioni devono risultare costanti ( $\pm 30\%$ ) in almeno cinque frazioni consecutive.

In ambedue i casi (sia che si usi una pompa di circolazione sia che si usi un vaso di livellamento), si deve eseguire una seconda prova con una velocità di flusso uguale alla metà di quella della prima prova. Se i risultati delle due prove concordano, la determinazione è soddisfacente. Se si misura una solubilità manifestamente superiore alla portata minore, il dimezzamento della velocità di flusso va proseguito finché due prove successive non forniscano lo stesso valore della solubilità.

In entrambi i casi (utilizzando una pompa di circolazione od un recipiente di livellamento), l'eventuale presenza di materia colloidale va controllata tramite l'effetto Tyndall (diffusione della luce). La presenza di tali particelle toglie validità ai risultati e pertanto si deve ripetere la determinazione migliorando l'azione filtrante della colonna.

Va registrato il pH di ogni campione. Deve essere eseguita una seconda prova alla stessa temperatura.

#### 1.6.4. Metodo del matraccio

##### 1.6.4.1. Apparecchiatura

Per il metodo del matraccio è necessario il seguente materiale:

- normale strumentazione e vetreria di laboratorio,
- un apparecchio adatto per l'agitazione delle soluzioni a temperatura costante e controllata,
- una centrifuga (preferibilmente con termostato), se necessaria quando siano presenti emulsioni, e
- apparecchiatura per determinazioni analitiche.

##### 1.6.4.2. Procedimento di misura

La quantità di materiale necessario per saturare il volume di acqua viene valutata in base alla prova preliminare. Il volume di acqua necessario dipenderà dal metodo analitico e dall'intervallo di solubilità. Una quantità di materiale pari a cinque volte quella determinata in conformità a quanto detto sopra viene pesata direttamente in tre recipienti di vetro (per esempio, provette da centrifuga, beute) provvisti di tappi di vetro. A ciascun recipiente viene aggiunto il volume prescelto di acqua e quindi i recipienti vengono chiusi ermeticamente. Questi sono poi agitati a 30 °C si deve utilizzare un apparecchio di agitazione o di mescolamento che funzioni a temperatura costante, per esempio un agitatore magnetico in bagno d'acqua termostato. Dopo un giorno, uno dei recipienti viene prelevato e riequilibrato per 24 ore alla temperatura della determinazione, con agitazione intermittente. Il contenuto del recipiente viene poi centrifugato alla temperatura di prova, e si misura con un opportuno metodo analitico la concentrazione del composto nella fase acquosa limpida. Gli altri due recipienti vengono trattati in modo analogo dopo una equilibratura iniziale a 30 °C per due e tre giorni, rispettivamente. Se i valori di concentrazione concordano, nei limiti richiesti per la riproducibilità, almeno per i due ultimi campioni, la prova è positiva. Se invece i dati relativi ai recipienti 1, 2 e 3 mostrano una tendenza verso valori crescenti, l'intera prova deve essere ripetuta utilizzando tempi di equilibratura più lunghi.

Il procedimento di misura può anche venire eseguito senza preincubazione a 30 °C. Allo scopo di stimare la velocità con cui si stabilisce l'equilibrio di saturazione, si prelevano dei campioni fino a che il tempo di agitazione non influisce più sulla concentrazione della soluzione di prova.

Va riportato il pH di ciascun campione.

##### 1.6.5. Analisi

Per queste determinazioni va preferito un metodo analitico specifico per la sostanza in esame, poiché piccole quantità di impurezze solubili possono causare forti errori nella misura della solubilità. Esempi di tali metodi sono la gascromatografia, la cromatografia liquida, procedimenti di titolazione, procedimenti fotometrici, procedimenti voltammetrici.

**2. DATI****2.1. METODO DELL'ELUIZIONE SU COLONNA**

Per ciascuna prova si deve calcolare il valore medio di almeno cinque campioni consecutivi, prelevati in corrispondenza della fase di costanza di saturazione, nonché la deviazione standard. I risultati devono essere presentati in unità di massa per volume di soluzione.

Le medie calcolate su due prove con l'utilizzo di portate differenti vengono confrontate e devono presentare una ripetibilità inferiore al 30 %.

**2.2. METODO DEL MATRACCIO**

Si devono riportare i singoli risultati per ciascuno dei tre matracci e i risultati giudicati costanti (ripetibilità entro il 15 %) devono essere mediati e presentati in unità di massa per volume di soluzione. Ciò può richiedere la conversione delle unità di massa in unità di volume, utilizzando la densità quando la solubilità sia molto elevata ( $> 100$  g/l).

**3. RELAZIONE****3.1. METODO DELLA ELUIZIONE SU COLONNA**

La relazione sulla prova deve, se possibile, includere le seguenti informazioni:

- i risultati della prova preliminare;
- la descrizione precisa della sostanza (identità e impurezze);
- le concentrazioni, flussi e pH individuali di ciascun campione;
- le medie e le deviazioni standard di almeno cinque campioni nella zona di saturazione costante per ciascuna prova;
- la media delle due prove successive accettabili;
- la temperatura dell'acqua durante il processo di saturazione;
- il metodo di analisi utilizzato;
- la natura del materiale di supporto utilizzato;
- il procedimento di carica del materiale di supporto;
- il solvente utilizzato;
- l'indicazione di eventuale instabilità chimica della sostanza durante la prova e il metodo utilizzato;
- tutte le informazioni attinenti all'interpretazione dei risultati, in particolare per quanto riguarda le impurezze e lo stato fisico della sostanza.

**3.2. METODO DEL MATRACCIO**

La relazione sulla prova deve, se possibile, includere le seguenti informazioni:

- i risultati della prova preliminare;
- la descrizione precisa della sostanza (identità ed impurezze);
- le singole determinazioni analitiche e la media nel caso in cui più di un valore sia stato determinato per ciascun matraccio;
- il pH di ciascun campione;

- la media dei valori per i diversi matracci, i cui risultati siano concordanti;
- la temperatura di determinazione;
- il metodo analitico utilizzato;
- l'indicazione di eventuale instabilità chimica della sostanza durante la prova e il metodo utilizzato;
- tutte le informazioni attinenti all'interpretazione dei risultati, in particolare per quanto riguarda le impurezze e lo stato fisico della sostanza.

## 4.

## BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guideline 105, Decision of the Council C(81) 30 final.
- (2) NF T 20-045 (AFNOR) (Sept. 85). Chemical products for industrial use — Determination of water solubility of solids and liquids with low solubility — Column elution method.
- (3) NF T 20-046 (AFNOR) (Sept. 85). Chemical products for industrial use — Determination of water solubility of solids and liquids with high solubility — Flask method.

## Appendice

Figura 1

Metodo dell'eluizione su colonna con pompa di circolazione

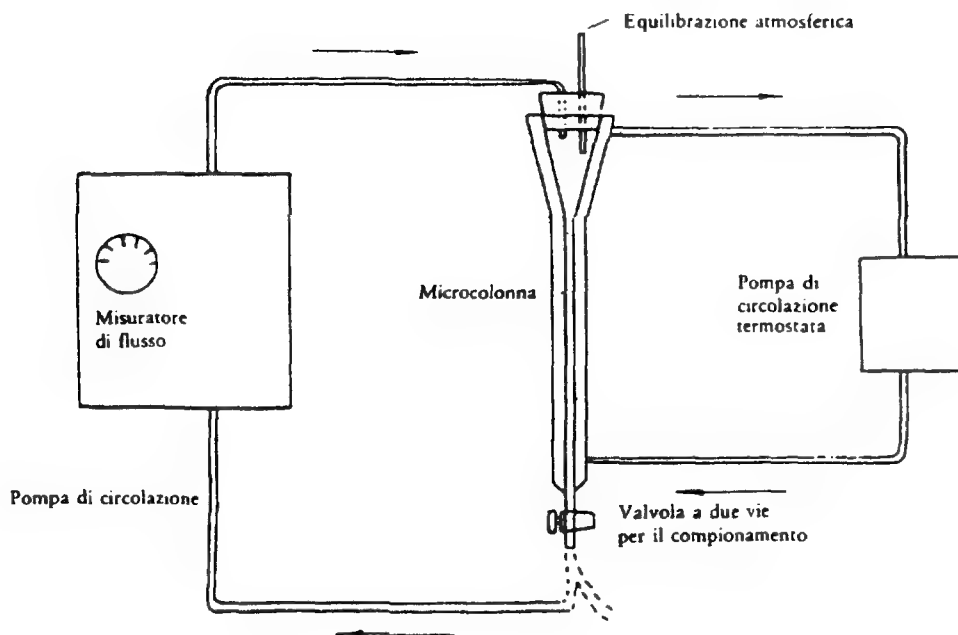




Figura 2

Microcolonna tipica  
(tutte le quote sono in mm)

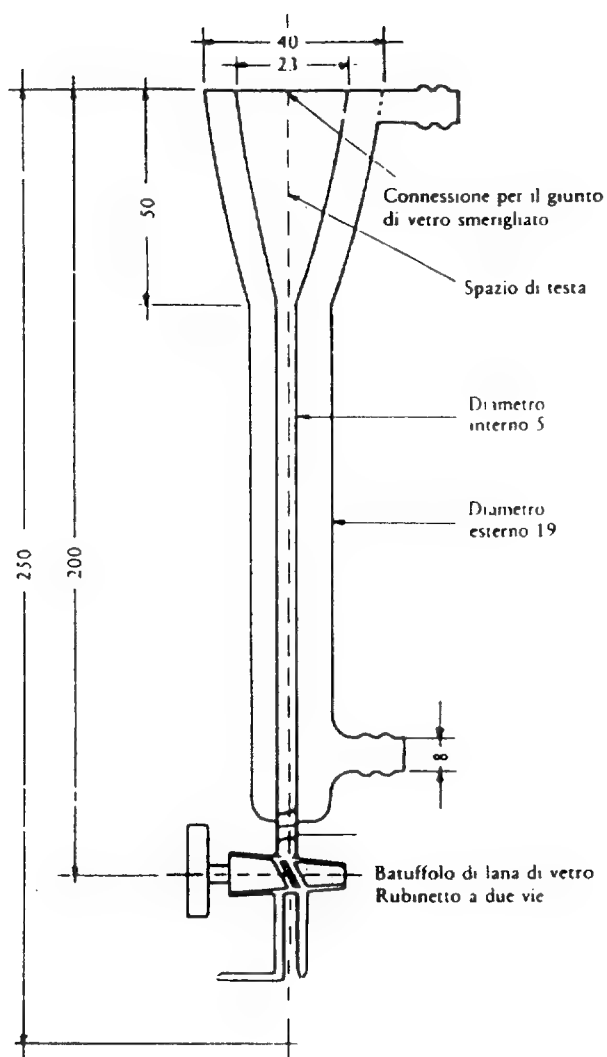


Figura 3  
Microcolonna tipica  
(tutte le quote sono in mm)

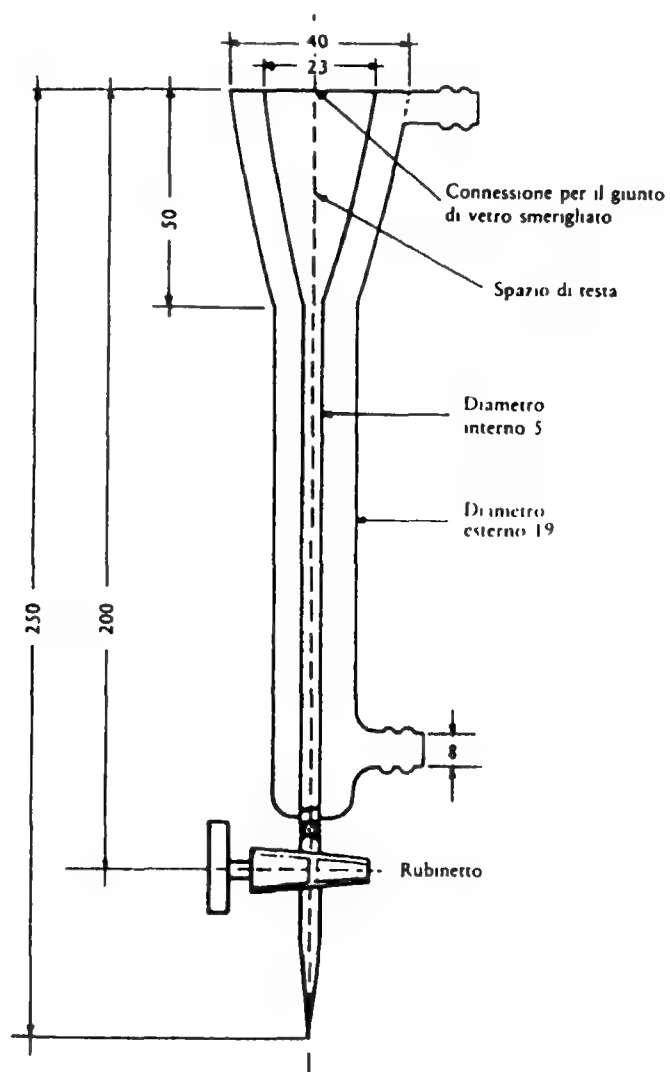
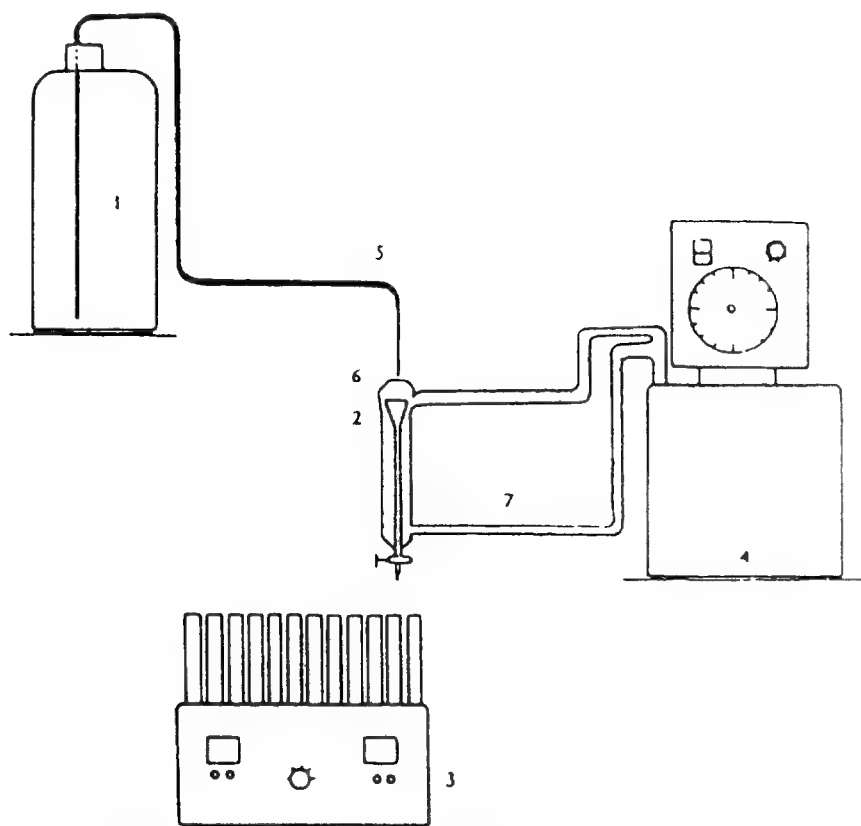


Figura 4

Metodo dell'eluizione su colonna con recipiente di livellamento



- 1 = Recipiente di livellamento (per esempio bottiglia da 2,5 litri)
- 2 = Colonna (vedi figura 3)
- 3 = Collettore di frazioni
- 4 = Termostato
- 5 = Tubo in teflon
- 6 = Tappo di vetro (per connessione in vetro smerigliato)
- 7 = Tubi per l'acqua (tra il termostato e la colonna, diametro interno: 8 mm circa)

## A.8. COEFFICIENTE DI RIPARTIZIONE

## 1 METODO

Il metodo del «dibattimento in pallone» descritto è basato sulle linee direttrici OCSE (1)

## 1.1 INTRODUZIONE

Per eseguire questa prova è utile disporre di informazioni preliminari sulla formula di struttura, la costante di dissociazione, la solubilità in acqua, l'idrolisi, la solubilità in n-ottanolo e la tensione superficiale della sostanza

La misura sulle sostanze ionizzabili deve essere eseguita solo nella loro forma non ionizzata (acido libero o base libera), prodotta mediante l'uso di un tampone appropriato con un pH di almeno una unità inferiore (acido libero) o superiore (base libera) al pK.

Questo metodo di prova include due procedure separate — il metodo dell'agitazione in pallone e la cromatografia liquida ad alte prestazioni (HPLC) — il primo può essere applicato quando il valore di  $\log P_{oa}$  (per le definizioni si veda più avanti) ricade nel campo da -2 a 4 e il secondo nel campo da 0 a 6. Prima di eseguire una delle due procedure sperimentali, si deve ricavare una stima preliminare del coefficiente di ripartizione

Il metodo del dibattimento in pallone vale solo per sostanze essenzialmente pure, solubili in acqua e in n-ottanolo. Non è applicabile a materiali tensioattivi (per i quali si deve fornire un valore calcolato o una stima basata sulle solubilità individuali in n-ottanolo e in acqua)

Il metodo HPLC non è applicabile ad acidi e basi forti, complessi metallici, materiali tensioattivi o sostanze che reagiscono con l'eluente. Per questi materiali, si deve fornire un valore calcolato o una stima basata sulle solubilità individuali in n-ottanolo e acqua

Il metodo HPLC è meno sensibile alla presenza di impurezze nel composto in esame che non il metodo dell'agitazione in pallone. Tuttavia, in alcuni casi, le impurezze possono rendere difficile l'interpretazione dei risultati perché l'assegnazione dei picchi diventa incerta. Per le miscele che forniscono una banda non risolta, si devono indicare i limiti inferiore e superiore di  $\log P$

## 1.2 DEFINIZIONI ED UNITÀ

Il coefficiente di ripartizione (P) si definisce come il rapporto tra le concentrazioni all'equilibrio ( $c_i$ ) di una sostanza disciolta in un sistema costituito da due solventi pressoché immiscibili. Nel caso del n-ottanolo e dell'acqua

$$P_{oa} = \frac{c_{n\text{-ottanolo}}}{c_{\text{acqua}}}$$

Il coefficiente di ripartizione (P) è pertanto il quoziente di due concentrazioni e viene generalmente espresso, sotto forma del suo logaritmo decimale ( $\log P$ )

## 1.3 SOSTANZE DI RIFERIMENTO

*Metodo del dibattimento in pallone*

Non è necessario utilizzare sostanze di riferimento ogni volta che si esamina una nuova sostanza. Esse servono principalmente per controllare periodicamente l'attendibilità del metodo e per permettere il confronto con risultati ottenuti mediante altri metodi.

*Metodo HPLC*

Allo scopo di correlare i dati di un composto misurati per HPLC con il suo P, si deve tracciare un grafico di taratura di  $\log P$  contro i dati cromatografici utilizzando almeno 6 punti di riferimento. Sta all'utilizzatore selezionare le sostanze di riferimento appropriate. Se possibile, almeno un composto di riferimento deve avere

un  $P_{0,2}$  al di sopra di quello della sostanza in esame e un altro un  $P_{0,2}$  al di sotto di quello della sostanza in esame. Per valori di  $\log P$  minori di 4, la taratura può essere basata su dati ottenuti mediante il metodo del dibattimento in pallone. Per valori di  $\log P$  maggiori di 4, la taratura può essere basata su valori di letteratura convalidati, purché siano in accordo con i valori calcolati. Per una migliore accuratezza, è preferibile scegliere composti di riferimento strutturalmente simili alla sostanza in esame.

Sono disponibili elenchi estesi di valori di  $\log P_{0,2}$  per molti gruppi di composti chimici (2) (3). Se non sono disponibili dati di coefficienti di ripartizione di composti strutturalmente simili, si può allora usare una taratura più generale basata su altri composti di riferimento.

In appendice 2 è fornito un elenco di sostanze di riferimento raccomandate e dei loro valori di  $P_{0,2}$ .

#### 1.4. PRINCIPIO DEL METODO

##### 1.4.1. Metodo del dibattimento in pallone

Per determinare il coefficiente di ripartizione è necessario raggiungere l'equilibrio tra tutti i componenti che interagiscono nel sistema, e si devono determinare le concentrazioni delle sostanze disciolte nelle due fasi. Un esame della letteratura sull'argomento indica che si possono utilizzare varie tecniche per risolvere questo problema, cioè l'accurata miscelazione delle due fasi seguita dalla loro separazione per poter determinare la concentrazione all'equilibrio della sostanza in esame.

##### 1.4.2. Metodo HPLC

La misura viene eseguita su colonne analitiche impaccate con una fase solida disponibile in commercio contenente idrocarburi a catena lunga (per esempio  $C_8$ ,  $C_{18}$ ) chimicamente legati su silice. I prodotti chimici iniettati su una colonna si muovono lungo di essa a velocità differenti a causa del differente grado di ripartizione tra la fase mobile e la fase stazionaria idrocarbonica. Miscele di composti chimici vengono eluite nell'ordine della loro idrofobicità, dove i composti chimici solubili in acqua sono eluiti per primi e i composti chimici liposolubili per ultimi, in proporzione al loro coefficiente di ripartizione idrocarburo-acqua. Questo permette di stabilire la relazione esistente tra il tempo di ritenzione su tale colonna (a fase inversa) e il coefficiente di ripartizione n-ottanolo/acqua. Il coefficiente di ripartizione viene dedotto dal fattore di capacità  $k$ , fornito dall'espressione:

$$k = \frac{t_R - t_0}{t_0}$$

in cui  $t_R$  = tempo di ritenzione della sostanza in esame e  $t_0$  = tempo medio richiesto perché una molecola di solvente passi attraverso la colonna (tempo morto).

Non sono richiesti metodi analitici quantitativi, ed è necessaria solo la determinazione dei tempi di eluizione.

#### 1.5. CRITERI DI QUALITÀ

##### 1.5.1. Ripetibilità

###### *Metodo del dibattimento in pallone*

Per assicurare l'accuratezza del coefficiente di ripartizione, vanno eseguite determinazioni in doppio in tre diverse condizioni sperimentali, così da poter variare la quantità della sostanza considerata nonché il rapporto tra i volumi dei solventi. I valori determinati per il coefficiente di ripartizione, espressi come logaritmi decimali, devono essere compresi in un intervallo di  $\pm 0,3$  unità logaritmiche.

###### *Metodo HPLC*

Al fine di aumentare la validità della misura, si devono eseguire determinazioni in doppio. I valori di  $\log P$  derivati dalle singole misure devono essere compresi in un intervallo di  $\pm 0,1$  unità logaritmiche.

1 5 2      **Sensibilità***Metodo del dibattimento in pallone*

L'intervallo di misura del metodo è definito dal limite di rivelabilità del procedimento analitico. Questo deve essere sufficiente per permettere la valutazione dei valori di  $\log P_{oa}$  nel campo da -2 a 4 (occasionalmente, quando si verificano le opportune condizioni, questo intervallo può essere esteso ad un  $\log P_{oa}$  fino a 5) quando la concentrazione del soluto in una delle due fasi non è superiore a 0,01 mol/l.

*Metodo HPLC*

Il metodo HPLC permette di stimare i coefficienti di ripartizione nel campo di  $\log P_{oa}$  da 0 a 6

Normalmente, il coefficiente di ripartizione di un composto può essere stimato entro  $\pm 1$  unità logaritmica del valore ottenibile con il metodo del dibattimento in pallone. In letteratura è possibile trovare correlazioni tipiche (4) (5) (6) (7) (8). Un'accuratezza più elevata si può in genere ottenere con grafici di correlazione basati su composti di riferimento di struttura simile (9)

1 5 3      **Specificità***Metodo del dibattimento in pallone*

La legge di ripartizione di Nernst si applica esclusivamente a soluzioni diluite a temperatura, pressione e pH costanti. Essa è rigorosamente valida solo per una sostanza pura dispersa tra due solventi puri. Qualora in una delle due fasi, od in ambedue, siano presenti più soluti diversi, ciò può alterare i risultati

La dissociazione o l'associazione delle molecole disciolte portano a deviazioni dalla legge di ripartizione di Nernst. Tali deviazioni sono evidenziate dal fatto che il coefficiente di ripartizione varia in funzione della concentrazione della soluzione

Dati gli equilibri multipli che hanno luogo, questo metodo non può essere applicato a composti ionizzabili senza ricorrere ad opportuni fattori di correzione. Per tali composti si deve prendere in considerazione l'uso di soluzioni tampone invece di acqua; il pH del tampone deve differire di almeno un'unità di pH dal pKa della sostanza, tenendo presente la significatività di questo pH per l'ambiente.

1 6      **DESCRIZIONE DEL METODO**1 6 1      **Stima preliminare del coefficiente di ripartizione**

Il coefficiente di ripartizione viene stimato preferibilmente utilizzando un metodo di calcolo (si veda l'appendice 1), o, dove appropriato, dal rapporto delle solubilità della sostanza in esame nei solventi puri (10)

1 6 2      **Metodo del dibattimento in pallone**1 6 2 1      **Preparazione**

n-ottanolo la determinazione del coefficiente di ripartizione deve essere eseguita con reattivi per analisi di elevata purezza

Acqua: va impiegata acqua distillata o bidistillata in apparecchi di vetro o quarzo. Per i composti ionizzabili, si devono usare soluzioni tampone al posto dell'acqua, se giustificato

*Nota*

Non si deve usare acqua prelevata direttamente da uno scambiatore di ioni

**1.6.2.1.1. Presaturazione dei solventi**

Prima di determinare il coefficiente di ripartizione, le fasi del sistema di solventi devono essere mutuamente saturate mediante agitazione alla temperatura della determinazione. Per far ciò è vantaggioso agitare per 24 ore con un agitatore meccanico due grandi bottiglie di riserva contenenti rispettivamente n-ottanolo ed acqua, entrambi di grande purezza, addizionati ciascuno di una adeguata quantità dell'altro solvente, e poi lasciate riposare abbastanza a lungo da consentire la separazione delle fasi ed il raggiungimento dello stato di saturazione.

**1.6.2.1.2. Preparazione per la determinazione**

L'intero volume del sistema bifasico deve riempire quasi completamente il recipiente di misura. Ciò permetterà di evitare le perdite di materiale per volatilizzazione. I rapporti in volume e le quantità delle sostanze da impiegare devono essere stabilite tenendo conto:

- della valutazione preliminare del coefficiente di ripartizione (si veda sopra);
- della quantità minima di sostanza da esaminare per il procedimento analitico;
- della limitazione della concentrazione ad un massimo di 0,01 moli/l per ognuna delle due fasi.

Si eseguono tre determinazioni. Nella prima, si usa il rapporto in volume calcolato di n-ottanolo ad acqua; nella seconda, questo rapporto viene diviso per due; e nella terza questo rapporto viene moltiplicato per due (p. es. 1:1, 1:2, 2:1).

**1.6.2.1.3. Sostanza da esaminare**

Si prepara una soluzione di riserva in n-ottanolo presaturato con acqua. La concentrazione di questa soluzione di riserva deve essere determinata con precisione prima di impiegare nella determinazione del coefficiente di ripartizione. Questa soluzione deve essere conservata in condizioni che assicurino la sua stabilità.

**1.6.2.2. Condizioni sperimentali**

La temperatura della determinazione deve essere mantenuta costante ( $\pm 1^\circ\text{C}$ ) ed essere compresa nell'intervallo 20-25  $^\circ\text{C}$ .

**1.6.2.3. Procedimento di misura****1.6.2.3.1. Raggiungimento dell'equilibrio di ripartizione**

Per ciascuna condizione sperimentale si devono preparare in doppio i recipienti contenenti la quantità richiesta dei due solventi, esattamente misurata, insieme all'opportuna quantità della soluzione di riserva.

Le fasi in n-ottanolo devono essere misurate in volume. I recipienti per la determinazione devono essere collocati in un opportuno agitatore o essere agitati manualmente. Un metodo raccomandato è quello di fare ruotare rapidamente di  $180^\circ$  la provetta da centrifuga intorno al suo asse trasversale in modo che l'eventuale aria intrappolata risalga attraverso le due fasi. L'esperienza ha mostrato che 50 rotazioni così effettuate sono in generale sufficienti per raggiungere l'equilibrio di ripartizione. Per sicurezza sono raccomandate 100 rotazioni in 5 minuti.

**1.6.2.3.2. Separazioni delle fasi**

Quando è necessario, allo scopo di separare le fasi si deve effettuare una centrifugazione della miscela. Ciò dovrebbe essere fatto mediante una centrifuga da laboratorio mantenuta a temperatura ambiente o, se si usa una centrifuga non termostata, le provette da centrifuga devono essere riequilibrate alla temperatura di determinazione per almeno 1 ora prima dell'analisi.

**1.6.2.4. Analisi**

Per la determinazione del coefficiente di ripartizione è necessario misurare la concentrazione della sostanza in esame in ambedue le fasi. Ciò può essere fatto prelevando un'aliquota di entrambe le fasi da ciascuna provetta per ciascuna condizione sperimentale ed analizzando ciascuna aliquota mediante il procedimento prescelto. La quantità totale delle sostanze presenti in ambedue le fasi deve essere calcolata e confrontata con la quantità della sostanza inizialmente introdotta.

Il prelievo di un campione della fase acquosa va eseguito con un procedimento che renda minimo il rischio di inclusione di tracce di n-ottanolo, a tal fine si può impiegare una siringa in vetro con ago asportabile. All'inizio, la siringa deve essere parzialmente riempita d'aria. L'aria deve essere espulsa cautamente mentre si inserisce l'ago attraverso lo strato di ottanolo. Si aspira nella siringa un adeguato volume di fase acquosa. Si toglie rapidamente la siringa dalla soluzione e si rimuove l'ago. Il contenuto della siringa può quindi essere impiegato come campione della fase acquosa. La concentrazione nelle due fasi separate va determinata preferibilmente attraverso un metodo specifico per la sostanza. Esempi di determinazioni chimico-fisiche che possono essere adatte sono i seguenti:

- metodi fotometrici,
- gascromatografia,
- cromatografia liquida ad alte prestazioni

### 1.6.3 Metodo HPLC

#### 1.6.3.1 Preparazione

##### *Apparecchiatura*

È necessario un cromatografo liquido equipaggiato con pompa esente da pulsazioni e con un adatto dispositivo di rivelazione. Si raccomanda di usare una valvola di iniezione con serbatoi di iniezione. La presenza di gruppi polari nella fase stazionaria può peggiorare gravemente le prestazioni della colonna HPLC. Pertanto, le fasi stazionarie devono contenere una percentuale minima di gruppi polari (11). Si possono usare riempimenti commerciali a fase inversa a microparticelle o colonne preimpaccate. Si può posizionare una colonna di protezione tra il sistema di iniezione e la colonna analitica.

##### *Fase mobile*

Per preparare il solvente di eluizione si usano metanolo per HPLC e acqua per HPLC e il solvente viene degassato prima dell'uso. Si deve ricorrere all'eluizione isocratica. Si devono usare rapporti metanolo/acqua con un contenuto minimo d'acqua del 25%. Normalmente, una miscela metanolo-acqua 3:1 (v/v) è soddisfacente per eluire composti con  $\log P$  6 in un'ora ad una portata di 1 ml/min. Per composti con  $\log P$  elevato, può essere necessario abbreviare il tempo di eluizione (e quello dei composti di riferimento) diminuendo la polarità della fase mobile oppure la lunghezza della colonna.

Sostanze con solubilità molto bassa in n-ottanolo tendono a fornire dei valori anormalmente bassi di  $\log P_{oa}$  con il metodo HPLC, i picchi di tali composti accompagnano talvolta il fronte del solvente. Ciò è probabilmente dovuto al fatto che il processo di ripartizione è troppo lento perché raggiunga l'equilibrio nel tempo normalmente richiesto da una separazione mediante HPLC. Una diminuzione del flusso e/o una diminuzione del rapporto metanolo/acqua può essere efficace per arrivare ad un valore affidabile.

Il composto in esame e i composti di riferimento devono essere solubili nella fase mobile in concentrazioni sufficienti per permetterne la rivelazione. Solo in casi eccezionali si possono usare degli additivi con la miscela metanolo-acqua perché questi modificano le proprietà della colonna. Per i cromatografi con additivi, è obbligatorio usare una colonna separata dello stesso tipo. Se la miscela metanolo-acqua non è appropriata, si possono usare altre miscele solvente organico-acqua, per esempio etanolo-acqua o acetonitrile-acqua.

Il pH dell'eluente è critico per i composti ionizzabili. Esso deve rientrare nel campo operativo di pH della colonna, che di solito è compreso tra 2 e 8. Si raccomanda di tamponare la soluzione. Occorre aver cura di evitare la precipitazione di sali e il deterioramento della colonna che si verificano con alcune miscele di fase organica/tampone. Le misure mediante HPLC con fasi stazionarie a base di silice al di sopra di pH 8 non sono consigliabili perché l'uso di una fase mobile alcalina può provocare un rapido scadimento delle prestazioni della colonna.

##### *Soluti*

I composti di riferimento devono essere i più puri disponibili. I composti da usare a scopo di prova o di titolazione devono, se possibile, essere disciolti nella fase mobile.

##### *Condizioni sperimentali*

La temperatura durante le misure non deve variare di oltre  $\pm 2$  K.



## 1 6.3.2 Misure

*Calcolo del tempo morto  $t_0$* 

Il tempo morto  $t_0$  può venire determinato usando o una serie omologa di sostanze (per esempio n-alchilmetil chetoni) o composti organici non trattenuti (per esempio tiourea o formammide). Per il calcolo del tempo morto  $t_0$  mediante l'uso di una serie omologa, si inietta una successione di almeno 7 elementi di una serie omologa e si determinano i rispettivi tempi di ritenzione. I tempi di ritenzione grezzi  $t_{r(n_c+1)}$  sono riportati in grafico in funzione di  $t_{r(n_c)}$ , determinano la intercetta a e il coefficiente angolare b della equazione di regressione

$$t_{r(n_c+1)} = a + b t_{r(n_c)}$$

( $n_c$  = numero di atomi di carbonio). Il tempo morto  $t_0$  è rappresentato allora da

$$t_0 = a / (1 - b)$$

*Grafico di taratura*

La fase successiva consiste nella costruzione di un tracciato di correlazione di  $\log k$  contro  $\log P$  per appropriati composti di riferimento. Nella pratica, si effettua la determinazione su un gruppo di 5-10 composti standard di riferimento, il cui  $\log P$  cade nei dintorni dell'intervallo previsto, iniettandoli simultaneamente ed effettuando preferibilmente la determinazione con un registratore integratore collegato al sistema di rivelazione. I logaritmi dei fattori di capacità corrispondenti,  $\log k$ , vengono calcolati e riportati sul tracciato in funzione del  $\log P$  determinato mediante il metodo del dibattimento in pallone. La taratura viene eseguita a intervalli regolari ed almeno una volta al giorno, in modo da tenere conto di possibili variazioni delle prestazioni della colonna.

*Determinazioni del fattore di capacità della sostanza in esame*

La sostanza in esame viene iniettata nella più piccola quantità possibile di fase mobile. Viene determinato il tempo di ritenzione (in doppio) e questo permette il calcolo del fattore di capacità  $k$ . Dal grafico di correlazione dei composti di riferimento, si può interpolare il coefficiente di ripartizione della sostanza in esame. Per coefficienti di ripartizione sia molto bassi che molto elevati è necessario ricorrere alla estrapolazione. In tali casi bisogna porre particolare attenzione ai limiti di validità della retta di regressione.

## 2 DATI

*Metodo del dibattimento in pallone*

L'affidabilità dei valori di  $P$  determinati può essere controllata confrontando le medie delle determinazioni in doppio con la media globale.

## 3 RELAZIONE

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- indicazione precisa della sostanza (identità e impurezze),
- quando i metodi non siano applicabili (per esempio materiale tensioattivo), deve essere fornito un valore calcolato o una stima basata sulle singole solubilità in n-ottanolo e acqua,
- ogni informazione e osservazione significativa per l'interpretazione dei risultati, in particolare per quanto riguarda le impurezze e lo stato fisico della sostanza.

*Per il metodo del dibattito in pallone*

- il risultato dell'eventuale stima preliminare,
- la temperatura di determinazione,
- i dati sui procedimenti analitici impiegati per determinare le concentrazioni,
- il tempo e la velocità di centrifugazione, se quest'ultima è stata applicata,
- le concentrazioni misurate in ambedue le fasi per ciascuna determinazione (ciò significa che dovrà essere riportato un totale di 12 concentrazioni),

- il peso della sostanza in esame, il volume di ciascuna fase impiegata in ciascun recipiente di prova e la quantità totale calcolata della sostanza in esame presente in ciascuna fase dopo equilibrage;
- i valori calcolati per il coefficiente di ripartizione ( $P$ ), e le medie per ciascuna serie di condizioni sperimentali, nonché la media per tutte le determinazioni. Se esiste il sospetto di una dipendenza dalla concentrazione del coefficiente di ripartizione, ciò va menzionato nella relazione;
- la deviazione standard dei singoli valori di  $P$  rispetto alla loro media;
- il valore medio di  $P$  risultante da tutte le determinazioni deve pure essere espresso come logaritmo (base 10);
- il valore teorico calcolato per  $P_{00}$  quando esso è stato determinato o quando il valore misurato è  $> 10^4$ ;
- il pH dell'acqua impiegata e della fase acquosa durante l'esperimento;
- se vengono usati dei tamponi, giustificazione del loro uso al posto dell'acqua, composizione, concentrazione e pH dei tamponi, pH della fase acquosa prima e dopo l'esperimento.

*Per il metodo HPLC:*

- il risultato dell'eventuale stima preliminare;
- sostanze in esame e di riferimento e loro purezza;
- intervallo di temperatura delle determinazioni;
- pH al quale vengono effettuate le determinazioni;
- dettagli relativi alla colonna analitica e di protezione, alla fase mobile e al dispositivo di rivelazione;
- dati di ritenzione e valori di  $\log P$  desunti dalla letteratura per i composti di riferimento usati nella taratura;
- dettagli della curva di regressione risultante ( $\log k$  contro  $\log P$ );
- dati di ritenzione media e valore interpolato di  $\log P$  per il composto in esame;
- descrizione dell'apparecchiatura e delle condizioni operative;
- profili di eluizione;
- quantità delle sostanze in esame e di riferimento introdotte nella colonna;
- tempo morto e metodo secondo il quale questo è stato misurato.

4. BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guideline 107, Decision of the Council C(81) 30 final.
- (2) C. Hansch and A.J. Leo, Substituent Constants for Correlation Analysis in Chemistry and Biology, John Wiley, New York, 1979.
- (3) Log  $P$  and Parameter Database, A tool for the quantitative prediction of bioactivity (C. Hansch, chairman; A.J. Leo, dir.) — Available from Pomona College Medical Chemistry Project, 1982, Pomona College, Claremont, California 91711.
- (4) L. Renberg, G. Sundström and K. Sundh-Nygård, Chemosphere, 1981, vol. 80, 683.
- (5) H. Ellgehausen, C. D'Hondt and R. Fuerer, Pestic. Sci., 1981, vol. 12, 219.
- (6) B. McDuffie, Chemosphere, 1981, vol. 10, 73.
- (7) W.E. Hammers et al., J. Chromatogr., 1982, vol. 247, 1.
- (8) J.E. Haky and A.M. Young, J. Liquid, Chromat., 1984, vol. 7, 675.
- (9) S. Fujisawa and E. Masuhara, J. Biomed. Mat. Res., 1981, vol. 15, 787.
- (10) O. Jubermmann, Verteilen und Extrahieren, in Methoden der Organischen Chemie (Houbenm Weyl), Allgemeine Laboratoriumspraxis (edited by E. Muller), Georg Thieme Verlag, Stuttgart, 1958, Band I/1, 223-339.
- (11) R.F. Rekker and H.M. de Kort, Euro. J. Med. Chem. 1979, vol. 14, 479.
- (12) A. Leo, C. Hansch and D. Elkins, Partition coefficients and their uses. Chem. Rev., 1971, vol. 71, 525.

- (13) R.F. Rekker, The Hydrophobic Fragmental Constant, Elsevier, Amsterdam, 1977
- (14) NF T 20-043 AFNOR (1985). Chemical products for industrial use — Determination of partition coefficient — Flask shaking method
- (15) C.V. Eadsforth and P. Moser, Chemosphere, 1983, vol. 12, 1459
- (16) A. Leo, C. Hansch and D. Elkins, Chem. Rev., 1971, vol. 71, 525
- (17) C. Hansch, A. Leo, S.H. Unger, K.H. Kim, D. Nikaitani and E.J. Lien, J. Med. Chem., 1973, vol. 16, 1207.
- (18) W.B. Neely, D.R. Branson and G.E. Blau, Environ. Sci. Technol., 1974, vol. 8, 1113
- (19) D.S. Brown and E.W. Flagg, J. Environ. Qual., 1981, vol. 10, 382
- (20) J.K. Seydel and K.J. Schaper, Chemische Struktur und biologische Aktivität von Wirkstoffen, Verlag Chemie, Weinheim, New York, 1979
- (21) R. Franke, Theoretical Drug Design Methods, Elsevier, Amsterdam, 1984
- (22) Y.C. Martin, Quantitative Drug Design, Marcel Dekker, New York, Basel, 1978
- (23) N.S. Nirrelees, S.J. Noulton, C.T. Murphy, P.J. Taylor, J. Med. Chem., 1976, vol. 19, 615

### Appendice I

#### Metodi di calcolo/stima

##### INTRODUZIONE

Un'introduzione generale ai metodi di calcolo, dati ed esempi si trova nello Handbook of Chemical Property Estimation Methods (a)

I valori calcolati di  $P_{oa}$  possono essere usati

- per decidere quale dei metodi sperimentati sia appropriato (intervallo del metodo di dibattimento in pallone:  $\log P_{oa}$  da -2 a 4, intervallo del metodo in HPLC  $\log P_{oa}$  da 0 a 6),
- per scegliere le condizioni sperimentali appropriate (per esempio, sostanze di riferimento per i procedimenti HPLC, rapporto in volume n-ottanolo/acqua per il metodo del dibattimento in pallone),
- come verifica interna di laboratorio per possibili errori sperimentali,
- per ottenere una stima di  $P_{oa}$  nei casi in cui i metodi sperimentali non possano essere applicati per ragioni tecniche

##### METODO DI STIMA

Stima preliminare del coefficiente di ripartizione

Il valore del coefficiente di ripartizione può essere stimato mediante l'uso delle solubilità della sostanza in esame nei solventi puri

a tale scopo

$$P_{\text{stimato}} = \frac{C_{\text{n-ottanolo}} \text{ alla saturazione}}{C_{\text{acqua}} \text{ alla saturazione}}$$

##### METODI DI CALCOLO

Principio dei metodi di calcolo

Tutti i metodi di calcolo sono basati sulla frammentazione formale della molecola in sottostrutture adatte per le quali sono noti incrementi di  $\log P_{oa}$  affidabili. Il  $\log P_{oa}$  della molecola intera viene poi calcolato come somma dei valori corrispondenti dei suoi frammenti più la somma di termini di correzione per le interazioni intramolecolari

Sono disponibili elenchi delle costanti di frammentazione e dei termini di correzione (b) (c) (d) (e). Alcuni di questi vengono regolarmente aggiornati (b).

#### Criteri di qualità

In generale, l'affidabilità del metodo di calcolo diminuisce al crescere della complessità del composto in esame. Nel caso di molecole semplici di basso peso molecolare e con uno o due gruppi funzionali, ci si può attendere una deviazione da 0,1 a 0,3 unità di  $\log P_{oa}$  tra i risultati dei metodi di frammentazione e il valore misurato. Nel caso di molecole più complesse, il margine d'errore può essere più grande. Questo dipenderà dalla affidabilità e disponibilità delle costanti dei frammenti, nonché dalla capacità di riconoscere le interazioni intramolecolari (per esempio i legami idrogeno) e dall'uso corretto dei termini di correzione (problema di non facile soluzione utilizzando un elaboratore di calcolo e il programma CLOGP-3) (b). Nel caso di composti che si ionizzano, è importante considerare correttamente la carica e il grado di ionizzazione.

#### Procedure di calcolo

##### Metodo del $\pi$ di Hansch

La costante del sostituito idrofobo originale,  $\pi$ , introdotta da Fujita et al. (f) è definita come:

$$\pi_x = \log P_{oa}(\text{PhX}) - \log P_{oa}(\text{PhH})$$

dove  $P_{oa}(\text{PhX})$  è il coefficiente di ripartizione di un derivato aromatico e  $P_{oa}(\text{PhH})$  quello del composto capostipite

$$\begin{aligned} (\text{p. es. } \pi_{Cl} &= \log P_{oa}(\text{C}_6\text{H}_5\text{Cl}) - \log P_{oa}(\text{C}_6\text{H}_6) \\ &= 2,84 - 2,13 = 0,71) \end{aligned}$$

Secondo la sua definizione, il metodo del  $\pi$  può essere applicato principalmente per la sostituzione aromatica. Valori di  $\pi$  per un gran numero di sostituenti sono stati tabulati in (b) (c) (d). Essi vengono usati per il calcolo di  $\log P_{oa}$  di molecole o sottostrutture aromatiche.

##### Metodo di Rekker

Secondo Rekker (g), il valore di  $\log P_{oa}$  viene calcolato come segue:

$$\log P_{oa} = \sum_i a_i f_i + \sum_j (\text{termini di interazione})$$

dove  $f_i$  rappresenta la costante dei differenti frammenti molecolari e  $a_i$  la frequenza con cui essi si presentano nella molecola in esame. I termini di correzione possono essere espressi come multiplo intero di una costante singola  $C_m$  (la cosiddetta «costante magica»). Le costanti di frammento  $f_i$  e  $C_m$  sono state ricavate da un elenco di 1 054 valori sperimentali di  $P_{oa}$  (825 composti) utilizzando l'analisi di regressione multipla (c) (h). La determinazione dei termini di interazione viene eseguita secondo regole fisse descritte in letteratura (e) (h) (i).

##### Metodo di Hansch-Leo

Secondo Hansch e Leo (c), il valore di  $\log P_{oa}$  si calcola dalla relazione:

$$\log P_{oa} = \sum_i a_i f_i + \sum_j b_j F_j$$

in cui  $f_i$  rappresenta la costante per differenti frammenti molecolari,  $F_j$  il termine di correzione e  $a_i$ ,  $b_j$  le corrispondenti frequenze con cui essi si presentano. Una serie di valori di frammenti costituiti da atomi e gruppi e una serie di termini di correzione  $F_j$  (i cosiddetti «fattori») sono stati determinati per approssimazioni successive derivandoli da valori sperimentali di  $P_{oa}$ . I termini di correzione sono stati ordinati in varie classi (a) (c). È relativamente complicato e lungo tener conto di tutte le regole e dei termini di correzione. Sono stati sviluppati a tale scopo dei pacchetti di programma (b).

*Metodo combinato*

Il calcolo del  $\log P_{oa}$  di molecole complesse può venire migliorato considerevolmente se la molecola viene divisa in strutture più semplici per le quali sono disponibili valori affidabili di  $\log P_{oa}$  ottenuti o da tabelle (b) (c) o da proprie misure. Tali frammenti (p. es. sostanze eterocicliche, antrachinoni, azobenzene) possono poi venire combinati con i valori di  $\pi$  di Hansch o con le costanti di frammento di Rekker o Leo.

*Osservazioni*

- i) I metodi di calcolo possono essere applicati a composti parzialmente o completamente ionizzati solo quando è possibile tener conto dei necessari fattori di correzione.
- ii) Se si può assumere che vi siano dei legami idrogeno intramolecolari, i corrispondenti termini di correzione (approssimativamente da +0,6 a +1,0 unità di  $\log P_{oa}$ ) devono venire aggiunti (a). Indicazioni della presenza di tali legami si possono ottenere da modelli tridimensionali o da dati spettroscopici della molecola.
- iii) Se sono possibili varie forme tautomere, si deve assumere come base di calcolo la forma più probabile.
- iv) È opportuno seguire con attenzione le revisioni degli elenchi delle costanti di frammento.

*Relazione*

Quando si utilizzano metodi di calcolo/stima, la relazione deve, se possibile, includere le seguenti informazioni:

- descrizione della sostanza (miscela, impurezze, e così via);
- indicazione di ogni possibile legame idrogeno intramolecolare, dissociazione, carica e altri effetti insoliti (per esempio tautomeria);
- descrizione del metodo di calcolo;
- identificazione o fornitura della base di dati;
- peculiarità della scelta dei frammenti;
- documentazione completa del calcolo.

*BIBLIOGRAFIA*

- (a) W.J. Lyman, W.F. Reehl and D.H. Rosenblatt (ed.), *Handbook of Chemical Property Estimation Methods*, McGraw-Hill, New York, 1983.
- (b) Pomona College, Medicinal Chemistry Project, Claremont, California 91711, USA, Log P Database and Med. Chem. Software (Program CLOGP-3).
- (c) C. Hansch, A.J. Leo, *Substituent Constants for Correlation Analysis in Chemistry and Biology*, John Wiley, New York, 1979.
- (d) A. Leo, C. Hansch, D. Elkins, *Chem. Rev.*, 1971, vol. 71, 525.
- (e) R.F. Rekker, H.M. de Kort, *Eur. J. Med. Chem. — Chim. Ther.*, 1979, vol. 14, 479.
- (f) T. Fujita, J. Iwasa and C. Hansch, *J. Amer. Chem. Soc.*, 1964, vol. 86, 5175.
- (g) R.F. Rekker, *The Hydrophobic Fragmental Constant*, *Pharmacochemistry Library*, vol. 1, Elsevier, New York, 1977.
- (h) C.V. Eadsforth, P. Moser, *Chemosphere*, 1983, vol. 12, 1459.
- (i) R.A. Scherrer, ACS — American Chemical Society, Washington D.C., 1984, *Symposium Series* 255, p. 225.

## Appendice 2

## Sostanze di riferimento raccomandate per il metodo HPLC

N	Sostanza di riferimento	log P <sub>ow</sub>	pKa
1	2-butanone	0,3	
2	4-acetilpiridina	0,5	
3	anilina	0,9	
4	acetanilide	1,0	
5	alcool benzilico	1,1	
6	p-metossifenolo	1,3	pKa = 10,26
7	acido fenossiacetico	1,4	pKa = 3,12
8	fenolo	1,5	pKa = 9,92
9	2,4-dinitrofenolo	1,5	pKa = 3,96
10	benzonitrile	1,6	
11	fenilacetone	1,6	
12	alcool 4-metilbenzilico	1,6	
13	acetofenone	1,7	
14	2-nitrofenolo	1,8	pKa = 7,17
15	acido 3-nitrobenzoico	1,8	pKa = 3,47
16	4-cloroanilina	1,8	pKa = 4,15
17	nitrobenzene	1,9	
18	alcool cinnamico	1,9	
19	acido benzoico	1,9	pKa = 4,19
20	p-cresolo	1,9	pKa = 10,17
21	acido cinnamico	2,1	pKa = 3,89 cis 4,44 trans
22	anisolo	2,1	
23	metilbenzoato	2,1	
24	benzene	2,1	
25	acido 3-metilbenzoico	2,4	pKa = 4,27
26	4-clorofenolo	2,4	pKa = 9,1
27	tricloroetilene	2,4	
28	atrazina	2,6	
29	etilbenzoato	2,6	
30	2,6-diclorobenzonitrile	2,6	
31	acido 3-clorobenzoico	2,7	pKa = 3,82
32	toluene	2,7	
33	1-naftolo	2,7	pKa = 9,34
34	2,3-dicloroanilina	2,8	
35	clorobenzene	2,8	
36	allilfenil etere	2,9	
37	bromobenzene	3,0	
38	etilbenzene	3,2	
39	benzofenone	3,2	
40	4-fenilfenolo	3,2	pKa = 9,54
41	timolo	3,3	
42	1,4-diclorobenzene	3,4	
43	difenilammina	3,4	pKa = 0,79
44	naftalene	3,6	
45	fenilbenzoato	3,6	
46	isopropilbenzene	3,7	
47	2,4,6-triclorofenolo	3,7	pKa = 6
48	bifenile	4,0	
49	benzilbenzoato	4,0	
50	2,4-dinitro-6-sec. butilfenolo	4,1	
51	1,2,4-triclorobenzene	4,2	
52	acido dodecanoico	4,2	
53	difenil etere	4,2	
54	n-butilbenzene	4,5	
55	fenantrene	4,5	
56	fluorantene	4,7	
57	dibenzile	4,8	
58	2,6-difenilpiridina	4,9	
59	trifenilammina	5,7	
60	DDT	6,2	

Altre sostanze di riferimento di basso P<sub>ow</sub>

1	acido nicotinico	- 0,07
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## A.9. PUNTO D'INFIAMMABILITÀ

## 1 METODO

## 1.1 INTRODUZIONE

Prima di procedere all'esecuzione della prova sarà utile disporre di informazioni preliminari sulla infiammabilità della sostanza. Il metodo è applicabile a sostanze liquide i cui vapori possono infiammarsi mediante sorgenti di accensione. I metodi sperimentali elencati in questo testo sono affidabili solo per gli intervalli del punto di infiammabilità specificati nei singoli metodi.

Quando si sceglie il metodo da usare, bisogna considerare la possibilità di reazioni chimiche tra la sostanza e il porta campioni

## 1.2 DEFINIZIONI E UNITÀ

Il punto di infiammabilità è la temperatura più bassa, corretta alla pressione di 101,325 kPa, alla quale un liquido sviluppa vapori, nelle condizioni definite nel metodo sperimentale, in quantità tali da produrre una miscela vapore/aria infiammabile nel recipiente di prova

unità °C

$$t = T - 273,15$$

(t in °C e T in K)

## 1.3 SOSTANZE DI RIFERIMENTO

Non è necessario utilizzare sostanze di riferimento ogni volta che si esamina una nuova sostanza. Esse servono principalmente per controllare periodicamente la precisione del metodo e per permettere il confronto con risultati ottenuti mediante altri metodi

## 1.4 PRINCIPIO DEL METODO

La sostanza viene posta in un recipiente di prova e riscaldata o raffreddata alla temperatura sperimentale secondo la procedura descritta nei singoli metodi sperimentali. Vengono eseguite delle prove di accensione allo scopo di accertare se il campione si infiamma o non si infiamma alla temperatura di prova

## 1.5 CRITERI DI QUALITÀ

## 1.5.1 Ripetibilità

La ripetibilità varia secondo l'intervallo del punto di infiammabilità e secondo il metodo sperimentale usato, massimo 2 °C

## 1.5.2 Sensibilità

La sensibilità dipende dal metodo sperimentale applicato.

## 1.5.3 Specificità

La specificità di alcuni metodi sperimentali è limitata a particolari intervalli di punto di infiammabilità e dipende dalle caratteristiche delle sostanze (come ad esempio una elevata viscosità)

## 1.6 DESCRIZIONE DEL METODO

## 1.6.1 Preparazioni

Un campione della sostanza in esame viene posto in un apparecchio di prova in conformità a quanto indicato nei punti 1.6.3.1 e/o 1.6.3.2

Per ragioni di sicurezza, si raccomanda di usare un metodo che utilizzi un campione di piccole dimensioni, circa 2 cm<sup>3</sup>, per le sostanze di elevato contenuto energetico o tossiche.

**1.6.2. Condizioni di prova**

L'apparecchio, nei limiti in cui ciò sia in linea con le esigenze di sicurezza, deve essere collocato lontano da correnti d'aria.

**1.6.3. Esecuzione della prova****1.6.3.1. Metodo dell'equilibrio**

Vedi norme ISO 1516, ISO 3680, ISO 1523 e ISO 3679.

**1.6.3.2. Metodo basato sul non equilibrio**

*Apparecchio di Abel:*

Vedi norme BS 2000, parte 170, NF M07-011 e NF T66-009.

*Apparecchio di Abel-Pensky:*

Vedi norme EN 57, DIN 51755 — parte 1 — (per temperature comprese tra 5 °C e 65 °C) e DIN 51755 — parte 2 — (per temperature al di sotto di 5 °C), NF M07-036

*Apparecchio di Tag:*

Vedi norma ASTM D 56.

*Apparecchio di Pensky-Martens:*

Vedi norme ISO 2719, EN 11, DIN 51758, ASTM D 93, BS 2000-34 e NF M 07-019.

*Osservazioni:*

Quando il punto di infiammabilità, determinato mediante un metodo non di equilibrio scelto tra quelli elencati al punto 1.6.3.2, risulta essere pari a  $0 \pm 2$  °C,  $21 \pm 2$  °C, o  $55 \pm 2$  °C, occorre confermarlo con un metodo all'equilibrio, utilizzando la stessa apparecchiatura.

Ai fini della notifica possono applicarsi solo i metodi che forniscono la temperatura del punto di infiammabilità.

Per determinare il punto di infiammabilità di liquidi viscosi (vernici, gomme e prodotti analoghi) contenenti solventi, possono impiegarsi soltanto apparecchiature e metodi di prova adatti alla determinazione del punto di infiammabilità di liquidi viscosi.

Vedi norme ISO 3679, ISO 3680, ISO 1523 e DIN 53213, parte 1.

**2. DATI****3. RELAZIONE**

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- la descrizione precisa della sostanza (identità e impurezze presenti),
- l'indicazione del metodo impiegato e di eventuali deviazioni da esso,
- i risultati e tutte le osservazioni aggiuntive utili ai fini dell'interpretazione dei risultati.

**4. BIBLIOGRAFIA**

Nessuna.



## A.10. INFIAMMABILITÀ (SOLIDI)

## 1. METODO

## 1.1. INTRODUZIONE

Prima di effettuare la prova sarà utile disporre di informazioni preliminari sulle eventuali proprietà esplosive della sostanza.

*La presente prova dovrebbe essere applicata esclusivamente a sostanze in polvere, granulari e pastose*

Evitando di considerare tutte le sostanze capaci di infiammarsi e limitandosi soltanto a quelle che bruciano rapidamente o il cui comportamento alla combustione presenta particolari pericoli di qualsiasi genere, si considerano come facilmente infiammabili soltanto le sostanze la cui velocità di combustione supera un certo valore limite.

Può essere particolarmente pericoloso se l'incandescenza si propaga lungo una polvere metallica a motivo della difficoltà di estinguere l'incendio. Le polveri metalliche sono da considerarsi facilmente infiammabili se sostengono la diffusione dell'incandescenza attraverso la massa entro un tempo specificato.

## 1.2. DEFINIZIONE E UNITÀ

La velocità di combustione è espressa in secondi.

## 1.3. COMPOSTI DI RIFERIMENTO

Non specificati.

## 1.4. PRINCIPIO DEL METODO

La sostanza viene sagomata in una striscia continua o in una miccia di polvere della lunghezza di circa 250 mm e si esegue una prova preliminare orientativa per determinare se, all'accensione mediante una fiamma gassosa, si verifica la propagazione per combustione con fiamma o senza fiamma. Se entro un tempo specificato si verifica la propagazione su 200 mm della massa di campione, allora si esegue un programma completo di prova per determinare la velocità di combustione.

## 1.5. CRITERI DI QUALITÀ

Non definiti.

## 1.6. DESCRIZIONE DEL METODO

## 1.6.1. Prova preliminare orientativa

La sostanza viene sagomata in una striscia continua o in una miccia di polvere per una lunghezza di circa 250 mm per 20 mm di larghezza per 10 mm di altezza su una lastra di base non combustibile, non porosa e di bassa conducibilità termica. Ad una estremità della miccia in polvere si applica una fiamma di alta temperatura generata da un bruciatore a gas (diametro minimo 5 mm) fino a che la polvere si accende oppure per un massimo di 2 minuti (5 minuti per polveri di metalli o leghe metalliche). Ciò che deve essere osservato è se la combustione si propaga per 200 mm della miccia entro un tempo di prova di 4 minuti (o 40 minuti per polveri metalliche). Se la sostanza non si accende e non propaga la combustione bruciando con fiamma o senza fiamma su 200 mm della miccia di polvere entro 4 minuti (o 40 minuti) nel periodo di prova, allora la sostanza non è da considerarsi come facilmente infiammabile e non sono richieste ulteriori prove. Se la sostanza propaga la combustione per un tratto di 200 mm della miccia di polvere in meno di 4 minuti o in meno di 40 minuti per le polveri metalliche, si deve eseguire il procedimento descritto nel seguito (punto 1.6.2. e successivi).

## 1.6.2. Prova della velocità di combustione

## 1.6.2.1 Preparazione

Le sostanze in polvere o granulari vengono introdotte in modo sfuso in uno stampo della lunghezza di 250 mm con sezione trasversale triangolare ed altezza interna di 10 mm e larghezza di 20 mm. Su ambedue i lati dello stampo, in senso longitudinale, sono montate due lastre di metallo, con la funzione di limiti laterali; esse devono sporgere di 2 mm oltre il bordo superiore della sezione triangolare (vedi figura). Lo stampo viene poi lasciato cadere per tre volte su una superficie solida, dall'altezza di 2 cm. Se necessario, lo stampo viene nuovamente riempito. I limiti laterali vengono poi rimossi e la sostanza in eccesso viene asportata. Sopra allo stampo si pone una piastra non combustibile, non porosa e con una bassa conducibilità termica che funge da piastra di base, si rovescia l'apparecchio e si rimuove lo stampo.

Le sostanze pastose sono sparse su una piastra di base non combustibile, non porosa e di bassa conducibilità termica in forma di un cordone della lunghezza di 250 mm con una sezione trasversale di circa 1 cm<sup>2</sup>.

## 1.6.2.2. Condizioni sperimentali

Nel caso di una sostanza sensibile all'umidità, la prova deve essere effettuata con la massima rapidità possibile subito dopo aver tolto la sostanza stessa dal recipiente.

## 1.6.2.3 Esecuzione della prova

Disporre il campione nella corrente di una cappa per l'aspirazione dei fumi.

La velocità dell'aria deve essere sufficiente per impedire ai fumi di sfuggire verso il laboratorio e non deve venire modificata durante la prova. L'apparecchio deve essere schermato dalla corrente d'aria.

Per accendere l'ammasso ad una estremità, si utilizza una fiamma calda di un bruciatore a gas (diametro minimo 5 mm). Quando l'ammasso è bruciato per un tratto di 80 mm, si misura la velocità di combustione sui successivi 100 mm. L'esperimento viene eseguito sei volte usando ogni volta una piastra pulita e fredda, salvo che si osservi prima un risultato positivo.

## 2. DATI

Il tempo di combustione risultante dalla prova preliminare orientativa (1.6.1) e il minimo tempo di combustione su un massimo di sei prove (1.6.2.3) sono i dati utili ai fini della valutazione.

## 3. RELAZIONE

## 3.1. RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- l'indicazione esatta della sostanza (identificazione e impurezze);
- una descrizione della sostanza esaminata e del suo stato fisico, incluso il contenuto di umidità;
- i risultati della prova preliminare orientativa e della prova della velocità di combustione, se eseguita;
- tutte le osservazioni aggiuntive significative ai fini dell'interpretazione dei risultati.

## 3.2. INTERPRETAZIONE DEI RISULTATI

Le sostanze in polvere, granulari o pastose sono da considerarsi facilmente infiammabili se il tempo di combustione in una qualunque delle prove eseguite secondo la procedura sperimentale descritta al punto 1.6.2. è minore di 45 secondi. Le polveri di metalli o leghe metalliche sono considerate facilmente infiammabili quando sono suscettibili di accensione e la fiamma o la zona di reazione si propaga sull'intero campione in 10 minuti o meno.

## 4. BIBLIOGRAFIA

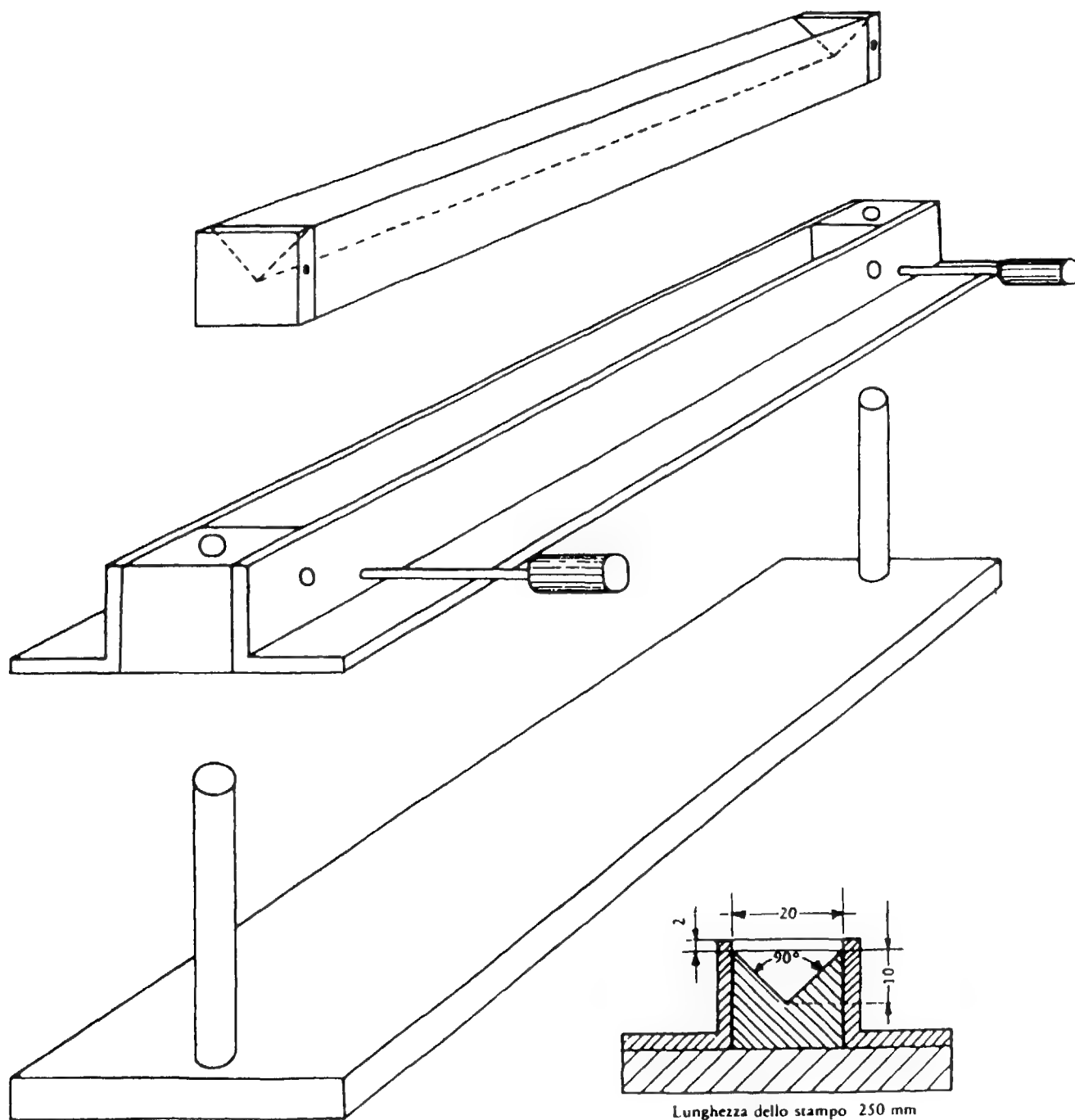
- (1) NF T 20-042 (SEPT 85). Chemical products for industrial use. Determination of the flammability of solids

## Appendice

## Figura

Stampo e accessori per la preparazione del campione

(Tutte le dimensioni sono espresse in mm)



## A.11. INFIAMMABILITÀ (GAS)

## 1 METODO

## 1.1 INTRODUZIONE

Questo metodo permette di determinare se gas miscelati con aria a temperatura ambiente (circa 20 °C) e pressione atmosferica sono infiammabili e, in tale caso, in quale intervallo di concentrazioni. Miscele a concentrazioni crescenti del gas in esame con l'aria vengono esposte a una scintilla elettrica e si osserva se ha luogo l'accensione.

## 1.2 DEFINIZIONE E UNITÀ

L'intervallo d'infiammabilità è l'intervallo di concentrazione compreso fra il limite minimo e il limite massimo di esplosione. I limiti minimo e massimo di esplosione sono quei limiti di concentrazione del gas infiammabile in miscela con l'aria ai quali non si verifica la propagazione della fiamma.

## 1.3. SOSTANZE DI RIFERIMENTO

Non specificate

## 1.4. PRINCIPIO DEL METODO

La concentrazione del gas nell'aria viene aumentata gradualmente e ad ogni livello di concentrazione la miscela viene esposta ad una scintilla elettrica.

## 1.5. CRITERI DI QUALITÀ

Non stabiliti

## 1.6. DESCRIZIONE DEL METODO

## 1.6.1 Apparecchiatura

Il recipiente di prova è costituito da un cilindro verticale di vetro con un diametro interno di almeno 50 mm ed una altezza di 300 mm. Gli elettrodi di accensione, separati da una distanza di 3-5 mm, sono collocati 60 mm al di sopra del fondo del cilindro. Il cilindro è provvisto di un'apertura per lo sfogo della pressione. L'apparecchio deve essere schermato in modo da limitare gli eventuali danni dovuti ad esplosione.

Come fonte di accensione si impiega una scintilla ad induzione permanente della durata di 0,5 sec., generata da un trasformatore ad alto voltaggio con una tensione di uscita compresa fra 10 e 15 kV (potenza massima di entrata: 300 W). Un esempio di un apparecchio adatto è descritto nel riferimento bibliografico (2).

## 1.6.2. Condizioni sperimentali

La prova deve essere eseguita a temperatura ambiente (circa 20 °C).

## 1.6.3. Esecuzione della prova

Usando pompe dosatrici, si introduce nel cilindro di vetro una miscela gas — aria di concentrazione nota. Si fa passare una scintilla attraverso la miscela e si osserva se si stacca o no dalla fonte di accensione una fiamma che si propaga indipendentemente. La concentrazione del gas viene variata per incrementi dell'1 % in volume fino a quando si verifica l'accensione sopra descritta.

Se la struttura chimica del gas indica che esso non dovrebbe essere infiammabile e si può calcolare la composizione della miscela stechiometrica con aria, si effettua allora la prova solo su miscele nell'intervallo dal 10 % al di sotto della composizione stechiometrica al 10 % al di sopra di questa composizione in incrementi dell'1 %.

## 2. DATI

La propagazione della fiamma è l'unico fenomeno significativo per la determinazione di questa proprietà

## 3. RELAZIONE

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- la descrizione esatta della sostanza (identità e impurezze presenti),
- la descrizione dell'apparecchiatura utilizzata con l'indicazione delle dimensioni,
- la temperatura alla quale la prova è stata eseguita,
- le diverse concentrazioni impiegate e i risultati ottenuti,
- il risultato della prova: gas non infiammabile o gas facilmente infiammabile,
- se si conclude che il gas non è infiammabile, si deve allora dichiarare l'intervallo di concentrazioni nel quale esso è stato provato in incrementi dell'1 %;
- tutte le informazioni e osservazioni significative per l'interpretazione dei risultati

## 4. BIBLIOGRAFIA

- (1) NF T 20-041 (SEPT 85). Chemical products for industrial use. Determination of the flammability of gases.
- (2) W.Berthold, D.Conrad, T.Grewer, H.Grosse-Wortmann, T.Redeker und H.Schacke. «Entwicklung einer Standard-Apparatur zur Messung von Explosionsgrenzen». Chem.-Ing.-Tech. 1984, vol. 56, 2, 126-127.

## A.12. INFIAMMABILITÀ (Contatto con l'acqua)

## 1 METODO

## 1.1. INTRODUZIONE

Questo metodo sperimentale può essere usato per determinare se la reazione di una sostanza con acqua o aria umida porta allo sviluppo di quantità pericolose di gas che possono essere facilmente infiammabili.

Il metodo è applicabile alle sostanze solide e liquide. Questo metodo non è applicabile a sostanze che si infiammano spontaneamente a contatto con l'aria.

## 1.2. DEFINIZIONI E UNITÀ

Facilmente infiammabili: sostanze che, a contatto con l'acqua o con l'aria umida, sviluppano gas facilmente infiammabili in quantità pericolose ad una velocità minima di 1 litro/kg per ora.

## 1.3. PRINCIPIO DEL METODO

La sostanza viene saggiata secondo il procedimento per gradi descritto nel seguito; se ad uno qualsiasi dei livelli si verifica l'accensione, non è necessario proseguire nella prova. Se è noto che la sostanza non reagisce violentemente con l'acqua, procedere allora al livello 4 (1.3.4).

## 1.3.1. Livello 1

La sostanza in esame viene versata in un recipiente contenente acqua distillata a 20 °C e si osserva se il gas sviluppato si infiamma o meno.

## 1.3.2. Livello 2

La sostanza in esame viene posta su un foglio di carta da filtro galleggiante sulla superficie di un recipiente contenente acqua distillata a 20 °C e si osserva se il gas sviluppato si infiamma o meno. La carta da filtro ha semplicemente la funzione di evitare la dispersione della sostanza in acqua, aumentando così le possibilità di accensione.

## 1.3.3. Livello 3

La sostanza in esame viene disposta in forma approssimativamente cilindrica di circa 2 cm di altezza e 3 cm di diametro. Si aggiungono alcune gocce di acqua e si osserva se il gas sviluppato si infiamma.

## 1.3.4. Livello 4

La sostanza in esame viene mescolata con acqua distillata a 20 °C e si misura la velocità di sviluppo del gas per un periodo di 7 ore ad intervalli di un'ora. Se la velocità di formazione del gas non è costante, o è ancora in aumento dopo 7 ore, si deve prolungare il tempo di misurazione fino ad un massimo di 5 giorni. La prova può essere sospesa in qualsiasi momento se la velocità di sviluppo del gas supera 1 l/kg per ora.

## 1.4. SOSTANZA DI RIFERIMENTO

Non specificata.

## 1.5. CRITERI DI QUALITÀ

Non stabiliti

## 1.6. DESCRIZIONE DEI METODI

## 1.6.1. Livello 1

## 1.6.1.1. Condizioni di prova

La prova va eseguita a temperatura ambiente (circa 20 °C).

## 1.6.1.2. Esecuzione della prova

Una piccola quantità (2 mm circa di diametro) della sostanza da esaminare viene posta in un recipiente contenente acqua distillata. Si deve osservare: (i) se si ha sviluppo di gas; (ii) se si verifica l'accensione del gas. Se si verifica l'accensione del gas, non sono necessarie ulteriori prove, poiché la sostanza deve essere considerata pericolosa.

## 1.6.2. Livello 2

## 1.6.2.1. Apparecchiatura

Un foglio di carta da filtro viene fatto galleggiare sulla superficie di acqua distillata contenuta in un qualsiasi recipiente idoneo, per esempio una capsula da evaporazione del diametro di 100 mm.

## 1.6.2.2. Condizioni di prova

La prova va eseguita a temperatura ambiente (circa 20 °C).

## 1.6.2.3. Esecuzione della prova

Una piccola quantità della sostanza in esame (2 mm circa di diametro) viene posta al centro del foglio di carta da filtro. Si deve osservare: (i) se si ha sviluppo di gas; (ii) se si verifica l'accensione del gas. Se si verifica l'accensione del gas, non sono necessarie ulteriori prove, poiché la sostanza deve essere considerata pericolosa.

## 1.6.3. Livello 3

## 1.6.3.1. Condizioni di prova

La prova deve essere eseguita a temperatura ambiente.

## 1.6.3.2. Esecuzione della prova

La sostanza da esaminare viene disposta in forma approssimativamente cilindrica di circa 2 cm d'altezza e 3 cm di diametro, con una leggera concavità sulla cima. Si aggiungono alcune gocce di acqua e si osserva: (i) se si ha sviluppo di gas; (ii) se si verifica l'accensione del gas. Se si verifica l'accensione del gas, non sono necessarie ulteriori prove, poiché la sostanza deve essere considerata pericolosa.

## 1.6.4. Livello 4

## 1.6.4.1. Apparecchiatura

L'apparecchiatura viene montata come mostrato in figura.

## 1.6.4.2. Condizioni di prova

Controllare il contenitore della sostanza da esaminare per accertare l'eventuale presenza di polveri al di sotto di 500  $\mu\text{m}$  (dimensioni delle particelle). Se il contenuto in polvere supera l'1% (p/p) del totale, o se il campione è friabile, tutta la sostanza deve essere ridotta in polvere prima della prova, per tener conto della riduzione di formato delle particelle durante l'immagazzinamento e la manipolazione; in caso contrario, la sostanza deve essere saggiata così come ricevuta. La prova deve essere eseguita a temperatura ambiente (circa 20 °C) e a pressione atmosferica.

## 1 6 4 3 Esecuzione della prova

Si introducono da 10 a 20 ml d'acqua nel contagocce dell'apparecchiatura e 10 g di sostanza nella beuta. Il volume del gas sviluppato può essere misurato mediante qualsiasi mezzo opportuno. L'imbuto del contagocce viene aperto per immergere l'acqua nella beuta e si avvia un cronometro. Lo sviluppo del gas viene misurato ogni ora per un periodo di 7 ore. Se durante questo periodo lo sviluppo del gas è irregolare o se, al termine di questo periodo, la velocità di sviluppo del gas è in aumento, le misure devono essere continuate fino a 5 giorni. Se in qualunque momento durante la misura la velocità di sviluppo del gas è superiore a 1 l/kg per ora, la prova può essere interrotta. La prova va eseguita in triplo.

Se l'identità chimica del gas è sconosciuta, il gas deve essere analizzato. Quando il gas contiene componenti facilmente infiammabili e non si sa se l'intera miscela sia facilmente infiammabile, si deve preparare e saggiare secondo il metodo A.11 una miscela avente la stessa composizione.

## 2 DATI

La sostanza viene considerata pericolosa se:

- a qualsiasi livello della procedura sperimentale si verifica l'accensione spontanea;  
o
- avviene uno sviluppo di gas infiammabile ad una velocità maggiore di 1 l/kg della sostanza per ora.

## 3 RELAZIONE

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- l'indicazione precisa della sostanza (identificazione e impurezze);
- dettagli dell'eventuale preparazione iniziale della sostanza in esame;
- i risultati delle prove (livelli 1, 2, 3 e 4);
- l'identità chimica del gas sviluppato;
- la velocità di sviluppo del gas se viene eseguito il livello 4 (1.6.4);
- ogni ulteriore osservazione significativa ai fini dell'interpretazione dei risultati.

## 4 BIBLIOGRAFIA

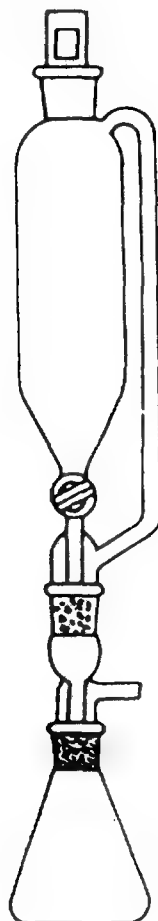
- (1) Recommendations on the Transport of Dangerous Goods, test and criteria, 1990, United Nations, New York.
- (2) NF T 20-040 (SEPT 85). Chemical products for industrial use. Determination of the flammability of gases formed by the hydrolysis of solid and liquid products.



## Appendice

## Figura

## Apparecchiatura



## A.13. PROPRIETÀ PIROFORICHE DI SOLIDI E LIQUIDI

## 1 METODO

## 1.1 INTRODUZIONE

La procedura sperimentale può essere applicata a sostanze solide o liquide che, in piccole quantità, si accendano spontaneamente poco tempo dopo essere venute in contatto con l'aria a temperatura ambiente (circa 20 °C)

Questo metodo di prova non considera le sostanze che devono essere esposte all'aria per ore o giorni a temperatura ambiente o a temperature elevate prima che si verifichi l'accensione

## 1.2 DEFINIZIONI E UNITÀ

Si considera che una sostanza presenti proprietà piroforiche se si accende o carbonizza nelle condizioni descritte in 1.6

Può anche essere necessario controllare l'autoinfiammabilità dei liquidi usando il metodo A.15 (Temperatura di autoaccensione liquidi e gas)

## 1.3 SOSTANZE DI RIFERIMENTO

Non specificata

## 1.4 PRINCIPIO DEL METODO

La sostanza solida o liquida viene aggiunta ad un veicolo inerte e portata in contatto con aria a temperatura ambiente per un periodo di 5 minuti. Se le sostanze liquide non si accendono, esse vengono assorbite su carta da filtro ed esposte all'aria a temperatura ambiente (circa 20 °C) per 5 minuti. Se un solido o un liquido si infiammano, o se un liquido provoca l'accensione o la carbonizzazione della carta da filtro, la sostanza è considerata piroforica

## 1.5 CRITERIO DI QUALITÀ

Ripetibilità per motivi di sicurezza, un singolo risultato positivo è sufficiente perché la sostanza sia considerata piroforica

## 1.6 DESCRIZIONE DEL METODO DI PROVA

## 1.6.1 Apparecchiatura

Una capsula di porcellana del diametro di circa 10 cm viene riempita con farina di diatomee per un'altezza di circa 5 mm a temperatura ambiente (circa 20 °C)

*Nota*

La farina di diatomee, o qualsiasi altra sostanza inerte paragonabile facilmente reperibile, sarà considerata rappresentativa di un suolo su cui può riversarsi, in caso di incidente, la sostanza in esame

Per l'analisi di liquidi che non si accendono a contatto con l'aria quando siano in contatto con un veicolo inerte, è necessaria carta da filtro asciutta

**1.6.2. Esecuzione della prova****a) Solidi in polvere**

Da 1 a 2 cm<sup>3</sup> della sostanza in polvere da esaminare vengono versati da un'altezza di circa 1 m su una superficie non combustibile e si osserva se la sostanza si infiamma durante la caduta o entro 5 minuti dopo la caduta.

La prova viene eseguita fino a quando si verifica l'accensione, per un massimo di 6 volte.

**b) Liquidi**

Circa 5 cm<sup>3</sup> del liquido in esame vengono versati nella capsula di porcellana preparata e si osserva se la sostanza si infiamma entro 5 minuti.

Se nelle 6 prove non si verifica accensione, eseguire le prove seguenti:

un campione da 0,5 ml viene applicato mediante siringa su una carta da filtro dentellata e si osserva se avviene l'accensione o la carbonizzazione della carta da filtro entro 5 minuti dall'aggiunta del liquido. La prova viene eseguita fino a quando si verifica l'accensione o la carbonizzazione, per un massimo di tre volte.

**2. DATI****2.1. TRATTAMENTO DEI RISULTATI**

La prova può essere interrotta non appena si verifici un risultato positivo in una qualunque delle prove.

**2.2. VALUTAZIONE**

Se la sostanza si accende entro 5 minuti da quando viene aggiunta ad un veicolo inerte ed esposta all'aria, oppure se una sostanza liquida carbonizza o provoca l'accensione di una carta da filtro entro 5 minuti da quando è stata aggiunta ed esposta all'aria, tale sostanza viene considerata piroforica.

**3. RELAZIONE**

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- l'indicazione precisa della sostanza (identificazione e impurezze);
- i risultati delle prove;
- ogni ulteriore osservazione significativa ai fini dell'interpretazione dei risultati.

**4. BIBLIOGRAFIA**

- (1) NF T 20-039 (SEPT 85). Chemical products for industrial use. Determination of the spontaneous flammability of solids and liquids.
- (2) Recommendations on the Transport of Dangerous Goods, Test and criteria, 1990, United Nations, New York.

## A.14. PROPRIETÀ ESPLOSIVE

## 1. METODO

## 1.1 INTRODUZIONE

Il metodo fornisce uno schema di prove per determinare se una sostanza solida o pastosa presenti un pericolo di esplosione quando viene sottoposta all'effetto di una fiamma (sensibilità termica) o ad urti o sfregamenti (sensibilità agli stimoli meccanici) e se una sostanza liquida presenti un pericolo di esplosione quando viene sottoposta all'effetto di una fiamma o di un urto.

Il metodo comprende tre parti:

- a) una prova di sensibilità termica (1);
- b) una prova di sensibilità meccanica relativa agli urti (1);
- c) una prova di sensibilità meccanica relativa allo sfregamento (1).

Il metodo fornisce dei dati per valutare la probabilità che certe sollecitazioni comuni possano dar luogo ad una esplosione. Il metodo non è previsto per stabilire se una sostanza sia in grado di esplodere in qualsiasi condizione.

Il metodo è appropriato per determinare se una sostanza presenti un pericolo di esplosione (sensibilità termica e meccanica) nelle particolari condizioni specificate nella direttiva. Questo metodo è basato su un certo numero di tipi di apparecchi ampiamente usati a livello internazionale (1) e che danno normalmente dei risultati significativi. Si riconosce che il metodo non è definitivo. Apparecchi alternativi a quelli specificati possono essere usati purché siano internazionalmente riconosciuti e i risultati possano adeguatamente venire correlati con quelli ricavabili dall'apparecchio specificato.

Non è necessario eseguire le prove quando le informazioni termodinamiche disponibili (per esempio il calore di formazione, calore di decomposizione) e/o l'assenza di certi gruppi reattivi (2) nella formula di struttura permettano di stabilire al di là di ogni ragionevole dubbio che la sostanza non è soggetta a rapida decomposizione con sviluppo di gas o liberazione di calore (cioè che il materiale non presenta alcun rischio di esplosione). Per i liquidi non è richiesto un saggio di sensibilità allo sfregamento.

## 1.2 DEFINIZIONI E UNITÀ

Esplosivi:

Sostanze che possono esplodere sotto l'effetto di una fiamma o che sono sensibili agli urti o all'attrito nell'apparecchiatura specificata (o che presentano una sensibilità meccanica maggiore dello 1,3-dinitrobenzene in un apparecchio alternativo).

## 1.3. SOSTANZE DI RIFERIMENTO

1,3-dinitrobenzene tecnico cristallino passante un setaccio da 0,5 mm per il metodo dello sfregamento e dell'urto.

Peridro-1,3,5-trinitro-1,3,5-triazina (RDX, esogeno, ciclonite — CAS 121-82-4), ricristallizzata da cicloesano-ne acquoso, setacciata a umido attraverso un setaccio da 250 µm e trattenuta su un setaccio da 150 µm, essiccata a  $103 \pm 2$  °C (per 4 ore) per la seconda serie di prove di sfregamento e urto.

## 1.4 PRINCIPIO DEL METODO

Per stabilire le condizioni di sicurezza per l'esecuzione delle tre prove di sensibilità sono necessarie delle prove preliminari.

## 1 4 1 Prove di sicurezza di manipolazione (3)

Per ragioni di sicurezza, prima di eseguire le prove principali campioni molto piccoli (circa 10 mg) della sostanza vengono sottoposti a riscaldamento senza restrizioni fisiche in una fiamma gassosa, ad urti in qualunque tipo di apparecchio adatto e allo sfregamento con l'impiego di un mazzuolo contro un incudine o qualsiasi altro tipo di macchina che produca attrito. Obiettivo della prova è di stabilire se la sostanza sia sensibile ed esplosiva in misura tale che le prove di sensibilità prescritte, in particolare quella della sensibilità termica, debbano essere eseguite con precauzioni particolari per evitare danni all'operatore.

## 1.4.2 Sensibilità termica

Il metodo prevede di riscaldare la sostanza in un tubo d'acciaio chiuso con piastre forate di differente diametro del foro per determinare se la sostanza tenda ad esplodere nelle condizioni di intensa sollecitazione termica e delimitazione spaziale definita.

## 1 4 3 Sensibilità meccanica (urti)

Il metodo prevede di sottoporre la sostanza all'urto di una massa specificata lasciata cadere da un'altezza specificata.

## 1 4 4 Sensibilità meccanica (sfregamento)

Il metodo prevede di sottoporre le sostanze solide o pastose ad attrito tra superfici standard in condizioni specificate di carico e movimento relativo.

## 1.5. CRITERI DI QUALITÀ

Non stabiliti

## 1 6 DESCRIZIONE DEL METODO

## 1 6 1 Sensibilità termica (effetto di una fiamma)

## 1 6 1 1 Apparecchiatura

L'apparecchiatura è costituita da un tubo d'acciaio non riutilizzabile con il suo dispositivo di chiusura riutilizzabile (figura 1), installato in un dispositivo di riscaldamento e protezione. Ciascun tubo è ottenuto per imbuitura da una lamiera d'acciaio (vedi appendice) e presenta un diametro interno di 24 mm, una lunghezza di 75 mm e uno spessore delle pareti di 0,5 mm. I tubi sono flangiati all'estremità aperta per permetterne la chiusura mediante la piastra forata. Questa è costituita da una piastra forata resistente alle alte pressioni, dotata di un foro centrale, saldamente fissata ad un tubo con un giunto a vite a due parti (dado e collare filettato). Il dado e il collare filettato sono in acciaio al cromo-manganese (vedi appendice) che non genera scintille fino a 800 °C. Le piastre forate hanno uno spessore di 6 mm, sono in acciaio resistente al calore (vedi appendice) e sono disponibili con aperture di vario diametro.

## 1 6 1 2 Condizioni di prova

Normalmente la sostanza viene controllata così come fornita, benché in certi casi, per esempio se è pressata, colata o altrimenti condensata, possa essere necessario triturlarla prima di esaminarla.

Per i solidi, la massa di materiale da usarsi in ciascuna prova viene determinata secondo un procedimento a secco in due stadi. Un tubo tarato viene riempito con 9 cm<sup>3</sup> di sostanza e la sostanza viene compattata con una forza di 80 N applicata alla sezione trasversale totale del tubo. Per ragioni di sicurezza o nei casi in cui la forma

fisica del campione possa essere modificata per compressione, si possono usare differenti procedure di riempimento; per esempio, se la sostanza è molto sensibile all'attrito la pigiatura non è appropriata. Se il materiale è comprimibile, se ne aggiunge dell'altro e lo si pigia fino a che il tubo è riempito fino a 55 mm dal bordo. Si determina la massa totale usata per riempire il tubo fino al livello di 55 mm e se ne aggiungono due ulteriori aliquote, pigiata ciascuna con una forza di 80 N. Poi, secondo le necessità, si aggiunge ulteriore materiale pigiandolo oppure lo si toglie per lasciare il tubo riempito fino a 15 mm dal bordo. Si esegue una seconda prova a secco partendo con una quantità pigiata pari a un terzo della massa totale trovata nella prima prova a secco. Si aggiungono altre due di queste aliquote pigiandole a 80 N e il livello della sostanza nel tubo viene regolato a 15 mm dal bordo mediante l'aggiunta o la sottrazione di materiale secondo le necessità. La quantità di solido usata in ciascuna prova è quella determinata nella seconda prova a secco; il riempimento viene eseguito in tre quantità uguali, compresse ciascuna a 9 cm<sup>3</sup> con la forza necessaria, qualunque essa sia. (Ciò può essere facilitato mediante l'uso di anelli distanziatori.)

I liquidi e i gel sono caricati nel tubo fino ad un'altezza di 60 mm ponendo particolare attenzione con i gel per impedire la formazione di vuoti. Il collare filettato viene fatto scivolare sul tubo dal basso, si inserisce l'appropriato piatto forato e si serra il dado dopo aver applicato un po' di lubrificante a base di disolfuro di molibdeno. È essenziale controllare che non vi sia sostanza intrappolata tra la flangia e la piastra né nella filettatura.

Per il riscaldamento si utilizza propano prelevato da una bombola industriale dotata di regolatore di pressione (60-70 mbar), passandolo attraverso un manometro e distribuendolo in modo uniforme (come indicato dall'osservazione visiva delle fiamme uscenti dai bruciatori) a 4 bruciatori mediante un collettore. I bruciatori sono disposti intorno alla camera di prova come mostrato in figura 1. I quattro bruciatori hanno un consumo totale di circa 3,2 litri di propano al minuto. È possibile usare gas combustibili e bruciatori alternativi, ma la velocità di riscaldamento deve essere quella specificata in figura 3. Per tutte le apparecchiature, si deve controllare periodicamente la velocità di riscaldamento con l'uso di tubi riempiti di dibutilftalato, come indicato in figura 3.

#### 1.6.1.3 *Esecuzione delle prove*

Ciascuna prova viene eseguita fino a quando il tubo si frammenta o è stato riscaldato per 5 minuti. Una prova che dia come risultato la frammentazione del tubo in tre o più pezzi, che in alcuni casi possono essere collegati uno all'altro da sottili strisce di metallo come è illustrato in figura 2, viene valutata come esplosione. Se una prova dà come risultato un minor numero di frammenti o nessuna frammentazione, si considera che non abbia dato luogo ad esplosione.

Si esegue inizialmente una serie di tre prove con una piastra con orificio da 6,0 mm di diametro e, se non si ottengono esplosioni, si esegue una seconda serie di tre prove con una piastra avente un orificio del diametro di 2,0 mm. Se avviene un'esplosione durante una delle serie di prova non sono necessarie prove ulteriori.

#### 1.6.1.4 *Valutazione*

Il risultato della prova è considerato positivo se si verifica un'esplosione in una delle serie di prove sopra descritte.

#### 1.6.2. *Sensibilità meccanica (urti)*

##### 1.6.2.1. *Apparecchiatura (figura 4)*

Le parti essenziali di una tipica apparecchiatura a martello cadente sono un blocco d'acciaio fuso con base, incudine, colonna, guide, pesi cadenti, dispositivo di rilascio e porta campione. L'incudine d'acciaio da 100 mm di diametro per 70 mm di altezza è avvitata su un blocco d'acciaio da 230 mm di lunghezza per 250 mm di larghezza per 200 mm d'altezza con una base fusa da 450 mm di lunghezza per 450 mm di larghezza per 60 mm d'altezza. Sul retro del blocco d'acciaio è avvitato un sostegno nel quale è fissata una colonna in tubo d'acciaio trafilato senza saldatura. Quattro viti ancorano l'apparecchio ad un blocco massiccio di cemento da 60 x 60 x 60 cm in modo che le guide siano assolutamente verticali e il peso cadente possa cadere liberamente. Per l'uso sono disponibili pesi di acciaio massiccio da 5 e 10 kg. La testa di impatto dei pesi è di acciaio temprato da 60 a 63 HRC e presenta un diametro minimo di 25 mm.

Il campione da esaminare viene posto in un dispositivo per prove d'urto costituito da due cilindri massicci d'acciaio coassiali e sovrapposti in un cilindro cavo d'acciaio che funge da guida. I cilindri d'acciaio massiccio devono avere un diametro di 10 ( $-0,003$ ,  $-0,005$ ) mm e un'altezza di 10 mm e superfici levigate, spigoli arrotondati (raggio di curvatura 0,5 mm) e una durezza HRC da 58 a 65. Il cilindro cavo deve avere un diametro esterno di 16 mm, un foro levigato di 10 ( $+0,005$ ,  $+0,010$ ) mm e un'altezza di 13 mm. Il dispositivo per le prove d'urto è montato su un'incudine intermedia d'acciaio (diametro 26 mm, altezza 26 mm) e centrato mediante un anello con fori di sfogo dei fumi.

#### 1.6.2.2. Condizioni sperimentali

Il volume del campione dovrebbe essere di 40 mm<sup>3</sup>, o un volume adatto per eventuali apparecchi alternativi. Le sostanze solide dovrebbero essere provate allo stato secco e preparate come segue:

- le sostanze in polvere sono setacciate (maglie da 0,5 mm); per le prove si usa tutto il materiale passato attraverso il setaccio;
- le sostanze pressate, fuse o altrimenti condensate vengono rotte in pezzettini e setacciate. Per le prove si usa la frazione di setacciatura compresa tra 0,5 e 1 mm di diametro, e questa deve essere rappresentativa della sostanza originale.

Le sostanze che si presentano normalmente sotto forma di pasta dovrebbero essere saggiate per quanto possibile allo stato secco o comunque dopo aver rimosso la maggior quantità possibile di diluente.

#### 1.6.2.3. Esecuzione delle prove

Si esegue una serie di 6 prove lasciando cadere la massa di 10 kg da 0,40 m (40 J). Se durante le sei prove a 40 J si ottiene un'esplosione, si deve eseguire una serie ulteriore di 6 prove lasciando cadere una massa di 5 kg da 0,15 m (7,5 J). In altri apparecchi, il campione viene confrontato con la sostanza di riferimento scelta usando una procedura di provata validità (per esempio tecnica «su e giù», ecc.).

#### 1.6.2.4. Valutazione

Il risultato della prova viene considerato positivo se si verifica un'esplosione (l'accensione violenta e/o un colpo sono equivalenti a un'esplosione) almeno una volta in qualsiasi delle prove con l'apparecchio per prove d'urto specificato oppure se il campione è più sensibile dello 1,3-dinitrobenzene o della RDX in una prova d'urto alternativa.

#### 1.6.3. Sensibilità meccanica (attrito)

##### 1.6.3.1. Apparecchiatura (figura 5)

L'apparecchiatura per le prove d'attrito è costituita da una piastra di base d'acciaio fuso sulla quale è montato il dispositivo di sfregamento, costituito da una barra fissa di porcellana con una piastra mobile di porcellana. La piastra di porcellana è tenuta in una slitta che corre su due guide. La slitta è collegata ad un motore elettrico mediante un'asta di collegamento, un eccentrico e una trasmissione adatta perché la piastra di porcellana venga spostata, una sola volta, avanti e indietro sotto la barra di porcellana per un tratto di 10 mm. La barra di porcellana può essere sottoposta ad un carico per esempio di 120 o 360 newton.

Le piastre di porcellana piatte sono fatte di porcellana tecnica bianca (ruvidità da 9 a 32  $\mu$ m) e hanno le seguenti dimensioni: 25 mm di lunghezza  $\times$  25 mm di larghezza  $\times$  5 mm di altezza. La barra cilindrica di porcellana è fatta anch'essa di porcellana tecnica ed ha una lunghezza di 15 mm, un diametro di 10 mm e superfici terminali sferiche irruvidite con un raggio di curvatura di 10 mm.

##### 1.6.3.2. Condizioni sperimentali

Il volume del campione dovrebbe essere di 10 mm<sup>3</sup> o un volume adatto ad eventuale apparecchio alternativo.

Le sostanze solide sono controllate allo stato secco e preparate come segue.

- le sostanze in polvere sono setacciate (maglie da 0,5 mm); per la prova si utilizza tutto il materiale passato attraverso il setaccio;
- le sostanze pressate, fuse o altrimenti condensate vengono rotte in pezzettini e setacciate. La frazione di setacciatura  $< 0,5$  mm viene usata per le prove.

Le sostanze che si presentano normalmente sotto forma di pasta devono essere provate per quanto possibile allo stato secco. Se la sostanza non può essere preparata allo stato secco, la pasta (dopo rimozione della maggior quantità possibile di diluente) viene provata in forma di una pellicola da 0,5 mm di spessore, 2 mm di larghezza e 10 mm di lunghezza preparata con un attrezzo opportuno.

#### 1.6.3.3 Esecuzione delle prove

La base di porcellana viene portata sul campione in esame e si applica il peso. Durante l'esecuzione della prova, la struttura spugnosa superficiale della piastra di porcellana deve giacere trasversalmente rispetto alla direzione di movimento. Bisogna fare attenzione che la barra sia appoggiata sul campione, che vi sia una quantità sufficiente di materiale in esame sotto alla barra e inoltre che la piastra si muova correttamente sotto la barra. Per le sostanze pastose si usa un calibro dello spessore di 0,5 mm con una fessura da  $2 \times 10$  mm per applicare la sostanza alla piastra. La piastra di porcellana deve muoversi 10 mm avanti e indietro sotto alla barra di porcellana in un tempo di 0,44 secondi. Ciascuna parte della superficie della piastra e della barra deve essere usata una sola volta; le due estremità di ciascuna barra serviranno per due prove e le due superfici di una piastra serviranno ciascuna per tre prove.

Si esegue una serie di sei prove con un carico di 360 N. Se in queste sei prove si ottiene un evento positivo, si deve eseguire un'ulteriore serie di sei prove con un carico di 120 N. In altri apparecchi, il campione viene confrontato con la sostanza di riferimento scelta usando una procedura di provata validità (per esempio tecnica «su e giù», ecc.).

#### 1.6.3.4 Valutazione

Il risultato della prova viene considerato positivo se si verifica un'esplosione (crepitio e/o una accensione violenta o una fiammata sono equivalenti ad un'esplosione) almeno una volta in una qualunque delle prove con l'apparecchio di attrito specificato o se soddisfa i criteri equivalenti in una prova di attrito alternativa.

### 2. DATI

In linea di principio, si considera che una sostanza presenti un pericolo di esplosione ai sensi della direttiva se si ottiene un risultato positivo nella prova di sensibilità termica, agli urti o all'attrito.

### 3. RELAZIONE

#### 3.1 RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- identità, composizione, purezza, umidità e così via della sostanza esaminata;
- la forma fisica del campione e se esso sia o no stato macinato, tritato e/o setacciato;
- osservazioni effettuate durante le prove di sensibilità termica (per esempio massa del campione, numero di frammenti);
- osservazioni eseguite durante le prove di sensibilità meccanica (per esempio la formazione di quantità considerevoli di fumo o la decomposizione completa senza accensione violenta, fiamme, scintille, crepitii, ecc.);
- risultati di ciascun tipo di prova;
- se è stato usato un apparecchio alternativo, bisogna fornire una giustificazione scientifica e una prova della correlazione tra i risultati ottenuti con l'apparecchio specificato e quelli ottenuti con l'apparecchio equivalente;
- qualsiasi commento utile, come riferimenti a prove con prodotti simili, che possono essere significativi per una corretta interpretazione dei risultati;
- tutte le osservazioni addizionali significative per l'interpretazione dei risultati.

#### 3.2 INTERPRETAZIONE E VALUTAZIONE DEI RISULTATI

La relazione di prova deve citare gli eventuali risultati considerati falsi, anormali o non rappresentativi. Se qualcuno dei risultati deve essere scartato, deve essere fornita una spiegazione e i risultati di prove alternative o complementari. I risultati anormali, salvo che essi possano venire spiegati, devono essere accettati con i valori sperimentali e usati per classificare conformemente la sostanza.



## 4. BIBLIOGRAFIA

- (1) Recommendations on the Transport of Dangerous Goods: Tests and criteria, 1990, United Nations, New York.
- (2) Bretherick, L., Handbook of Reactive Chemical Hazards, 4th edition, Butterworths, London, ISBN 0-750-60103-5, 1990.
- (3) Koenen, H., Ide, K.H. and Swart, K.H., Explosivstoffe, 1961, vol. 3, 6-13 and 30-42.
- (4) NF T 20-038 (Sept. 85). Chemical products for industrial use — Determination of explosion risk.

## Appendice

Esempi di specifiche dei materiali per la prova di sensibilità termica (vedi DIN 1623)

- (1) Tubo: specifica materiali numero 1.0336.505 g
- (2) Piastra forata: specifica materiali numero 1.4873
- (3) Collare filettato e dado: specifica materiali numero 1.3817

Figura 1

Apparecchio per la prova della sensibilità termica  
(quote espresse in millimetri)

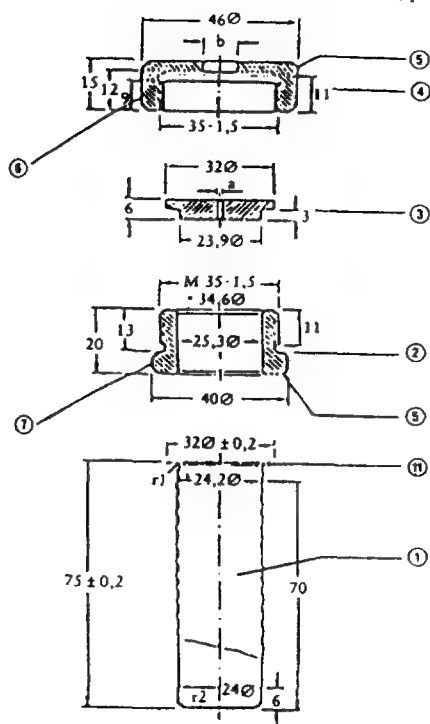


Figura 1a Tubo d'acciaio e accessori  
(1) tubo  
(1a) flangia esterna  
(2) collare filettato: filetto a basso attrito  
(3) piastra forata, diametro  $a = 2,0$  o  $6,0$  mm  
(4) dado diametro  $b = 10$  mm  
(5) superficie smussata  
(6) 2 facce per chiave n. 41

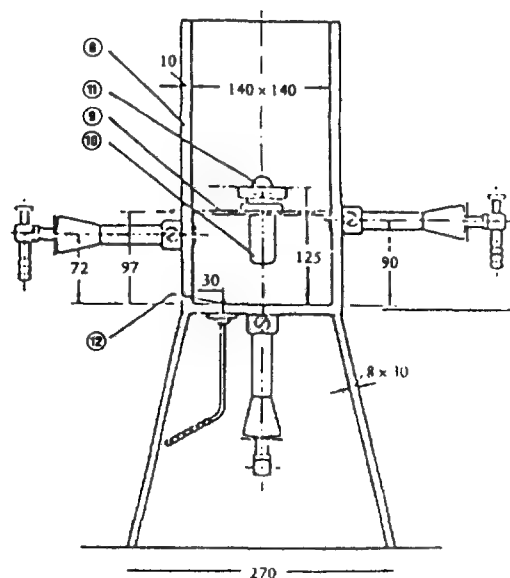


Figura 1b Dispositivo di riscaldamento e protezione  
(7) due facce per chiave numero 36  
(8) scatola resistente alle schegge  
(9) due aste di supporto per il tubo  
(10) tubo assemblato  
(11) posizione del bruciatore posteriore; gli altri bruciatori sono visibili  
(12) getto pilota

Figura 2

Prova di sensibilità termica

Esempi di frammentazione



Non esploso



Non esploso



Esploso



Esploso



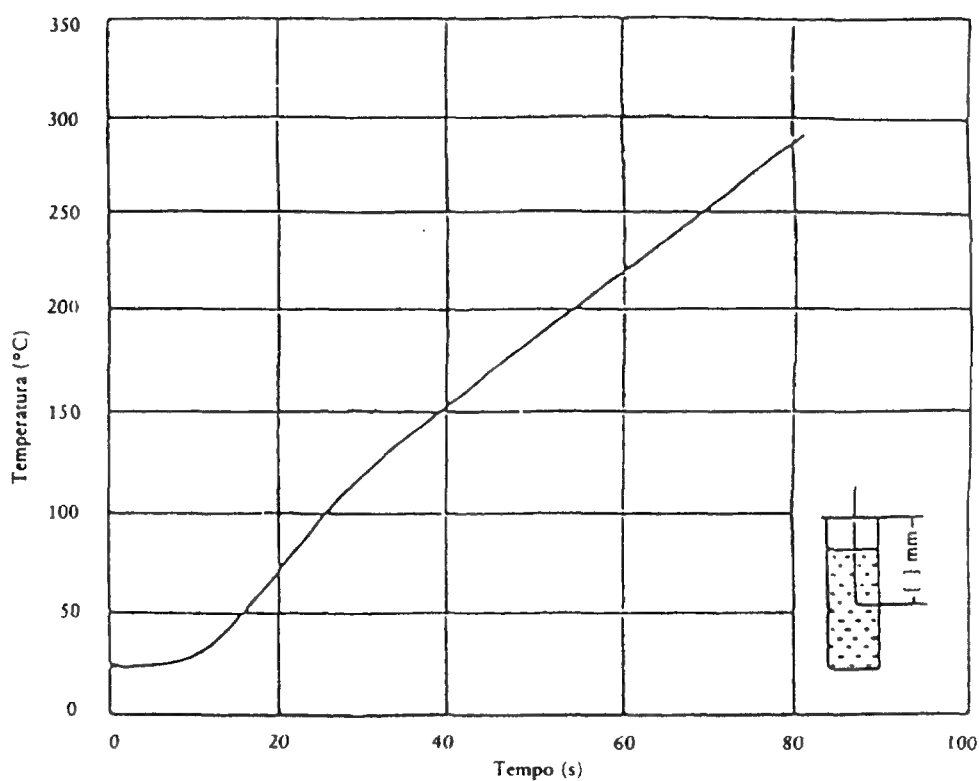
Esploso



Esploso

Figura 3

Taratura della velocità di riscaldamento per la prova di sensibilità termica



Curva temperatura/tempo ottenuta riscaldando dibutilitalato ( $27 \text{ cm}^3$ ) in un tubo chiuso (piastra forata da 1,5 mm) con propano ad una portata di 3,2 litri al minuto. La temperatura viene misurata con una termocoppia cromel/alumel con guaina d'acciaio inossidabile del diametro di 1 mm disposta centralmente 4,3 mm al di sotto del bordo del tubo. La velocità di riscaldamento tra 135 °C e 285 °C deve essere compresa tra 185 e 215 K/min.

Figura 4

Apparecchio per le prove d'urto

(quote espresse in millimetri)

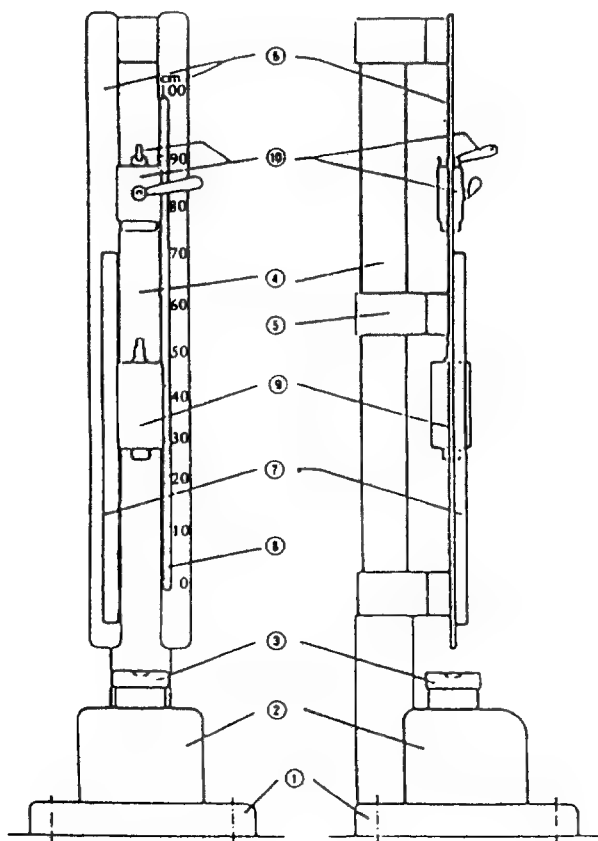


Figura 4a Martello cadente, vista generale frontale e laterale

- (1) base, 450 x 450 x 60
- (2) blocco d'acciaio, 230 x 250 x 200
- (3) incudine, diametro 100 x 70
- (4) colonna
- (5) traversa mediana
- (6) due guide
- (7) cremagliera
- (8) scala graduata

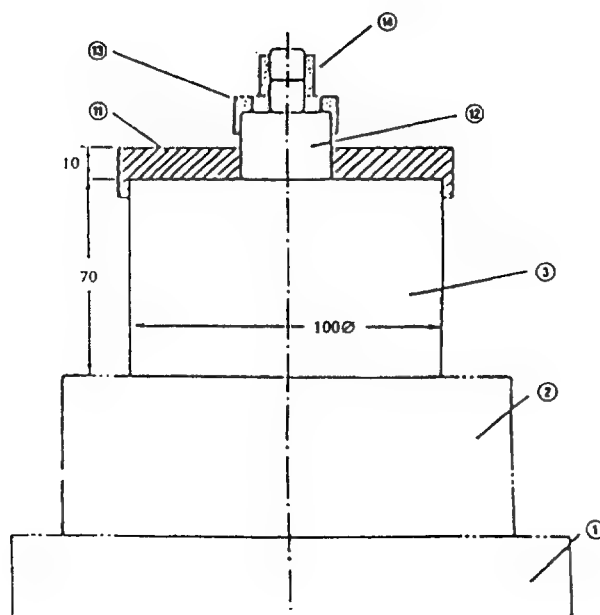
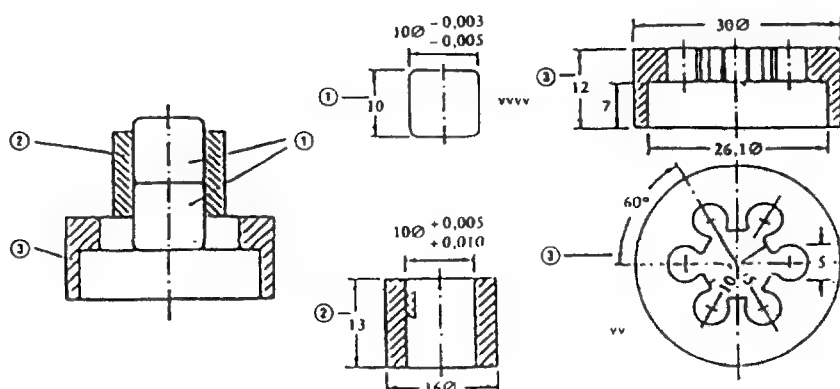


Figura 4b Martello cadente, parte inferiore

- (9) martello cadente (massa cadente)
- (10) dispositivo di ritenzione e liberazione
- (11) piastra di posizionamento
- (12) incudine intermedia (sostituibile) diametro 26 x 26
- (13) anello di posizionamento con orifici
- (14) dispositivo d'urto

Figura 4

Continua

Figura 4c Dispositivo d'urto  
per sostanze in polvere o in pasta

- (1) cilindri d'acciaio
- (2) anello di guida per i cilindri d'acciaio
- (3) anello di posizionamento con orifici
  - (a) sezione verticale
  - (b) pianta
- (4) anello di gomma
- (5) sostanza liquida (40 mm<sup>3</sup>)
- (6) spazio libero sopra al liquido

Figura 4d Dispositivo d'urto per sostanze liquide

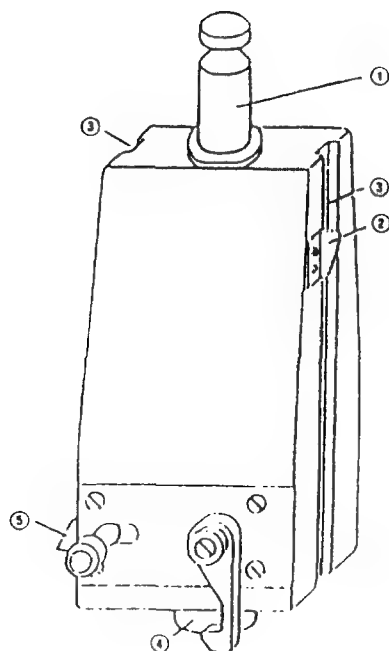
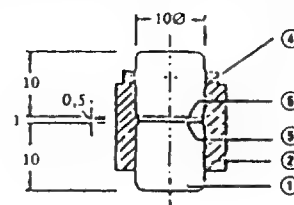


Figura 4e Martello (massa di caduta di 5 kg)

- (1) giunto di sospensione
- (2) indicatore d'altezza
- (3) solco di posizionamento
- (4) testa d'urto cilindrica
- (5) dente d'arresto

Figura 5

Apparecchio per la sensibilità all'attrito

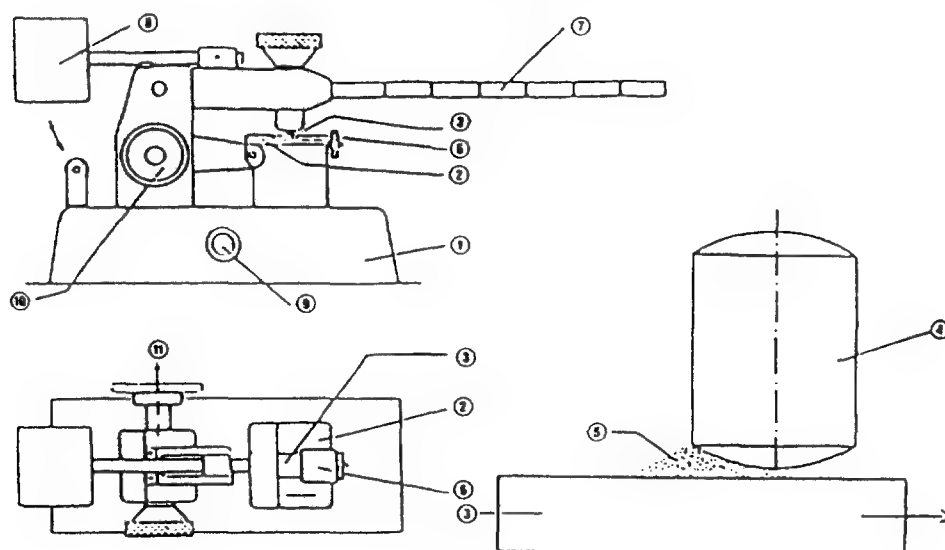


Figura 5a Apparecchio di sfregamento:

vista in elevazione e in pianta

(1) base d'acciaio

(2) carrello mobile

(3) piastra di porcellana,  
25 x 25 x 5 mm, portata  
sul carrello(4) barra di porcellana fissa,  
diametro 10 x 15 mm(5) campione in esame, appros-  
simativamente 10 mm<sup>3</sup>Figura 5b Posizione di partenza  
della barra sul campione

(6) supporto della barra

(7) braccio di armatura

(8) contrappeso

(9) interruttore

(10) ruota per regolare il  
carrello nella posizione  
di partenza(11) direzione verso il  
motore elettrico

## A.15. TEMPERATURA DI AUTOACCENSIONE (LIQUIDI E GAS)

## 1 METODO

## 1.1 INTRODUZIONE

A questa prova non devono essere sottoposte le sostanze esplosive e le sostanze che si accendono spontaneamente per contatto con l'aria a temperatura ambiente. La procedura d'esame è applicabile a gas, liquidi e vapori che in presenza dell'aria possono essere infiammati da una superficie calda.

La temperatura di autoaccensione può essere ridotta considerevolmente dalla presenza di impurezze catalitiche, dal materiale della superficie o da un maggiore volume del recipiente di prova

## 1.2 DEFINIZIONI E UNITÀ

Il grado di autoinfiammabilità è espresso in termini di temperature di autoaccensione. La temperatura di autoaccensione è la temperatura minima alla quale la sostanza in esame si infiamma quando sia miscelata con aria nelle condizioni definite nel metodo di prova.

## 1.3 SOSTANZE DI RIFERIMENTO

Le sostanze di riferimento sono citate nelle norme (vedi 1.6.3). Queste sostanze servono principalmente per verificare periodicamente la precisione del metodo e per permettere il confronto coi risultati ottenuti mediante altri metodi.

## 1.4 PRINCIPIO DEL METODO

Il metodo determina la temperatura minima della superficie interna di un recipiente chiuso che dà luogo all'accensione di un gas, vapore o liquido iniettato nel recipiente chiuso.

## 1.5 CRITERI DI QUALITÀ

La ripetibilità varia secondo l'intervallo delle temperature di autoaccensione e il metodo di prova usato.

La sensibilità e la specificità dipendono dal metodo di prova utilizzato.

## 1.6 DESCRIZIONE DEL METODO

## 1.6.1 Apparecchiatura

L'apparecchiatura è descritta nel metodo di cui al punto 1.6.3.

## 1.6.2 Condizioni di prova

Un campione della sostanza in esame viene saggiato in conformità al metodo di cui al punto 1.6.3.

## 1.6.3 Esecuzione della prova

Vedi IEC 79-4, DIN 51794, ASTM E 659-78, BS 4056, NF T 20 037.

## 2 DATI

Registrare la temperatura di prova, la pressione atmosferica, la quantità di campione usato e l'intervallo di tempo dopo il quale si verifica l'accensione.

## 3 RELAZIONE

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- l'indicazione precisa della sostanza (identificazione e impurezze);
- la quantità di campione usato, la pressione atmosferica,
- l'apparecchiatura usata;
- i risultati delle misure (temperature di prova, risultati relativi all'accensione, e corrispondenti ritardi temporali);
- tutte le osservazioni aggiuntive significative per l'interpretazione dei risultati.

## 4. BIBLIOGRAFIA

Nessuna.

## A.16. TEMPERATURA DI AUTOACCENSIONE RELATIVA DEI SOLIDI

## 1. METODO

## 1.1. INTRODUZIONE

Non devono essere sottoposte a questa prova le sostanze esplosive e le sostanze che si infiammano spontaneamente a contatto con l'aria a temperatura ambiente.

Lo scopo della prova è di fornire informazioni preliminari sull'autoinfiammabilità di sostanze solide a temperature elevate.

Se il calore sviluppato dalla reazione della sostanza con l'ossigeno o dalla sua decomposizione esotermica non viene ceduto con sufficiente rapidità all'ambiente circostante, si ha un autoriscaldamento che porta all'autoaccensione. L'autoaccensione si verifica quindi quando la velocità di produzione di calore supera quella della sua dispersione.

Il procedimento è utile come saggio preliminare per le sostanze solide. Data la complessità dei processi di accensione e di combustione dei solidi, la temperatura di autoaccensione determinata con questo metodo deve essere utilizzata soltanto a scopo di confronto.

## 1.2. DEFINIZIONI E UNITÀ

La temperatura di autoaccensione ottenuta secondo il presente metodo è la minima temperatura, espressa in °C, alla quale un dato volume di una sostanza si infiamma in determinate condizioni.

## 1.3. SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4. PRINCIPIO DEL METODO

In un forno a temperatura ambiente viene posto un certo volume della sostanza da esaminare, si registra la curva temperatura/tempo relativa alle condizioni esistenti al centro del campione mentre la temperatura del forno viene aumentata fino a 400 °C o fino al punto di fusione, se inferiore, ad una velocità di 0,5 °C/min. Ai fini di questa prova, la temperatura del forno alla quale la temperatura del campione raggiunge i 400 °C per autoriscaldamento è detta temperatura di autoaccensione.



**1.5 CRITERI DI QUALITÀ**

Nessuno

**1.6. DESCRIZIONE DEL METODO****1.6.1 Apparecchiatura****1.6.1.1 Forno**

Forno da laboratorio a temperatura programmata (volume circa 2 litri) con circolazione d'aria naturale e sfogo per esplosioni. Per evitare un rischio potenziale di esplosione, si deve impedire che eventuali gas di decomposizione vengano in contatto con gli elementi riscaldanti elettrici.

**1.6.1.2 Cubo di rete metallica**

Ritagliare un pezzo di rete d'acciaio inossidabile con luce di 0,045 mm secondo il modello della figura 1. Piegare la rete e fissarla con filo metallico in forma di cubi con la faccia superiore aperta.

**1.6.1.3 Termocoppie**

Termocoppie adatte

**1.6.1.4 Registratore**

Qualsiasi registratore a due canali tarato da 0 a 600 °C o tensione corrispondente.

**1.6.2 Condizioni di prova**

Le sostanze vengono sottoposte a prova nella forma in cui vengono ricevute.

**1.6.3 Esecuzione della prova**

Il cubo viene riempito con la sostanza da esaminare e battuto leggermente, aggiungendo ulteriore sostanza fino a quando è completamente pieno. Il cubo viene poi sospeso al centro del forno a temperatura ambiente. Una termocoppia viene posta al centro del cubo e l'altra tra il cubo e la parete del forno per registrare la temperatura del forno.

Le temperature del forno e del campione vengono registrate in continuo mentre la temperatura del forno viene aumentata fino a 400 °C o fino al punto di fusione, se inferiore, ad una velocità di 0,5 °C/min.

Quando la sostanza si infiamma, la temperatura del campione presenterà un aumento brusco della temperatura al di sopra di quella del forno.

**2 DATI**

Rilevante ai fini della valutazione è la temperatura del forno alla quale la temperatura del campione raggiunge i 400 °C per autoriscaldamento (vedi figura 2).

**3 RELAZIONE**

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- descrizione della sostanza in esame;
- risultati delle misure, inclusa la curva temperatura/tempo,
- tutte le osservazioni aggiuntive significative per l'interpretazione dei risultati.

## BIBLIOGRAFIA

- (1) NF T 20-036 (SEPT 85). Chemical products for industrial use. Determination of the relative temperature of the spontaneous flammability of solids.

Figura 1

Sviluppo di un cubo di prova da 20 mm

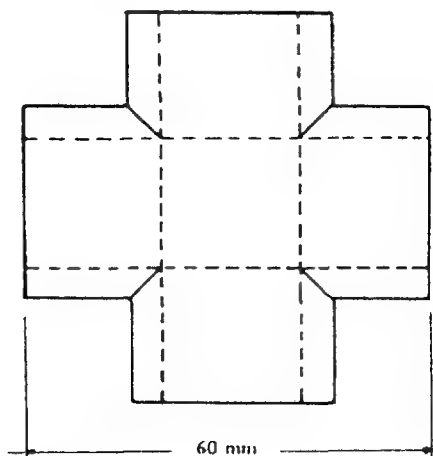
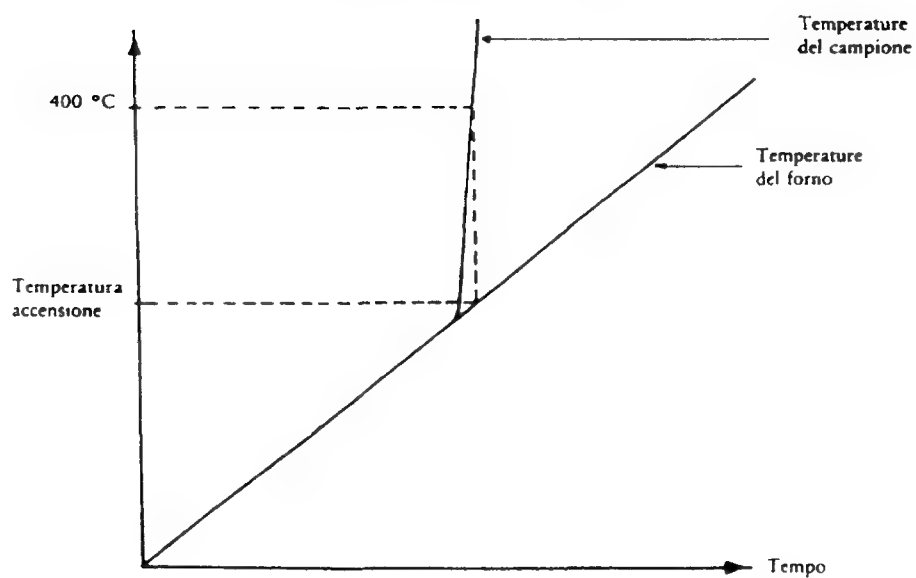


Figura 2

Curva tipica temperatura/tempo



## A.17. PROPRIETÀ OSSIDANTI (SOLIDI)

## 1 METODO

## 1.1 INTRODUZIONE

È utile avere informazioni preliminari sulle potenziali proprietà esplosive della sostanza prima di effettuare la prova.

Questa prova non si applica ai liquidi e ai gas, alle sostanze esplosive o altamente infiammabili, e ai perossidi organici.

Non occorre eseguire questa prova quando l'esame delle formule di struttura stabilisce, al di là di ogni ragionevole dubbio, che la sostanza non è suscettibile di reagire esotermicamente con materiale combustibile.

Per appurare se la prova debba essere condotta con precauzioni particolari, è opportuno effettuare un test preliminare.

## 1.2 DEFINIZIONI ED UNITÀ

Tempo di combustione tempo di reazione, in secondi, riferito allo spostamento della zona di reazione lungo il cumulo, seguendo la procedura descritta nel punto 1.6

Velocità di combustione espressa in mm/s

Velocità di combustione massima il valore più elevato della velocità di combustione ottenuto con miscele contenenti dal 10 % al 90 %, in peso, di ossidante

## 1.3 SOSTANZA DI RIFERIMENTO

Per la prova e per la prova preliminare si usa il nitrato di bario (grado analitico) come sostanza di riferimento

La miscela di riferimento è costituita da una miscela di nitrato di bario e di polvere di cellulosa, preparata secondo il punto 1.6, che presenta la massima velocità di combustione (di solito una miscela con il 60 % in peso di nitrato di bario)

## 1.4 PRINCIPIO DEL METODO

Per sicurezza si esegue una prova preliminare. Quando la prova preliminare indica chiaramente che la sostanza in esame presenta proprietà ossidanti, non sono necessarie prove ulteriori. Quando ciò non si verifica, la sostanza deve essere sottoposta alla prova completa

Nella prova completa, la sostanza da esaminare e una sostanza combustibile definita vengono miscelate in vari rapporti. Si formano altrettanti cumuli con le varie miscele e si procede all'accensione di un'estremità di ognuno di essi. La velocità massima determinata viene poi confrontata con la velocità massima di combustione di una miscela di riferimento

## 1.5 CRITERI DI QUALITÀ

Qualsiasi metodo di macinazione e mescolamento è valido a condizione che la differenza fra le velocità massime di combustione in ciascuna delle 6 prove non differisca dal valore della media aritmetica di oltre il 10 %

## 1.6 DESCRIZIONE DEL METODO

## 1.6.1. Preparazione

1.6.1.1. *Sostanza in esame*

Ridurre il campione da esaminare ad una granulometria  $< 0,125$  mm usando la seguente procedura: setacciare la sostanza di prova, macinare la frazione rimanente, ripetere la procedura fino a quando tutta la porzione di prova è passata dal setaccio.

Per la macinatura e la setacciatura si può usare qualsiasi apparecchio che soddisfi i criteri di qualità.

Prima di preparare la miscela, la sostanza viene essiccata a  $105^{\circ}\text{C}$  fino a peso costante. Se la temperatura di decomposizione della sostanza da esaminare è inferiore a  $105^{\circ}\text{C}$ , la sostanza deve essere essiccata ad una temperatura opportunamente inferiore.

1.6.1.2. *Sostanza combustibile.*

Come sostanza combustibile si usa la cellulosa in polvere del tipo impiegato per la cromatografia a strato sottile o in colonna. È risultato idoneo un tipo di cellulosa con fibre di lunghezza compresa per l'85 % tra 0,020 mm e 0,075 mm. La polvere di cellulosa viene fatta passare attraverso un setaccio a maglia da 0,125 mm. Per tutta la prova deve essere usata la stessa partita di cellulosa.

Prima di preparare la miscela, la cellulosa in polvere deve essere essiccata a  $105^{\circ}\text{C}$  fino a peso costante.

Se nella prova preliminare si usa farina di legno, preparare farina di legno dolce raccogliendo la porzione che passa attraverso un setaccio da 1,6 mm, miscelare accuratamente e poi essiccare a  $105^{\circ}\text{C}$  per 4 ore in uno strato di spessore non superiore a 25 mm. Raffreddare e conservare in un contenitore a tenuta d'aria riempito il più possibile fino a quando serve, preferibilmente entro 24 ore dall'essiccazione.

1.6.1.3. *Fonte di ignizione*

Come fonte di ignizione si dovrebbe usare una fiamma calda di un bruciatore a gas (diametro minimo 5 mm). Se si usa un'altra fonte di ignizione (per esempio quando si effettua la prova in atmosfera inerte), devono essere riportate la descrizione e la giustificazione.

## 1.6.2. Esecuzione della prova

*Nota:*

Le miscele di ossidanti con cellulosa o farina di legno devono essere trattate come potenzialmente esplosive e maneggiate con la dovuta attenzione.

1.6.2.1. *Prova preliminare*

La sostanza essiccata viene accuratamente miscelata con cellulosa o farina di legno essiccata nel rapporto 2 parti di sostanza in esame/1 parte di cellulosa o farina di legno (in peso) e la miscela viene ammassata in forma di un piccolo cono con un diametro di base di 3,5 cm  $\times$  2,5 d'altezza, riempiendo, senza compattazione, un recipiente di forma conica, (per esempio un imbuto da laboratorio con il gambo tappato).

Il mucchietto viene posto su una piastra di base fredda, non combustibile, non porosa e di bassa conducibilità termica. La prova deve essere eseguita sotto cappa di aspirazione dei fumi come indicato al punto 1.6.2.2.

La sorgente di ignizione viene posta in contatto con il cono, e si osservano e registrano il vigore e la durata della reazione risultante.

La sostanza deve essere considerata ossidante se la reazione è vigorosa.

Nei casi in cui il risultato sia dubbio, è necessario completare l'intera sequenza di prova descritta nel seguito.

1 6 2 2 *Prova sequenziale*

Preparare miscele ossidante/cellulosa contenenti dal 10 al 90 % in peso di ossidante in incrementi del 10 %. Per i casi limite, usare miscele ossidante/cellulosa intermedie per ottenere con maggior precisione la massima velocità di combustione.

Il mucchietto viene formato mediante uno stampo di metallo, che presenta una lunghezza di 250 mm e una sezione trasversale triangolare con altezza interna di 10 mm e larghezza interna di 20 mm. Su ambedue i lati dello stampo, nella direzione longitudinale, sono montate due lastre metalliche come limitazioni laterali che sporgono di 2 mm sopra al bordo superiore della sezione triangolare (figura). Questo dispositivo viene riempito con un leggero eccesso di miscela. Dopo aver lasciato cadere una volta lo stampo da un'altezza di 2 cm su una superficie solida, la sostanza in eccesso rimanente viene rimossa con un foglio disposto obliquamente. Le delimitazioni laterali vengono rimosse e la polvere rimanente viene lisciata con l'uso di un rullo. Sopra allo stampo si pone poi una piastra di base non combustibile, non porosa, e di bassa conducibilità termica, l'apparecchio viene invertito e lo stampo rimosso.

Disporre il mucchietto nella corrente d'aria in una cappa.

La velocità dell'aria deve essere sufficiente per impedire ai fumi di propagarsi nel laboratorio e non deve venire variata durante la prova. Intorno all'apparecchio deve essere montato uno schermo per la corrente.

Data l'igroscopicità della cellulosa e di alcune sostanze da esaminare, la prova deve essere eseguita più velocemente possibile.

Accendere un'estremità del cumulo toccandolo con la fiamma.

Misurare il tempo di reazione su una distanza di 200 mm dopo che la zona di reazione si è propagata per una distanza iniziale di 30 mm.

La prova viene eseguita con la sostanza di riferimento e almeno una volta con ciascuna miscela di sostanze di prova e cellulosa della serie.

Se si trova che la velocità massima di combustione è significativamente maggiore di quella della miscela di riferimento, la prova può essere interrotta. Altrimenti la prova deve essere ripetuta 5 volte per ciascuna delle 3 miscele che danno la velocità di combustione più elevata.

Se si sospetta che il risultato sia un falso positivo, ripetere la prova usando una sostanza inerte con granulometria simile, come farina fossile, al posto della cellulosa. In alternativa, la miscela sostanza in esame/cellulosa che presenta la velocità di combustione più elevata deve essere ricontrollata in atmosfera inerte (contenuto d'ossigeno < 2 % v/v).

2 **DATI**

Per ragioni di sicurezza, deve essere considerato come caratteristica della proprietà ossidante della sostanza in prova il valore massimo della velocità di combustione e non il valore medio.

Ai fini della valutazione si prende in considerazione il più alto valore della velocità di combustione rilevato su una serie di 6 prove su una determinata miscela.

Riportare in grafico il valore più elevato di velocità di combustione per ciascuna miscela contro la concentrazione dell'ossidante. Ricavare dal grafico la velocità massima di combustione.

I sei valori di velocità di combustione misurati in una prova effettuata sulla miscela che presenta la più elevata velocità di combustione non devono differire dalla loro media aritmetica per oltre il 10 %, altrimenti deve essere migliorato il metodo di macinatura e miscelazione.

Confrontare la velocità di combustione massima ottenuta con la massima velocità di combustione della miscela di riferimento (vedi 1.3).

Se le prove vengono condotte in atmosfera inerte, la velocità di reazione massima viene confrontata con quella della miscela di riferimento in atmosfera inerte.

## 3. RELAZIONE

## 3.1. RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- l'identità, composizione, purezza, umidità ecc. della sostanza esaminata;
- eventuali trattamenti del campione in esame (per esempio macinatura, essiccazione, ecc.);
- la fonte di ignizione usata nelle prove;
- i risultati delle misure;
- la modalità di reazione (per esempio fiammata superficiale, combustione attraverso l'intera massa, eventuali informazioni relative ai prodotti di combustione, ecc.);
- ogni osservazione aggiuntiva significativa per l'interpretazione dei risultati, inclusa una descrizione del vigore (la miscela arde, produce scintille, esala fumi, brucia senza fiamma, ecc.) e la durata approssimata prodotta nella prova preliminare di sicurezza/vagliatura per la sostanza in esame e la sostanza di riferimento;
- i risultati delle prove eventuali con sostanze inerti;
- i risultati delle prove eventuali in atmosfera inerte.

## 3.2. INTERPRETAZIONE DEI RISULTATI

Una sostanza è considerata come ossidante quando:

- (a) nella prova preliminare c'è una reazione vigorosa,
- (b) nella prova, la velocità massima di combustione delle miscele analizzate è maggiore o uguale alla velocità di combustione della miscela di cellulosa e di nitrato di bario.

Al fine di evitare un falso positivo, i risultati ottenuti nella prova della sostanza miscelata con un materiale inerte e/o sotto atmosfera inerte devono essere tenuti in considerazione nell'interpretazione dei risultati.

## 4. BIBLIOGRAFIA

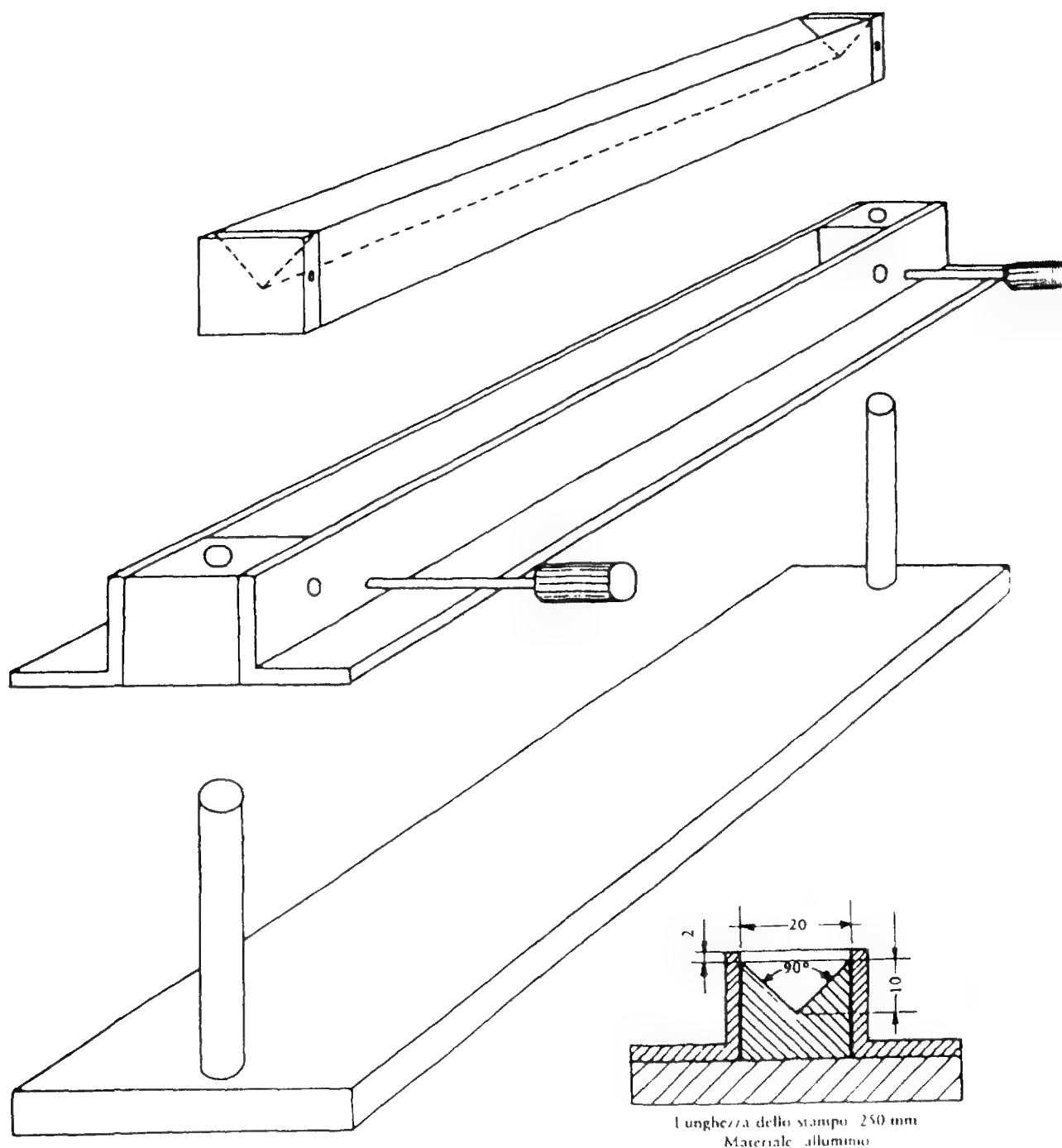
- (1) NF T 20-035 (SEPT 85). Chemical products for industrial use. Determination of the oxidizing properties of solids.

## Appendice

## Figura

Stampo e accessori per la preparazione del campione

(Tutte le dimensioni sono espresse in mm)



**PARTE B: METODI PER LA DETERMINAZIONE DELLA TOSSICITÀ E DEGLI ALTRI EFFETTI SULLA SALUTE****INTRODUZIONE GENERALE: PARTE B****A. NOTA ESPLICATIVA**

Ai fini della presente Introduzione vale la seguente numerazione:

- B.15 **Mutazione genetica:** *Saccharomyces cerevisiae*
- B.16 **Ricombinazione mitotica:** *Saccharomyces cerevisiae*
- B.17 **Cellule di mammifero in vitro:** saggio di mutazione genica
- B.18 **Danno e riparazione del DNA — sintesi non programmata del DNA — cellule di mammifero in vitro**
- B.19 **Saggio degli scambi tra cromatidi fratelli in vitro**
- B.20 **Saggio dei letali recessivi legati al sesso:** *Drosophila melanogaster*
- B.21 **Saggio in vitro di trasformazione di cellule di mammifero**
- B.22 **Saggio dei letali dominanti nei roditori**
- B.23 **Analisi citogenetica delle cellule germinali di mammifero in vivo**
- B.24 **Saggio delle macchie (spot test) nel topo**
- B.25 **Traslocazioni ereditabili nel topo**
- B.26 **Saggio di tossicità orale subcronica:** somministrazione orale ripetuta di dosi per 90 giorni usando specie di roditori
- B.27 **Saggio di tossicità orale subcronica:** somministrazione orale ripetuta di dosi per 90 giorni usando specie di non roditori
- B.28 **Studio di tossicità cutanea subcronica:** somministrazione cutanea ripetuta di dosi per 90 giorni usando specie di roditori
- B.29 **Studio di tossicità inalatoria subcronica:** somministrazione inalatoria ripetuta di dosi per 90 giorni usando specie di roditori
- B.30 **Saggio di tossicità orale cronica**
- B.31 **Saggio di teratogenesi — roditori e non-roditori**
- B.32 **Saggio di cancerogenesi**
- B.33 **Saggio combinato di tossicità cronica/cancerogenesi**
- B.34 **Saggio di tossicità sulla riproduzione su una generazione**
- B.35 **Saggio di tossicità sulla riproduzione su due generazioni**
- B.36 **Tossicocinetica**
- B.37 **Neurotossicità ritardata di sostanze organofosforiche dopo esposizione acuta**
- B.38 **Neurotossicità ritardata di sostanze organofosforiche con somministrazione ripetuta per 28 giorni**

**B. DEFINIZIONI GENERALI DEI TERMINI UTILIZZATI NEI METODI DI SAGGIO ILLUSTRATI NEL PRESENTE ALLEGATO**

- i) La **tossicità acuta** comprende gli effetti avversi che si verificano entro un dato tempo (in genere 14 giorni) dalla somministrazione di una singola dose di sostanza
- ii) La **tossicità evidente** è un termine generale che descrive chiari segni di tossicità risultanti dalla somministrazione della sostanza in esame. Tali segni devono essere sufficienti per consentire una valutazione dei rischi e tali che un aumento della dose somministrata sia suscettibile di produrre effetti tossici gravi ed eventualmente letali
- iii) La **dose** e la quantità di sostanza somministrata. Essa viene espressa in termini di peso (grammi o milligrammi) o peso di sostanza saggiata per unità di peso dell'animale usato per il saggio (p. es., milligrammi per chilogrammo di peso corporeo), o ancora concentrazione alimentare costante (parti per milione o milligrammi per chilogrammo di alimento)
- iv) La **dose discriminante** è il maggiore dei quattro livelli di dosaggio fisso che possono essere somministrati senza cagionare mortalità in relazione con la sostanza saggiata (compresa la mortalità per eutanasia)



- v) La **posologia** è un termine generico che designa la dose, la frequenza e la durata della somministrazione
- vi) La **DL<sub>50</sub>** (dose letale media) è la dose singola di una sostanza, valutata statisticamente, che si prevede causi la morte del 50 % degli animali trattati. Il valore della DL<sub>50</sub> viene espresso in termini di peso della sostanza saggiata per unità di peso dell'animale usato per il saggio (milligrammi per chilogrammo).
- vii) La **CL<sub>50</sub>** (concentrazione letale media) è la concentrazione di una sostanza, valutata statisticamente, che si può prevedere causi la morte durante l'esposizione o entro un determinato tempo, consecutivo all'esposizione, del 50 % degli animali esposti per un determinato periodo. Il valore della CL<sub>50</sub> viene espresso in termini di peso della sostanza in esame per volume standard di aria (milligrammi per litro)
- viii) **NOAEL** è l'abbreviazione dell'inglese "no observed adverse effect level" e designa la dose o il livello di esposizione massimo per i quali non siano stati osservati effetti avversi
- ix) La **tossicità subcronica da somministrazione ripetuta** comprende gli effetti avversi cagionati negli animali dalla somministrazione ripetuta quotidianamente di una dose o da una esposizione ripetuta quotidianamente a una sostanza chimica per una breve parte della loro prevista durata di vita
- x) La **dose massima tollerata (DMT)** è il livello massimo di dose che provoca sintomi di tossicità in animali senza avere effetti rilevanti sulla sopravvivenza, in relazione al saggio in cui viene usata
- xi) L'**irritazione cutanea** è la produzione di alterazioni infiammatorie reversibili nella cute a seguito dell'applicazione della sostanza in esame
- xii) L'**irritazione oculare** è la produzione di alterazioni reversibili nell'occhio a seguito dell'applicazione della sostanza in esame sulla superficie anteriore dell'occhio
- xiii) La **sensibilizzazione cutanea** (dermatite allergica da contatto) è una reazione cutanea ad una sostanza mediata da fattori immunologici
- xiv) La **corrosione del derma** è la produzione di lesioni irreversibili dei tessuti cutanei a seguito dell'applicazione della sostanza in esame per un periodo compreso tra 3 minuti e 4 ore
- xv) La **tossicocinetica** è lo studio dell'assorbimento, della distribuzione, del metabolismo o dell'escrezione delle sostanze in esame
- xvi) L'**assorbimento** corrisponde al/ai processo/i per cui una sostanza somministrata penetra nell'organismo
- xvii) L'**escrezione** corrisponde al/ai processo/i per cui una sostanza somministrata e/o i suoi metaboliti vengono eliminati dall'organismo
- xviii) La **distribuzione** corrisponde al/ai processo/i per cui la sostanza assorbita e/o i suoi metaboliti si distribuiscono nell'organismo
- xix) Il **metabolismo** corrisponde al/ai processo/i per cui le sostanze somministrate subiscono nell'organismo reazioni enzimatiche o non enzimatiche che ne modificano la struttura

#### **B1 Tossicità acuta — tossicità a dose ripetuta / tossicità cronica e subcronica**

Diversi saggi (metodi da B1 a B5) consentono di valutare gli effetti tossici acuti e la tossicità specifica o sistemica di una sostanza, essi forniscono un'indicazione preliminare sulla tossicità con la somministrazione di una singola dose

In funzione della tossicità di una sostanza, può essere opportuno effettuare un saggio limite come approccio al saggio di DL<sub>50</sub>, negli studi per inalazione non è specificato alcun saggio limite, in quanto non è stato possibile definire un valore limite di esposizione singola per inalazione

La preferenza dovrà essere accordata ai metodi che facciano il minore ricorso possibile agli animali e riducano al massimo le sofferenze ad essi cagionate, quali, per esempio, il metodo a dose fissa (metodo B1 bis) e il metodo della classe di tossicità acuta (metodo B1 tris). Per i saggi di livello 1, le conclusioni del primo studio possono essere integrate da uno studio su una seconda specie. In questo caso potrà essere utilizzato un metodo di saggi standard o il metodo potrà essere adattato per un numero minore di animali

Il saggio di tossicità a dose ripetuta (metodi B.7, B.8 e B.9) consente di valutare gli effetti tossici derivanti da un'esposizione ripetuta. È necessaria un'accurata osservazione clinica degli animali per ottenere il maggior numero possibile di informazioni. Tali saggi sono finalizzati all'individuazione degli organi bersaglio della tossicità e alla determinazione delle dosi tossiche e non tossiche. Negli studi a lungo termine si potrà rendere necessaria un'analisi più approfondita di questi aspetti (metodi B.26 - B.30 e B.33).

## B.II Mutagenicità — genotossicità

La mutagenicità designa l'induzione di modificazioni permanenti e trasmissibili nella quantità o nella struttura del materiale genetico delle cellule o degli organismi. Tali modificazioni o "mutazioni" possono interessare un singolo gene o segmenti di un gene, un blocco di geni o interi cromosomi. Gli effetti su interi cromosomi possono essere strutturali e/o numerici.

L'attività mutagena di una sostanza viene valutata attraverso saggi in vitro su batteri per le mutazioni genetiche (puntiformi) (metodi B.13/14) e/o su cellule di mammifero per le aberrazioni strutturali cromosomiche (metodo B.10).

Sono accettabili anche procedure in vivo, quali il saggio del micronucleo (metodo B.12) o il saggio dell'analisi metafisica delle cellule di midollo osseo (metodo B.11). In assenza di controindicazioni sono tuttavia decisamente da preferire i metodi in vitro.

Per maggiori volumi di produzione e/o per l'esecuzione o la messa a punto di una valutazione dei rischi possono essere necessari studi complementari intesi a determinare con precisione il potenziale mutageno di una sostanza o a individuarne l'eventuale cancerogenicità. Tali studi possono essere utilizzati per diversi scopi: confermare i risultati ottenuti nei saggi di base, esaminare parametri non contemplati nei saggi di base, avviare o ampliare saggi in vivo.

A questo scopo, i metodi da B.15 a B.25 utilizzano sistemi eucarioti sia in vivo che in vitro e comprendono un'ampia gamma di parametri biologici. Tali saggi forniscono informazioni sulle mutazioni puntiformi e su altri parametri in organismi più complessi rispetto ai batteri utilizzati nei saggi di base.

In linea generale, qualora si decida la realizzazione di un programma complementare di studi di mutagenicità, questo dovrà essere formulato in modo da apportare informazioni complementari pertinenti sul potenziale mutageno e/o cancerogeno della sostanza in esame.

La scelta del saggio più appropriato al caso in esame dipende da tutta una serie di fattori, tra cui le caratteristiche fisico-chimiche della sostanza, i risultati dei primi saggi batterici e citogenetici, il profilo metabolico della sostanza, i risultati di altri studi di tossicità e gli usi noti della sostanza. Data la molteplicità dei fattori da prendere in esame, è sconsigliabile applicare criteri troppo rigidi nella scelta dei saggi da eseguire.

Alcuni principi generali sui metodi di saggio da adottare vengono fissati dalla direttiva 93/67/CEE; il documento tecnico di orientamento sulla valutazione dei rischi definisce invece precise strategie a questo riguardo, pur ammettendo una certa flessibilità e adattabilità in funzione delle circostanze specifiche.

Qui di seguito vengono elencati i metodi di saggio complementari, raggruppati in funzione del loro principale parametro genetico:

### *Studi sulle mutazioni geniche (puntiformi)*

- a) Studi sulla mutazione in avanti o sulla mutazione inversa usando microrganismi eucarioti (*Saccharomyces cerevisiae*) (metodo B.15)
- b) Studi in vitro sulla mutazione in avanti di cellule di mammifero (metodo B.17)
- c) Saggio dei letali recessivi legati al sesso su *Drosophila melanogaster* (metodo B.20)
- d) Saggio di mutazione somatica cellulare in vivo, saggio delle macchie nel topo (metodo B.24)

### *Studi sulle aberrazioni cromosomiche*

- a) Studi citogenetici in vivo nei mammiferi, può essere opportuno procedere ad un'analisi metafisica in vivo delle cellule di midollo osseo, qualora essa non sia stata effettuata nel corso della valutazione iniziale (metodo B.11). È inoltre possibile studiare la citogenetica delle cellule germinali in vivo (metodo B.23)
- b) Studi citogenetici in vitro su cellule di mammifero, se non effettuati nel corso della valutazione iniziale (metodo B.10)
- c) Studi dei letali dominanti nei roditori (metodo B.22)
- d) Saggio di traslocazione ereditabile nel topo (metodo B.25)

*Effetti genotossici — effetti sul DNA*

La genotossicità, che designa effetti potenzialmente nocivi sul materiale genetico non necessariamente associati a mutagenicità, può essere identificata sulla base di danni indotti sul DNA senza evidenza diretta di mutazione. Per questo tipo di indagine possono essere appropriati i metodi elencati qui di seguito, che utilizzano microrganismi eucarioti o cellule di mammifero:

- a) Ricombinazione mitotica su *Saccharomyces cerevisiae* (metodo B.16)
- b) Danno e riparazione del DNA — sintesi non programmata del DNA — cellule di mammifero — in vitro (metodo B.18)
- c) Scambio di cromatidi fratelli in cellule di mammifero — in vitro (metodo B.19)

*Metodi alternativi per lo studio del potenziale cancerogeno*

Esistono saggi di trasformazione su cellule di mammifero che consentono di determinare la capacità di una sostanza di indurre, in colture cellulari, modificazioni morfologiche e comportamentali che si ritiene possano essere associate ad una trasformazione maligna in vivo (metodo B.21). Possono essere utilizzati un certo numero di tipi cellulari e di criteri di trasformazione.

*Valutazione del rischio di effetti ereditabili nei mammiferi*

Esistono metodi atti a determinare gli effetti ereditabili indotti nei mammiferi da mutazioni genetiche (puntiformi), come il saggio dei loci specifici nel topo, che consente di misurare la mutazione della cellula germinale nella prima generazione (non illustrato nel presente allegato), o a determinare aberrazioni cromosomiche, come la prova di traslocazione ereditabile nel topo (metodo B.25). Tali metodi possono essere utilizzati per la valutazione del possibile rischio genetico di una sostanza per l'uomo. Tuttavia, data la loro complessità e l'elevato numero di animali richiesti, soprattutto per il saggio dei loci specifici, studi di questo tipo dovranno essere effettuati solo se strettamente necessari.

**B III Cancerogenicità**

Le sostanze chimiche possono essere classificate come agenti cancerogeni genotossici o non genotossici in funzione del meccanismo d'azione presunto.

Gli studi di mutagenicità/genotossicità consentono di effettuare uno screening preliminare per la determinazione del potenziale cancerogeno genotossico di una sostanza. Ulteriori informazioni possono essere fornite dai saggi di tossicità a dose ripetuta, di tossicità subcronica o cronica. Il saggio di tossicità a dose ripetuta (metodo B.7) e gli studi a lungo termine a dose ripetuta comportano una valutazione delle modificazioni istopatologiche osservate, quale per esempio l'iperplasia di determinati tessuti. Tali studi, insieme alle informazioni tossicocinetiche, possono contribuire all'identificazione di sostanze chimiche dotate di un potenziale cancerogeno, su cui potranno essere effettuate indagini più approfondite tramite un saggio di cancerogenicità (Metodo B.32) o, in molti casi, uno studio combinato di tossicità cronica e cancerogenicità (Metodo B.33).

**B IV Tossicità per la riproduzione**

La tossicità per la riproduzione può esprimersi in diversi modi, per esempio attraverso un'alterazione della funzione o della capacità riproduttiva maschile o femminile, definita come "effetti sulla fertilità", o la comparsa nella prole di effetti avversi non ereditabili, definita come "tossicità per lo sviluppo", concetto in cui rientrano anche la teratogenicità e gli effetti durante l'allattamento.

Per gli studi di teratogenicità, che fanno parte dello screening di tossicità per lo sviluppo, il metodo di saggio (metodo B.31) è sostanzialmente finalizzato alla somministrazione per via orale. In funzione delle caratteristiche fisiche della sostanza in esame o della via probabile di esposizione per l'uomo, è possibile il ricorso alternativo ad altre vie di somministrazione. In tal caso occorre modificare opportunamente il metodo di saggio tenendo conto degli elementi pertinenti dei metodi di saggio su 28 giorni.

Qualora sia necessario uno studio della riproduzione su tre generazioni (fertilità), è possibile utilizzare il metodo descritto per il saggio di riproduzione su due generazioni (metodo B.35) estendendolo ad una terza.

**B V Neurotossicità**

La neurotossicità può esprimersi in modi diversi, per esempio attraverso modificazioni funzionali e/o strutturali e modificazioni biochimiche nel sistema nervoso centrale o periferico. I saggi di tossicità acuta consentono di ottenere una prima indicazione sulla neurotossicità di una sostanza. Il saggio di tossicità a dose ripetuta (metodo B.7) comprende una valutazione degli effetti neurotossici, l'osservazione clinica degli animali deve essere particolarmente accurata per poter ottenere il maggior numero possibile di informazioni. Scopo di questo metodo è consentire l'individuazione di sostanze chimiche dotate di un potenziale neurotossico, che possono necessitare di indagini più approfondite al riguardo. Inoltre, è importante valutare la facoltà di una sostanza di indurre effetti neurotossici specifici che potrebbero non essere evidenziati da altri studi di tossicità. Per esempio, è stato osservato che alcune sostanze organofosforiche producono effetti neurotossici ritardati che possono essere valutati con i metodi B.37 e B.38, previa esposizione a dose singola o a dose ripetuta.

**B.VI Immunotossicità**

L'immunotossicità può esprimersi in diversi modi, per esempio l'immunosoppressione e/o il rafforzamento della risposta immunitaria, che dà luogo ad ipersensibilità o ad autoimmunità indotta. Il saggio di tossicità a dose ripetuta (metodo B.7) prevede una valutazione degli effetti immunotossici. Tale metodo è inteso a consentire l'identificazione di sostanze chimiche dotate di un potenziale immunotossico, che possono necessitare di indagini più approfondite al riguardo.

**B.VII Tossicocinetica**

Gli studi di tossicocinetica sono finalizzati all'interpretazione e alla valutazione dei dati di tossicità. Essi hanno lo scopo di chiarire determinati aspetti particolari della tossicità della sostanza chimica in esame e i risultati ottenuti possono essere di aiuto nella progettazione di ulteriori studi. Non si considera che sia necessario determinare la totalità dei parametri in ciascun caso. La sequenza completa degli studi tossicocinetici (assorbimento, escrezione, distribuzione e metabolismo) sarà necessaria solo in rari casi. Per taluni composti potrebbero essere opportune modifiche di detta sequenza, ovvero potrebbe essere sufficiente uno studio con dose unica (metodo B.36).

Le informazioni sulla struttura chimica (SAR, cioè structure activity relationship) e sulle proprietà fisico-chimiche possono anche fornire indicazioni sulle caratteristiche di assorbimento attraverso la via di somministrazione prevista e le possibilità metaboliche e di distribuzione nel tessuto. Informazioni sui parametri tossicocinetici possono inoltre provenire da precedenti studi di tossicità e di tossicocinetica.

**C. CARATTERIZZAZIONE DELLA SOSTANZA IN ESAME**

Prima dell'inizio di qualsiasi studio di tossicità occorre conoscere la composizione della sostanza in esame, incluse le impurità principali e le proprietà fisico-chimiche pertinenti, compresa la stabilità.

Le proprietà fisico-chimiche della sostanza in esame forniscono informazioni importanti per la scelta della via di somministrazione, per la progettazione dei vari studi e per il trattamento e la conservazione della sostanza in esame.

L'elaborazione di un metodo analitico per la determinazione qualitativa e quantitativa della sostanza in esame (comprese, se possibile, le principali impurità) nel mezzo di dosaggio e nel materiale biologico deve precedere l'inizio dello studio.

Tutte le informazioni relative all'identificazione, alle proprietà fisico-chimiche, alla purezza e al comportamento della sostanza devono essere riportate nella relazione del saggio.

**D. CURA DEGLI ANIMALI**

Nei saggi di tossicità è indispensabile esercitare un rigoroso controllo delle condizioni ambientali e utilizzare tecniche adeguate per la cura degli animali.

**(i) Condizioni di alloggiamento**

Le condizioni ambientali nei locali o nei recinti degli animali da laboratorio devono essere appropriate per le specie sperimentali. Per ratti, topi e porcellini d'India è indicata una temperatura ambiente di  $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$  con un'umidità relativa del 30-70 %. Per i conigli, la temperatura deve essere di  $20 \pm 3^{\circ}\text{C}$  con un'umidità relativa del 30-70 %.

Talune tecniche sperimentali sono particolarmente sensibili agli effetti della temperatura e, in tali casi, la descrizione del metodo di saggio comprende indicazioni precise sulle condizioni adeguate. In tutti gli studi di tossicità, la temperatura e l'umidità devono essere controllate, registrate e riportate nella relazione finale dello studio.

L'illuminazione deve essere artificiale ed alternare 12 ore di luce e 12 ore di oscurità. Le condizioni di illuminazione devono essere dettagliatamente registrate e riportate nella relazione finale dello studio.

Salvo nel caso in cui venga diversamente specificato nel metodo, gli animali dovranno essere alloggiati in gabbie individuali o contenenti piccoli gruppi dello stesso sesso. In questo caso il numero degli animali non dovrà essere superiore a cinque.

Nelle relazioni sugli esperimenti effettuati su animali dovranno essere indicati il tipo di gabbie utilizzate e il numero di animali alloggiati in ogni gabbia sia durante l'esposizione alla sostanza chimica che durante tutto il periodo successivo di osservazione.

**(ii) Condizioni di alimentazione**

La dieta deve soddisfare tutte le esigenze nutrizionali della specie utilizzata per il saggio. Qualora le sostanze in esame vengano somministrate agli animali nella loro dieta, il valore nutrizionale degli alimenti potrebbe essere ridotto per effetto dell'interazione tra la sostanza ed un costituente dietetico. Nell'interpretazione dei risultati dei saggi si dovrà tener conto di questa possibilità. Gli animali potranno essere nutriti con diete convenzionali da laboratorio ed abbeverati con acqua a sazietà. La scelta della dieta potrà essere condizionata dalla necessità di garantire un apporto adeguato della sostanza in esame, qualora essa venga somministrata con gli alimenti.

I contaminanti dietetici suscettibili di influenzare la tossicità non dovrebbero essere presenti in condizioni tali da causare interferenze.

## E BENESSERE DEGLI ANIMALI

Nell'elaborazione dei metodi sperimentali si è tenuto in debita considerazione il benessere degli animali. Citiamo brevemente qui di seguito alcuni esempi, benché l'elenco sia lungi dall'essere completo. Per le espressioni e/o le condizioni esatte, si farà riferimento al testo dei metodi:

- Per la determinazione della tossicità orale acuta esistono due metodi alternativi: il "metodo a dose fissa" e il "metodo della classe di tossicità acuta". Il "metodo a dose fissa" non utilizza la morte come parametro specifico di valutazione e richiede un minor numero di animali. Il "metodo della classe di tossicità acuta" utilizza in media il 70 % di animali in meno rispetto al metodo B.1 per la tossicità acuta orale. Entrambi questi metodi alternativi comportano minor sofferenza e dolore fisico rispetto alla metodologia classica.
- Il numero degli animali utilizzati è ridotto al minimo scientificamente accettabile: solo 5 animali di egual sesso vengono trattati per ogni livello di dosaggio per i metodi B.1 e B.3; solo 10 animali (e solo 5 per il gruppo di controllo negativo) vengono utilizzati per determinare la sensibilizzazione cutanea con il saggio di massimizzazione nel porcellino d'India (Guinea-Pig Maximisation Test, metodo B.6), anche il numero di animali necessari per il controllo positivo negli studi di mutagenicità in vivo è ridotto (metodi B.11 e B.12).
- Le sofferenze inflitte agli animali durante i saggi sono ridotte al minimo: gli animali che presentano segni di sofferenza gravi e persistenti dovranno essere sottoposti ad eutanasia, le sostanze in esame non dovranno essere somministrate in dosaggi suscettibili di cagionare sofferenze gravi per effetto delle loro proprietà corrosive o irritanti (metodi B.1, B.2 e B.3).
- L'introduzione di saggi limite consente di evitare la somministrazione di dosi inutilmente elevate, non solo nei saggi di tossicità acuta (metodi B.1, B.2 e B.3), ma anche nei saggi di mutagenicità in vivo (metodi B.11 e B.12).
- Una strategia per la determinazione del grado di irritabilità consente di non effettuare un saggio o di limitarlo ad un solo animale laddove si disponga di sufficienti elementi scientifici giustificativi.

Tale evidenza scientifica può essere data dalle proprietà fisico-chimiche della sostanza, dai risultati di saggi precedenti o dai risultati di saggi in vitro debitamente confermati. Per esempio, qualora in uno studio di tossicità cutanea acuta con somministrazione di una dose limite (metodo B.3) non siano stati osservati segni di irritazione del derma, può non essere necessario effettuare ulteriori prove di irritazione cutanea (metodo B.4), le sostanze rivelatesi effettivamente corrosive o fortemente irritanti per la pelle nell'ambito di uno studio di irritazione cutanea (metodo B.4) non dovranno essere ulteriormente saggiate per l'irritazione oculare (metodo B.5).

## F METODI ALTERNATIVI

Uno degli obiettivi scientifici dell'Unione europea è di sviluppare e collaudare tecniche alternative che consentano di ottenere lo stesso livello di informazioni degli attuali esperimenti su animali, riducendo tuttavia il numero di animali utilizzati e le sofferenze ad essi inflitte o evitando del tutto il ricorso agli animali.

Non appena perfezionati, tali metodi dovranno costituire, ove possibile, la scelta d'elezione per gli studi miranti alla caratterizzazione dei rischi e alla conseguente classificazione ed etichettatura delle sostanze in funzione dei rischi intrinseci.

## G VALUTAZIONE E INTERPRETAZIONE

Nella valutazione ed interpretazione dei saggi occorre tener conto dei limiti entro i quali i risultati di studi su animali e in vitro possono essere estrapolati direttamente all'uomo, laddove si abbia evidenza di effetti avversi per l'uomo, questa potrà essere utilizzata per confermare i risultati sperimentali.

Tali risultati possono servire per la classificazione e l'etichettatura di sostanze nuove o già esistenti per quanto riguarda gli effetti sulla salute dell'uomo, sulla base delle loro proprietà intrinseche, identificate e quantificate da tali metodi. I criteri per la classificazione e l'etichettatura di cui all'allegato VI fanno riferimento anche ai parametri previsti dai protocolli sperimentali riportati nei presenti metodi di saggio.

Tali risultati possono inoltre essere utilizzati per studi di valutazione dei rischi di sostanze chimiche nuove o già esistenti, adeguate strategie sperimentali sono indicate a tale scopo nei corrispondenti documenti orientativi.

## H RIFERIMENTI BIBLIOGRAFICI

La maggior parte di detti metodi è stata messa a punto nell'ambito del programma per la definizione di linee guida elaborato dall'OCSE in materia di saggi. Essi dovranno essere applicati in conformità con i principi delle buone pratiche di laboratorio allo scopo di garantire il più possibile il "reciproco riconoscimento dei dati".

Ulteriori informazioni sono reperibili nei riferimenti citati nelle linee guida dell'OCSE e nell'ampia letteratura esistente in materia.

## B.1. TOSSICITÀ ACUTA PER VIA ORALE

## 1. METODO

## 1.1. INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2. DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3. SOSTANZE DI RIFERIMENTO

Nessuna.

## 1.4. PRINCIPIO DEL METODO DI SAGGIO

La sostanza da saggiare viene somministrata per via orale mediante gavaggio in dosi graduate (un livello di dose per gruppo) a vari gruppi di animali. Vengono quindi osservati gli effetti e gli eventi letali. Gli animali morti durante il saggio vengono sottoposti a necropsia e, a conclusione del saggio, si procede alla necropsia di quelli rimasti in vita. Questo metodo riguarda principalmente gli studi sui roditori.

Può essere necessaria la eutanasia degli animali che mostrino indizi gravi e permanenti di sofferenza e dolore. Non è necessario eseguire la somministrazione di sostanze di prova in una maniera che notoriamente provoca evidente dolore e sofferenza in conseguenza di proprietà corrosive o irritanti.

## 1.5. CRITERI DI QUALITÀ

Nessuno.

## 1.6. DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1. Preparazioni

Prima del saggio gli animali sono mantenuti nelle stesse condizioni di stabulazione e di alimentazione dell'esperimento per un periodo di almeno 5 giorni. Prima dell'esecuzione del saggio gli animali che dovranno essere giovani adulti e sani sono scelti con metodo casuale e assegnati ai gruppi sperimentali. Se necessario, la sostanza in esame viene sciolta o sospesa in veicolo adatto. Si raccomanda di considerare, ovunque possibile, come prima scelta una soluzione acquosa, seguita da una soluzione in olio vegetale e quindi in altri veicoli o una sospensione. Per i veicoli non acquosi, le caratteristiche di tossicità del veicolo dovranno essere note o, in caso contrario, dovranno essere determinate prima o durante il saggio. Nei roditori, generalmente il volume non dovrebbe superare 10 ml/kg di peso corporeo, a meno che non vengano utilizzate soluzioni acquose, nel qual caso si possono raggiungere 20 ml/kg. La variabilità del volume di saggio dovrà essere ridotta al minimo, regolando la concentrazione per assicurare la somministrazione di un volume costante a tutti i dosaggi.

## 1.6.2. Condizioni per il saggio

1.6.2.1. *Animali da esperimento*

Salvo controindicazioni, il ratto è la specie d'elezione.

Si dovrebbero utilizzare ceppi di laboratorio comunemente usati. Per ciascun sesso, all'inizio del saggio, l'intervallo della variazione ponderale degli animali utilizzati non dovrà superare più o meno il 20% del valore medio.

1 6 2 2 *Numero e sesso*

Per ciascun saggio vengono usati almeno 5 roditori a ciascun livello di dosaggio. Essi dovranno essere tutti dello stesso sesso. Se si usano femmine, dovranno essere nullipare e non gravide. Nel caso siano disponibili informazioni che dimostrano che un sesso è nettamente più sensibile, si dovranno usare animali di questo sesso.

*Nota:* nei saggi di tossicità acuta con animali di ordine superiore ai roditori, si dovrebbe prendere in considerazione l'uso di un numero minore di animali.

Le dosi devono essere accuratamente scelte e si deve fare ogni sforzo possibile per non superare dosi moderatamente tossiche. In tali prove si dovrebbe evitare la somministrazione di dosi letali della sostanza in esame.

1 6 2 3 *Livelli di dosaggio*

Questi dovranno essere in numero sufficiente, almeno tre, opportunamente intervallati per produrre nei gruppi trattati una graduazione di effetti tossici e di mortalità. I risultati dovrebbero essere sufficienti per fornire una curva dose-risposta e, quando possibile, permettere un'accettabile determinazione della  $LD_{50}$ .

1 6 2 4 *Saggio limite*

Quando si usano dei roditori, si può eseguire un saggio limite ad un unico livello di dosaggio di almeno 2 000 mg/kg in un gruppo di 5 maschi e 5 femmine utilizzando le procedure sopra descritte. Se si osserva mortalità correlata all'esposizione al composto, può essere necessario prendere in considerazione uno studio completo.

1 6 2 5 *Periodo di osservazione*

Il periodo di osservazione dovrebbe essere di almeno 14 giorni. Tuttavia, tale durata non è tassativa. Essa dovrebbe dipendere dalla natura delle reazioni tossiche, dalla velocità del loro insorgere e dalla durata del periodo di recupero; essa può quindi essere estesa, se considerato necessario. Il momento in cui compaiono e scompaiono i segni di tossicità e il momento in cui sopraggiunge la morte sono importanti, soprattutto la sostanza in esame tende a causare mortalità ritardata.

1 6 3 *Procedimento*

Prima della somministrazione della sostanza in esame, gli animali vanno tenuti a digiuno. Al ratto non dovrebbe essere somministrato cibo durante la notte prima dell'esperimento, per animali con metabolismo più veloce, un periodo di digiuno più breve è adeguato, l'acqua resterà disponibile ad libitum. Il giorno successivo, gli animali devono essere pesati e poi la sostanza in esame somministrata mediante ingozzatura in una dose singola.

Qualora non sia possibile somministrare tutta la quantità con una singola dose, si può procedere alla somministrazione ripetuta di frazioni più piccole della stessa durante un periodo non superiore alle 24 ore. A somministrazione della sostanza avvenuta, il cibo può essere sospeso per altre 3 o 4 ore. Nel caso di una dose somministrata in frazioni durante un certo periodo di tempo, può essere necessario fornire agli animali cibo e acqua in misura dipendente dalla durata del periodo di somministrazione.

Dopo la somministrazione, si effettuano osservazioni e si registrano sistematicamente i risultati per ogni singolo animale. Durante il primo giorno, le osservazioni dovrebbero essere frequenti.

Un attento esame clinico dovrebbe essere effettuato almeno una volta al giorno per 5 giorni per settimana. Altre osservazioni dovrebbero essere effettuate quotidianamente, accompagnate da azioni adeguate per minimizzare la perdita di animali dall'esperimento, ad esempio, necropsia oppure refrigerazione degli animali deceduti e isolamento o sacrificio degli animali deboli o moribondi. Le osservazioni devono includere le alterazioni della cute e del pelo, degli occhi e delle membrane mucose, e anche del sistema respiratorio, circolatorio, nervoso autonomo e centrale, dell'attività somatomotoria e del quadro comportamentale. Particolare attenzione dovrebbe essere rivolta all'osservazione di tremori, convulsioni, salivazione, diarrea, letargia, sonno e coma. Il momento in cui sopraggiunge il decesso dell'animale dovrà essere registrato con la massima precisione possibile.

Gli animali che muoiono durante il saggio e quelli che sopravvivono alla fine dello stesso sono sottoposti a necropsia. Tutti i cambiamenti patologici macroscopici devono essere registrati. Ove opportuno, si dovrebbero prelevare tessuti per l'esame istopatologico.

*Valutazione della tossicità nell'altro sesso*

Dopo il completamento dello studio su un sesso, si tratta almeno un gruppo rimanente di 5 animali dell'altro sesso con un livello di dose per verificare che gli animali di tale sesso non siano nettamente più sensibili alla sostanza in esame. In circostanze particolari può essere giustificato l'uso di un minor numero di animali. Nel caso in cui siano disponibili informazioni adeguate che dimostrano che gli animali del sesso controllato sono nettamente più sensibili, si può fare a meno di effettuare la prova su animali dell'altro sesso.

**2. DATI**

I dati dovranno essere riassunti in una tabella indicante, per ogni gruppo di saggio, il numero di animali all'inizio del saggio, il momento del decesso di ciascun animale, il numero di animali che presentano altri segni di tossicità, la descrizione degli effetti tossici e i risultati della necropsia. Il peso di ciascun animale dovrà essere determinato e registrato poco prima della somministrazione della sostanza, quindi ogni settimana e al momento del decesso. Le variazioni di peso dovranno essere calcolate e registrate quando la sopravvivenza dell'animale supera un giorno. Gli animali che vengono uccisi per ragioni umanitarie in conseguenza di sofferenza e dolore dovuti al composto vengono registrati come morti in conseguenza del composto. La  $DL_{50}$  può essere determinata con un metodo riconosciuto.

La valutazione dei dati dovrà includere il rapporto, se esistente, tra l'esposizione degli animali alla sostanza in esame e l'incidenza e gravità di tutte le alterazioni, incluse quelle comportamentali e cliniche, le lesioni macroscopiche, le variazioni del peso corporeo, la mortalità e qualsiasi altro effetto tossico.

**3. RELAZIONE****3.1. RELAZIONE SUL SAGGIO**

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- specie, ceppo, origine degli animali usati, condizioni ambientali, dieta, ecc.;
- condizioni dell'esperimento;
- livelli di dosaggio (con veicolo, se usato, e concentrazione);
- sesso degli animali sottoposti a somministrazione;
- tabulato dei dati di risposta per sesso e livello di dosaggio (cioè numero degli animali morti o sacrificati durante la prova, numero degli animali che mostrano sintomi di tossicità, numero degli animali esposti);
- tempo intercorso tra la somministrazione della sostanza e la morte, ragioni e criteri usati per la eutanasia degli animali;
- tutte le osservazioni;
- valore della  $DL_{50}$  per il sesso sottoposto ad uno studio completo determinato a 14 giorni (specificando il metodo di determinazione);
- intervallo di confidenza statistica del 95 % per la  $DL_{50}$  (dove possa essere fornito);
- curva dose-mortalità e relativo coefficiente angolare (se il metodo di determinazione lo consente);
- risultati dell'esame necroscopico;
- qualsiasi reperto istopatologico;
- risultati delle eventuali prove effettuate sull'altro sesso;
- discussione dei risultati (particolare attenzione va posta all'effetto che la soppressione umanitaria di animali durante la prova può avere sul valore calcolato della  $DL_{50}$ );
- interpretazione dei risultati.

**3.2. VALUTAZIONE E INTERPRETAZIONE**

Vedi introduzione generale, parte B

**4. BIBLIOGRAFIA**

Vedi introduzione generale, parte B



## B.1 bis TOSSICITÀ ACUTA (PER VIA ORALE) — METODO A DOSE FISSA

## 1 METODO

## 1.1 INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2 DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3. SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4 PRINCIPIO DEL METODO DI PROVA

Il test di tossicità acuta per via orale fornisce dati sugli effetti nocivi che possono manifestarsi entro un breve periodo di tempo dall'ingestione di un'unica dose della sostanza di prova

Il metodo a dose fissa prevede due fasi

In uno studio preliminare di osservazione si analizzano sequenzialmente gli effetti di varie dosi somministrate oralmente mediante sonda a singole cavie dello stesso sesso. Lo studio di osservazione fornisce informazioni sul rapporto intercorrente fra dose somministrata e tossicità, compresa una valutazione della dose minima letale. Normalmente non si impiegano più di 5 cavie in questa prima fase.

Nello studio principale la sostanza è somministrata oralmente mediante sonda a gruppi di 5 animali maschi e 5 animali femmine ad uno dei livelli prestabiliti (5, 50, 500 o 2 000 mg/kg). La dose impiegata è quella derivata dallo studio di osservazione in grado di produrre «tossicità evidente» (vedi 1.2. Definizioni), ma non un esito letale.

A seguito della somministrazione della dose, si effettuano osservazioni per lo studio dei relativi effetti.

Quando il livello di dose iniziale prescelto produce una tossicità evidente ma non mortalità dipendente dal composto, non è richiesta un'ulteriore prova.

Quando con la dose prescelta non si riscontra un'evidente tossicità, la sostanza sarà sottoposta ad un'ulteriore prova al livello di dosaggio immediatamente superiore. Se sopraggiunge la morte degli animali o se una grave reazione tossica richiede l'eutanasia dei medesimi, la sostanza deve essere nuovamente esaminata al livello di dosaggio immediatamente inferiore.

Questo procedimento consente l'identificazione della dose «discriminante» (vedi 1.2. Definizioni) cioè il massimo livello di dose che si può somministrare senza provocare la morte dell'animale (inclusi i sacrifici terminali).

Per gli animali che presentano segni gravi e continui di sofferenza fisica può rendersi necessaria l'eutanasia. Non si dovranno dosare le sostanze in maniera che provochino notoriamente gravi sofferenze per gli animali a causa delle proprietà corrosive ed irritanti.

## 1.5 CRITERI QUALITATIVI

Nessuno

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1 Procedimenti

## 1.6.1.1 Animali da esperimento

Salvo controindicazioni, il ratto è la specie d'elezione.

Si dovranno impiegare ceppi utilizzati normalmente in laboratorio. Per ciascun sesso, all'inizio dell'esperimento, la variazione ponderale degli animali scelti non dovrebbe superare più o meno 20 % del valore medio.

Gli animali sono mantenuti nelle condizioni sperimentali di stabulazione e di alimentazione per almeno cinque giorni prima dell'esperimento. Gli animali, che dovranno essere giovani adulti, vengono scelti con metodo casuale e assegnati ai gruppi sperimentali dello studio di osservazione e dello studio principale (sebbene in pratica, per lo studio principale, possa anche bastare un solo gruppo di ogni sesso).

#### 1.6.1.2. *Preparazione e somministrazione della dose*

Se necessario, la sostanza viene sciolta o sospesa in un veicolo adatto. Si raccomanda di considerare, ogni volta possibile, come prima scelta una soluzione acquosa, seguita da una soluzione in olio vegetale, e quindi in altri veicoli o in sospensione. Per i veicoli non acquosi è necessario conoscere le caratteristiche tossiche dei veicoli oppure determinarle prima o durante l'esperimento. Nei roditori, in genere, il volume non dovrà eccedere 10 ml/kg di peso corporeo a meno che non vengano utilizzate soluzioni acquose, nel qual caso si possono raggiungere i 20 ml/kg. La variabilità del volume di prova dovrà essere ridotta al minimo, regolando la concentrazione per garantire un volume costante a tutti i livelli di dosaggio.

Gli animali saranno tenuti a digiuno prima della somministrazione della sostanza. Al ratto non dovrebbe essere somministrato cibo durante la notte prima dell'esperimento mentre l'acqua resta disponibile ad libitum. Il giorno successivo si procederà alla pesatura degli animali e alla somministrazione della sostanza in un'unica dose mediante ingozzamento. Se un'unico dosaggio non è possibile, si può somministrare la dose in frazioni più piccole per un periodo non superiore alle 24 ore. Dopo la somministrazione della sostanza, il cibo può venire sospeso per altre tre-quattro ore. Se una dose è somministrata in frazioni durante un determinato periodo, potrà essere necessario fornire agli animali cibo e acqua in misura dipendente dalla durata del periodo di somministrazione.

#### 1.6.2. *Procedimento*

##### 1.6.2.1. *Studio di osservazione*

Gli effetti delle varie dosi sono osservati nelle singole cavia. Le femmine di animali saranno generalmente impiegate in assenza di informazioni indicanti che i maschi sono il sesso più sensibile. Il dosaggio è sequenziale, vale a dire si devono attendere almeno 24 ore prima di somministrare una dose al prossimo animale. Tutti gli animali sono sottoposti ad attenta osservazione per almeno 7 giorni per accertare eventuali sintomi di tossicità; se dopo 7 giorni persistono sintomi di moderata tossicità, l'animale dovrebbe essere osservato per altri 7 giorni. Si propongono i seguenti livelli di dose iniziale: 5, 50, 500 e 2 000 mg/kg. Se la dose iniziale prescelta non induce gravi sintomi di tossicità e il successivo livello superiore ha esito letale, sarà necessario stabilire uno o più livelli intermedi di dosaggio. In tal modo dovrebbe essere possibile ottenere delle informazioni sul livello o sui livelli che inducono sintomi di tossicità e sul livello di dose minima che provoca la morte della cavia.

Si dovrebbe cercare di stabilire la dose iniziale servendosi dei dati concernenti prodotti chimici affini. In mancanza di tali si suggerisce di cominciare con la dose di 500 mg/kg. Se non si osservano sintomi di tossicità dopo la somministrazione della dose iniziale si passerà al prossimo livello superiore. Qualora la dose di 2 000 mg/kg non abbia esito letale, lo studio di osservazione è da considerarsi terminato e lo studio principale sarà condotto a partire da tale livello. Se la dose iniziale (ad esempio 500 mg/kg) provoca gravi effetti che rendono necessaria l'eutanasia, al successivo animale sarà somministrata la dose immediatamente inferiore (ad esempio 50 mg/kg). Se l'animale sopravvive, ad altre cavia saranno somministrati appropriati livelli intermedi compresi fra le due dosi fisse. Normalmente, in questa fase, non dovrebbero essere impiegate più di 5 cavia.

##### 1.6.2.2. *Studio principale*

Si dovranno impiegare almeno 10 animali (5 femmine e 5 maschi) per ciascun dosaggio. Le femmine saranno nullipare e non gravide.

L'utilizzazione dei dosaggi a moderata tossicità, costituisce un principio del metodo della dose fissa. Si dovrà quindi evitare di somministrare la sostanza in dosi letali.

Il livello di dosaggio dovrà essere scelto tra uno dei quattro livelli di dose fissi, cioè 5, 50, 500 o 2 000 mg/kg di peso corporeo. Il livello di dose iniziale prescelto dovrebbe essere quello suscettibile di produrre una tossicità evidente ma non la mortalità dipendente dal composto (inclusi i sacrifici terminali; le morti accidentali non

sono comprese ma dovrebbero essere registrate). Non è necessaria alcuna prova supplementare quando questo livello di dosaggio produce una tossicità evidente ma non mortalità dipendente dal composto.

Quando la somministrazione del livello di dose prescelto non provoca una tossicità evidente la sostanza dovrà essere ulteriormente esaminata al livello immediatamente superiore. Gli animali, tuttavia, continueranno ad essere tenuti sotto osservazione fino al completamento del periodo. Quando una grave reazione tossica richiede il sacrificio dell'animale o in caso di morte di quest'ultimo, la sostanza dovrà essere riesaminata al livello di dosaggio immediatamente inferiore. Gli animali che non devono essere uccisi saranno tenuti sotto controllo per l'intero periodo di osservazione.

Dopo la somministrazione, si effettuano le osservazioni e si registrano sistematicamente i risultati per ogni singolo animale.

Il periodo di osservazione dovrebbe essere di almeno 14 giorni. Tuttavia tale durata non è tassativa e dovrebbe dipendere dalla natura delle reazioni tossiche, dalla velocità del loro insorgere e dalla durata del periodo di recupero, se necessario il termine potrà essere quindi esteso. È importante osservare il momento in cui compaiono e scompaiono i segni di tossicità e il momento in cui sopraggiunge la morte, soprattutto se la sostanza in esame tende a causare tossicità ritardata.

Un attento esame clinico verrà effettuato almeno due volte nel giorno della somministrazione della dose ed almeno una volta al giorno per i giorni successivi. Gli animali che presentano segni gravi di sofferenza dovranno essere sacrificati. Si renderanno necessarie ulteriori osservazioni nei primi giorni successivi alla somministrazione qualora gli animali continuino a presentare segni di tossicità. L'esperimento può essere sospeso se risulta evidente che il livello della dose iniziale era troppo elevato.

Si osserveranno eventuali alterazioni della cute e del pelo, degli occhi e delle membrane mucose, nonché del sistema respiratorio, circolatorio, autonomo e centrale, dell'attività somatomotoria e delle caratteristiche comportamentali. Particolare attenzione sarà rivolta all'osservazione di tremori, convulsioni, salivazione, diarrea, letargia, sonno e coma.

Poco prima della somministrazione della sostanza, gli animali dovranno essere pesati individualmente e poi ogni giorno per tre giorni e successivamente una volta alla settimana. Gli animali che muoiono nel corso dell'esperimento e quelli che sopravvivono alla fine dello stesso vengono pesati e sottoposti a necropsia. Verranno registrate tutte le alterazioni patologiche evidenti. Se del caso, si prelevano dei tessuti per un esame istopatologico.

Potrà essere necessaria la somministrazione di un secondo, o in casi eccezionali di un terzo livello di dose in base ai risultati del precedente dosaggio.

Nel caso in cui una sostanza provochi mortalità ad un peso corporeo di 5 mg/kg (o quando uno «range finding test» indica che quel livello di dose causa mortalità) si dovrà procedere ad un ulteriore esame della tossicità acuta della sostanza.

2

## DATI

I dati ottenuti dallo studio di osservazione e dallo studio principale vengono riassunti in una tabella indicante per ogni singolo livello di dose sperimentato il numero degli animali all'inizio dell'esperimento, il numero degli animali che presentano segni di tossicità, il numero degli animali trovati morti durante l'esperimento o sacrificati per motivi umanitari, una descrizione degli effetti tossici e, per lo studio principale, l'eventuale osservazione di una tossicità evidente connessa con il composto: il decorso nel tempo di qualsiasi effetto tossico ed i risultati della necropsia. Se la sopravvivenza supera un giorno, si procederà a calcolare e a registrare le variazioni di peso.

Gli animali sacrificati a causa di sofferenze dipendenti dal composto sono registrati sotto la voce «morti connesse con il composto».

3

## RELAZIONE

3.1

### RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni per lo studio di osservazione e lo studio principale:

- specie, ceppo, origine, condizioni ambientali, dieta, ecc.
- condizioni dell'esperimento,

- livelli di dosaggio (con veicolo, se utilizzato, e concentrazione);
- risultati esaurienti di tutti i livelli di dosaggio;
- tabulato dei dati risposta per sesso e livello di dosaggio (ad esempio numero di animali impiegati; variazioni del peso corporeo; eventualmente numero di animali morti o sacrificati nel corso dell'esperimento; numero di animali che presentano segni di tossicità; natura, gravità e durata degli effetti);
- velocità di insorgenza dei segni di tossicità e loro eventuale reversibilità;
- data in cui gli animali sono morti o sono stati sacrificati, data in cui è sopraggiunto il decesso dopo la somministrazione del dosaggio, motivi e criteri adottati per l'eutanasia degli animali;
- risultati dell'esame necroscopico;
- referti istopatologici;
- discussione dei risultati;
- interpretazione dei risultati inclusi i segni di una tossicità evidente e il livello di dosaggio discriminante individuato nell'esperimento.

## 3.2

## VALUTAZIONE A INTERPRETAZIONE

DOSAGGIO	RISULTATI	INTERPRETAZIONE
5 mg/kg p.c.	sopravvivenza inferiore al 100 %	composti ALTAMENTE TOSSICI
	sopravvivenza del 100 %, tossicità evidente	composti TOSSICI
	sopravvivenza del 100 %, nessuna tossicità evidente	vedi risultati a 50 mg/kg
50 mg/kg p.c.	sopravvivenza inferiore al 100 %	composti che possono risultare TOSSICI o ALTAMENTE TOSSICI. Vedi risultati a 5 mg/kg
	sopravvivenza del 100 %, tossicità evidente	composti NOCIVI
	sopravvivenza del 100 %, nessuna tossicità evidente	vedi risultati a 500 mg/kg
500 mg/kg p.c.	sopravvivenza inferiore al 100 %	composti che possono risultare TOSSICI o NOCIVI. Vedi risultati 50 mg/kg
	sopravvivenza del 100 %, tossicità evidente	composti considerati come non comportanti una tossicità acuta di rilievo
	sopravvivenza del 100 %; nessuna tossicità evidente	vedi risultati a 2 000 mg/kg
2 000 mg/kg p.c.	sopravvivenza inferiore al 100 %	vedi risultati a 500 mg/kg
	sopravvivenza del 100 % con o senza tossicità evidente	composti che non inducono una tossicità acuta

Vedi anche introduzione generale, parte B

## 4

## REFERENZE

Vedi introduzione generale parte B

## B.1 tris TOSSICITÀ ACUTA PER VIA ORALE — METODO DELLA CLASSE DI TOSSICITÀ ACUTA

## 1 METODO

## 1.1 Introduzione

Il metodo della classe di tossicità acuta fornisce informazioni per la valutazione e la classificazione dei rischi.

Il metodo utilizza tre dosi fisse, adeguatamente distinte in modo da consentire la classificazione della sostanza in base ai risultati dello studio. Inoltre la procedura descritta prevede la possibilità di scegliere tre dosi fisse supplementari, che possono essere utilizzate quale opzione alternativa in determinate fasi decisionali o per l'esecuzione di ulteriori esperimenti. L'utilizzo di (una di dette) dosi supplementari può essere previsto nei casi in cui sia auspicabile o necessaria una valutazione più accurata.

Il metodo, che utilizza dosi iniziali definite, non ha lo scopo di determinare una  $LD_{50}$  precisa, ma è inteso a stabilire un range di esposizione potenzialmente letale. La morte di una certa percentuale di animali costituisce infatti il principale parametro preso in esame dal saggio in questione. I risultati del test dovrebbero consentire una classificazione secondo i criteri enunciati nell'allegato VI. Dato l'approccio sequenziale del metodo, la durata del saggio potrebbe essere superiore a quella della procedura descritta al punto B.1. Il principale vantaggio di questo metodo è che esso richiede un minor numero di animali rispetto al metodo di tossicità orale acuta (B.1) e al metodo alternativo a dose fissa (B.1 bis).

Vedi anche introduzione generale, parte B.

## 1.2 Definizioni

Vedi introduzione generale, parte B.

## 1.3 Principio del metodo di saggio

La sostanza viene somministrata per via orale ad un gruppo di animali da laboratorio in una delle dosi definite. Essa viene saggiata secondo una procedura composta da diverse fasi, per ciascuna delle quali vengono utilizzati tre animali dello stesso sesso. Non è necessario eseguire uno studio di osservazione preliminare. Il fatto che in una fase si abbia o meno mortalità degli animali trattati indotta dalla sostanza determinerà la fase successiva:

- il saggio verrà sospeso
- la fase successiva sarà effettuata con lo stesso dosaggio, ma con animali dell'altro sesso
- la fase successiva sarà effettuata con il livello di dosaggio immediatamente superiore o inferiore

## 1.4 Descrizione del metodo di saggio

## 1.4.1 Preparazioni

Animali adulti giovani e sani vengono scelti in modo casuale, marchiati per consentirne l'individuazione e mantenuti nelle loro gabbie per almeno 5 giorni prima dell'inizio del saggio, in modo da potersi acclimatare alle condizioni di laboratorio. Gli animali possono essere raggruppati in funzione del sesso e del dosaggio, ma il numero di animali per gabbia non deve essere tale da impedire la corretta osservazione di ogni esemplare.

La sostanza da saggiare viene somministrata in un'unica dose mediante sonda gastrica o cannula per intubazione.

Se necessario, la sostanza da saggiare viene disciolta o sospesa in un veicolo adatto. Ove possibile, si preferirà una soluzione/sospensione acquosa, o, come seconda alternativa, una soluzione/emulsione in olio (per esempio olio di mais), o ancora, infine, una soluzione in altri veicoli. Per i veicoli non acquosi, le caratteristiche di tossicità del veicolo dovranno essere note o, in caso contrario, determinate prima del saggio.

Gli animali dovranno essere tenuti a digiuno prima della somministrazione della sostanza (a partire dalla sera precedente per il ratto e tre-quattro ore prima per il topo), ma potranno continuare ad essere abbeverati.

1.4.2 *Condizioni sperimentali*1.4.2.1 *Animali da esperimento*

Salvo controindicazione, il ratto è la specie d'elezione. Le femmine dovranno essere nullipare e non gravide.

All'inizio dello studio, la variazione di peso degli animali dovrà essere minima e non essere superiore al  $\pm 20$  per cento del peso medio per ogni sesso.

1.4.2.2 *Numero e sesso*

Per ogni fase del saggio vengono utilizzati tre animali dello stesso sesso. Nella fase iniziale può essere utilizzato uno qualsiasi dei due sessi.

1.4.2.3 *Livelli di dosaggio*

Il livello iniziale di dosaggio sarà una delle tre dosi fisse, vale a dire 25, 200 e 2 000 mg/kg di peso corporeo. La dose iniziale dovrà essere quella più suscettibile di cagionare la morte di almeno una parte degli animali trattati. In funzione della dose iniziale si utilizzerà uno degli schemi descritti nell'allegato 1.

Per la scelta del sesso e della dose iniziale dovranno essere utilizzate tutte le informazioni disponibili, comprese quelle concernenti le relazioni struttura-attività. Qualora, alla luce di tali informazioni, la mortalità risulti improbabile al livello massimo di dosaggio (2 000 mg/kg di peso corporeo), si potrà fare ricorso ad un saggio limite. In mancanza di informazioni su una sostanza da saggiare, per il benessere degli animali si raccomanda l'uso della dose iniziale di 200 mg/kg di peso corporeo.

In alcuni casi può essere opportuno acquisire più informazioni rispetto a quelle fornite dal saggio che prevede la somministrazione di tre dosi fisse di 25, 200 e 2 000 mg/kg di peso corporeo. In questa eventualità si potrà proseguire lo studio somministrando dosi supplementari fisse rispettivamente di 5, 50 o 500 mg/kg di peso corporeo.

Dovrà essere possibilmente evitata la somministrazione di dosaggi suscettibili di cagionare sofferenze gravi per effetto delle proprietà corrosive o irritanti delle sostanze.

L'intervallo di tempo che intercorre tra il trattamento dei diversi gruppi viene determinato in funzione dell'esordio, della durata e della gravità dei segni di tossicità. Si avrà cura di procedere al trattamento degli animali dell'altro sesso o alla somministrazione della dose successiva in un altro gruppo di animali solo una volta accertata la sopravvivenza degli animali precedentemente trattati.

1.4.2.4 *Saggio limite*

È possibile eseguire un saggio limite ad un unico livello di dosaggio di 2 000 mg/kg di peso corporeo su tre animali per sesso. Qualora si osservi una mortalità correlata con la sostanza, può essere necessario proseguire il saggio con una dose di 200 mg/kg (o 500 mg/kg) di peso corporeo.

1.4.2.5 *Periodo di osservazione*

Di norma gli animali devono essere tenuti in osservazione per un periodo di 14 giorni, eccetto nel caso in cui sia preferibile escluderli dallo studio e sottoporli ad eutanasia o qualora vengano rinvenuti morti. Tuttavia tale durata non deve essere tassativa. Essa dipenderà dalla natura delle reazioni tossiche, dalla velocità del loro insorgere e dalla durata del periodo di recupero e, se necessario, potrà essere prolungata. Un parametro importante è rappresentato dal momento della comparsa e della scomparsa dei segni di tossicità, soprattutto in caso di insorgenza tardiva. Tutte le osservazioni devono essere registrate su schede individuali per ogni animale.

1.4.3 *Procedimento*

Dopo il periodo di digiuno e prima della somministrazione della sostanza da saggiare, gli animali vengono pesati. A somministrazione avvenuta, il cibo può essere sospeso per altre 3-4 ore. Qualora la stessa dose venga frazionata e somministrata durante un certo periodo di tempo, può essere necessario nutrire e abbeverare gli animali in misura adeguata alla durata del periodo di somministrazione.

Il volume massimo di liquidi somministrabile in un'unica volta dipende dalla taglia dell'animale da esperimento. Nei roditori esso non dovrebbe essere superiore ad 1 ml/100 g di peso corporeo, tuttavia per le soluzioni acquose sono ammessi 2 ml/100 g di peso corporeo. La variabilità del volume di liquidi da somministrare dovrebbe essere ridotta al minimo correggendo la concentrazione in modo che tutti i livelli di dosaggio abbiano un volume costante. Qualora non sia possibile somministrare l'intera quantità con una singola dose, si procederà alla somministrazione ripetuta di piccole frazioni di essa durante un periodo non superiore a 24 ore.

Lo schema procedurale dettagliato è descritto nell'allegato 1.

**1.4.3.1 Osservazioni generali**

Accurate osservazioni cliniche dovranno essere effettuate almeno due volte nel giorno stesso della somministrazione, o più frequentemente se la reazione degli animali lo richiede, e successivamente almeno una volta al giorno. Gli animali moribondi o recanti segni gravi e persistenti di sofferenza dovranno essere sottoposti ad eutanasia. In questo caso esse saranno assimilate agli animali andati incontro a morte spontanea durante l'esperimento.

Nel caso di animali sottoposti ad eutanasia o rinvenuti morti, il momento del decesso dovrà essere registrato con la massima precisione possibile. Ulteriori osservazioni saranno necessarie qualora gli animali presentino segni persistenti di tossicità. Dette osservazioni comprenderanno le modificazioni della cute e del pelo, degli occhi e delle mucose, del sistema respiratorio e circolatorio, del sistema nervoso autonomo e centrale, dell'attività somatomotoria e del comportamento. Particolare attenzione sarà rivolta all'osservazione di tremori, convulsioni, salivazione, diarrea, letargia, sonno e coma.

Tutte le osservazioni saranno sistematicamente registrate su schede individuali per ogni animale.

**1.4.3.2 Peso corporeo**

Tutti gli animali saranno pesati poco prima della somministrazione della sostanza da saggiare e almeno una volta alla settimana successivamente. Le variazioni ponderali dovranno essere calcolate e registrate. Al termine del saggio gli animali sopravvissuti saranno pesati prima di essere sottoposti ad eutanasia.

**1.4.3.3 Necropsia macroscopica**

Tutti gli animali da esperimento, compresi quelli morti durante il saggio o da esso esclusi, dovranno essere sottoposti a necropsia macroscopica. Per ogni animale si registreranno tutte le modificazioni patologiche di rilievo. Per gli animali sopravvissuti per almeno 24 ore, l'esame microscopico degli organi recanti alterazioni patologiche evidenti potrebbe fornire indicazioni utili ed essere quindi opportuno.

**2 DATI**

Dovranno essere forniti i dati individuali di ciascun animale. Inoltre, tutti i dati dovranno essere riassunti in una tabella indicante, per ogni gruppo di saggio, il numero di animali utilizzati, il numero di animali recanti segni di tossicità, il numero di animali rinvenuti morti durante il saggio o sottoposti ad eutanasia, il momento del decesso di ciascun animale, la descrizione degli effetti tossici con indicazione del momento della loro comparsa, decorso e reversibilità, e i risultati della necropsia.

Indicazioni generali sull'interpretazione dei risultati ai fini della loro classificazione sono riportate nell'allegato 2.

**3 RELAZIONE****Relazione sul saggio**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

*Animali da esperimento*

- specie/ceppo,
- condizioni microbiologiche degli animali qualora siano note,
- numero, età e sesso degli animali,
- origine, condizioni di alloggiamento, dieta ecc.,
- peso di ciascun animale determinato all'inizio del saggio, con cadenza settimanale nel periodo successivo e al termine del saggio.

*Condizioni sperimentali*

- motivazione della scelta del veicolo utilizzato, se diverso dall'acqua,
- modalità precise di somministrazione della sostanza in esame, compresi i volumi di dosaggio e il momento della somministrazione,
- caratteristiche della qualità del cibo e dell'acqua (compresi tipo/origine, origine dell'acqua)
- motivazione della scelta del dosaggio iniziale.

*Risultati.*

- tabulato dei dati di risposta per sesso e livello di dosaggio per ciascun animale (vale a dire animali recanti segni di tossicità, mortalità compresa; natura, gravità e durata degli effetti),
- momento della comparsa dei segni di tossicità, loro decorso ed eventuale reversibilità per ogni animale;
- risultati della necropsia ed eventuali altri reperti istopatologici per ogni animale.

*Discussione dei risultati.**Conclusioni.*4. **RIFERIMENTI**

Il presente metodo corrisponde al metodo OCSE TG 423.

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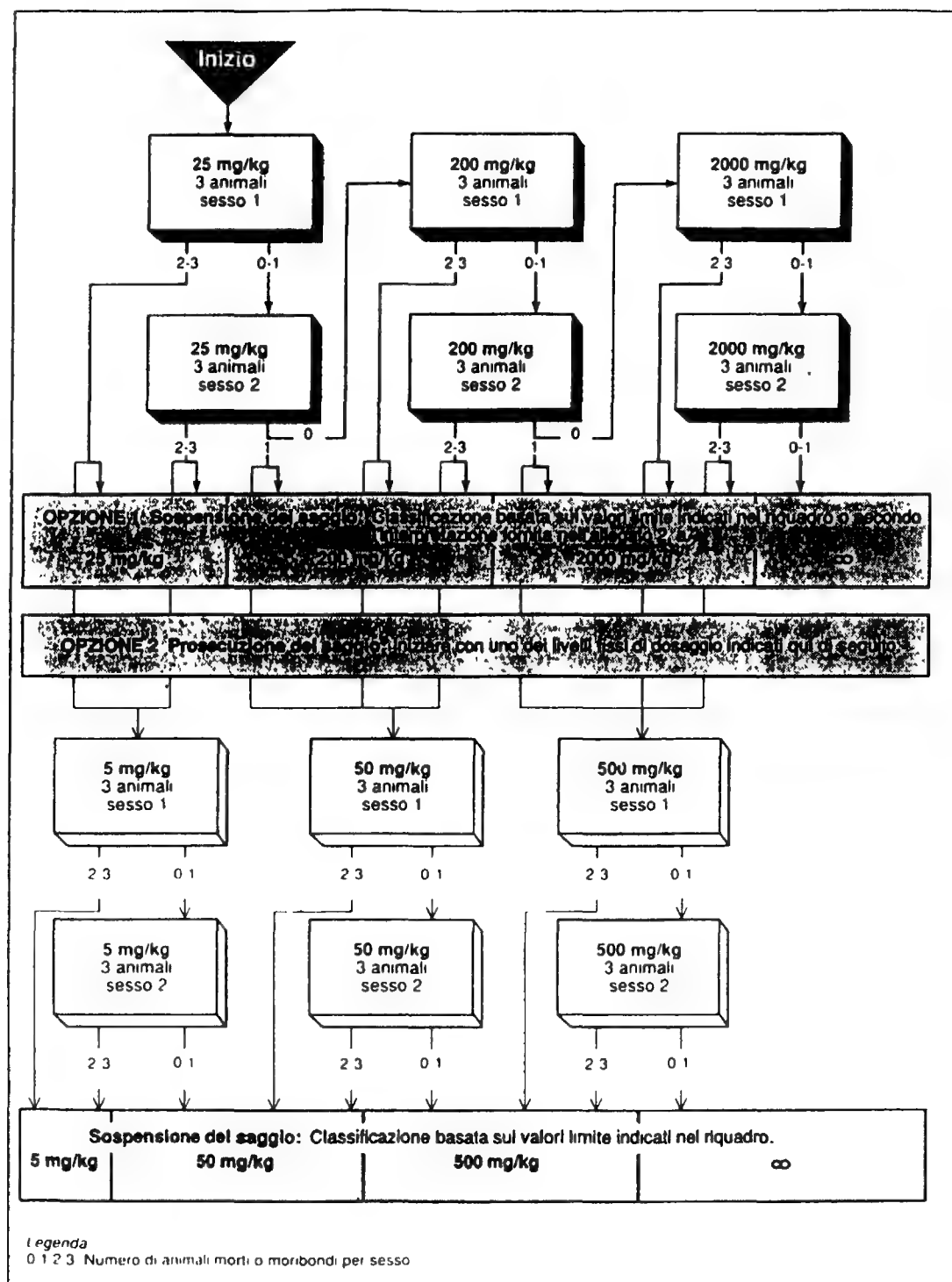


## ALLEGATO 1

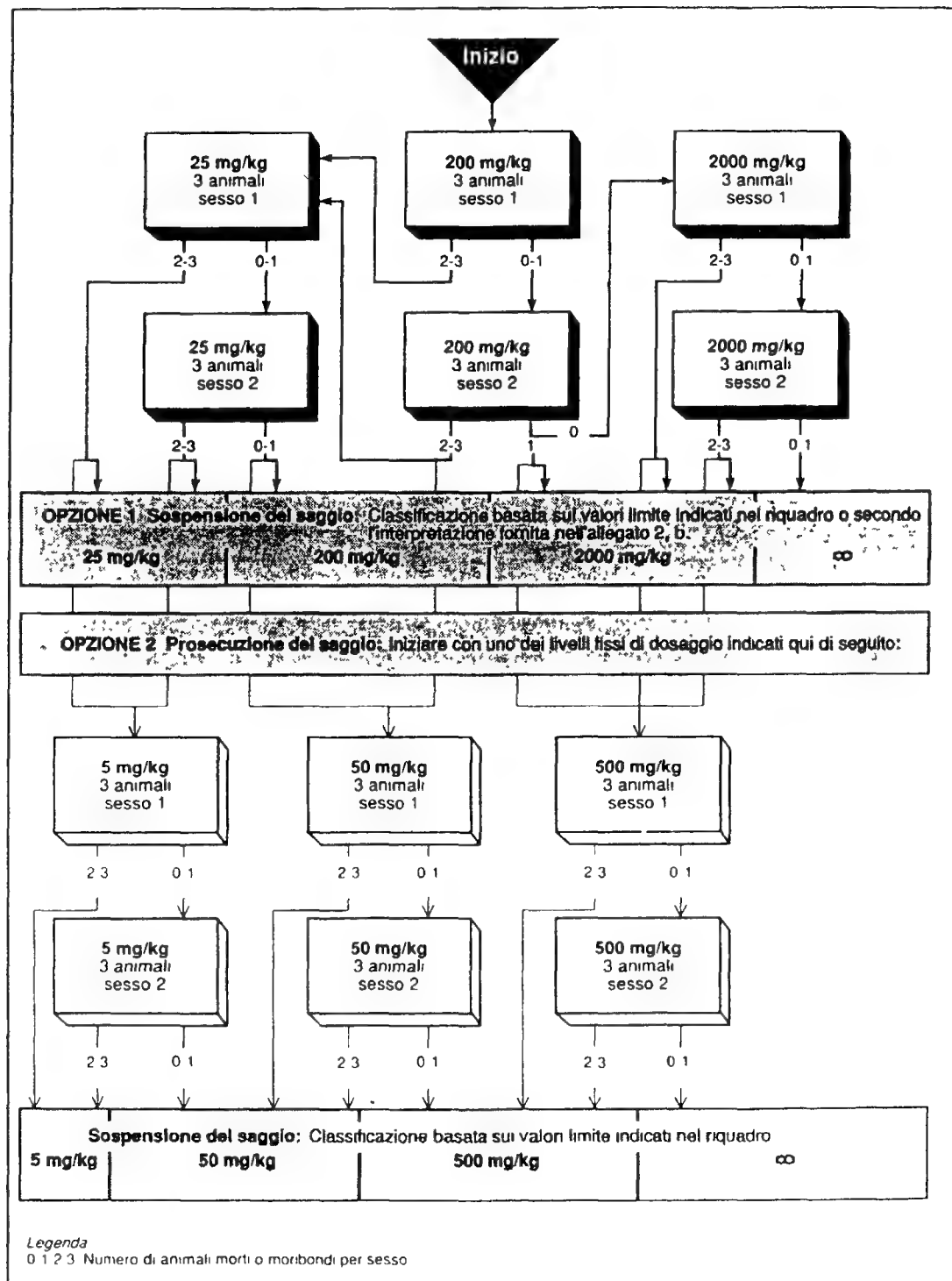
## SCHEMA PROCEDURALE

- 1 Come indicato al paragrafo 1.4.2.3, la dose iniziale dovrà essere quella più suscettibile di cagionare la morte di almeno una parte degli animali trattati. La scelta della dose iniziale sarà effettuata in funzione dei seguenti parametri:
  - dati concernenti le proprietà fisico-chimiche,
  - relazione struttura-attività,
  - tutti i dati forniti da altri saggi di tossicità, e
  - uso previsto della sostanza.
- 2 Per ogni dose iniziale, gli schemi riportati nel presente allegato definiscono il procedimento da seguire. In funzione del numero di animali morti o sottoposti ad eutanasia, il procedimento da seguire è indicato da frecce.
- 3 Nel caso in cui alla dose iniziale di 25 o 200 mg/kg di peso corporeo si riscontri il decesso di un solo animale del secondo sesso, di norma non dovranno essere effettuate altre somministrazioni. Tuttavia, qualora gli altri cinque animali non presentino segni di tossicità, al momento dell'autopsia si dovrà prendere in considerazione l'ipotesi che la morte non sia stata cagionata dalla sostanza. In tal caso, si dovrà proseguire l'esperimento con la somministrazione del dosaggio immediatamente superiore.
- 4 Nel caso in cui alla dose di 2.000 mg/kg di peso corporeo si riscontri il decesso di un animale per sesso, è lecito desumere che la  $DL_{50}$  sia superiore a 2.000 mg/kg di peso corporeo. Tuttavia, trattandosi di un risultato borderline, è opportuno osservare attentamente la risposta degli altri due animali per sesso: l'eventuale comparsa di segni chiari e marcati di tossicità in detti animali potrebbe infatti condurre ad una classificazione corrispondente ad una  $DL_{50}$  uguale o inferiore a 2.000 mg/kg di peso corporeo o giustificare l'esecuzione di ulteriori prove con il medesimo dosaggio.
- 5 Il procedimento prevede la possibilità di somministrare tre dosi fisse supplementari (opzione 2). Tale opzione può essere utilizzata per selezionare una dose alternativa in una determinata fase decisionale del saggio, o effettuare ulteriori esperimenti una volta ultimato il saggio in questione (opzione 1). Lo schema procedurale dell'opzione 1 è indicato da frecce in grassetto, quello dell'opzione 2 da frecce normali.

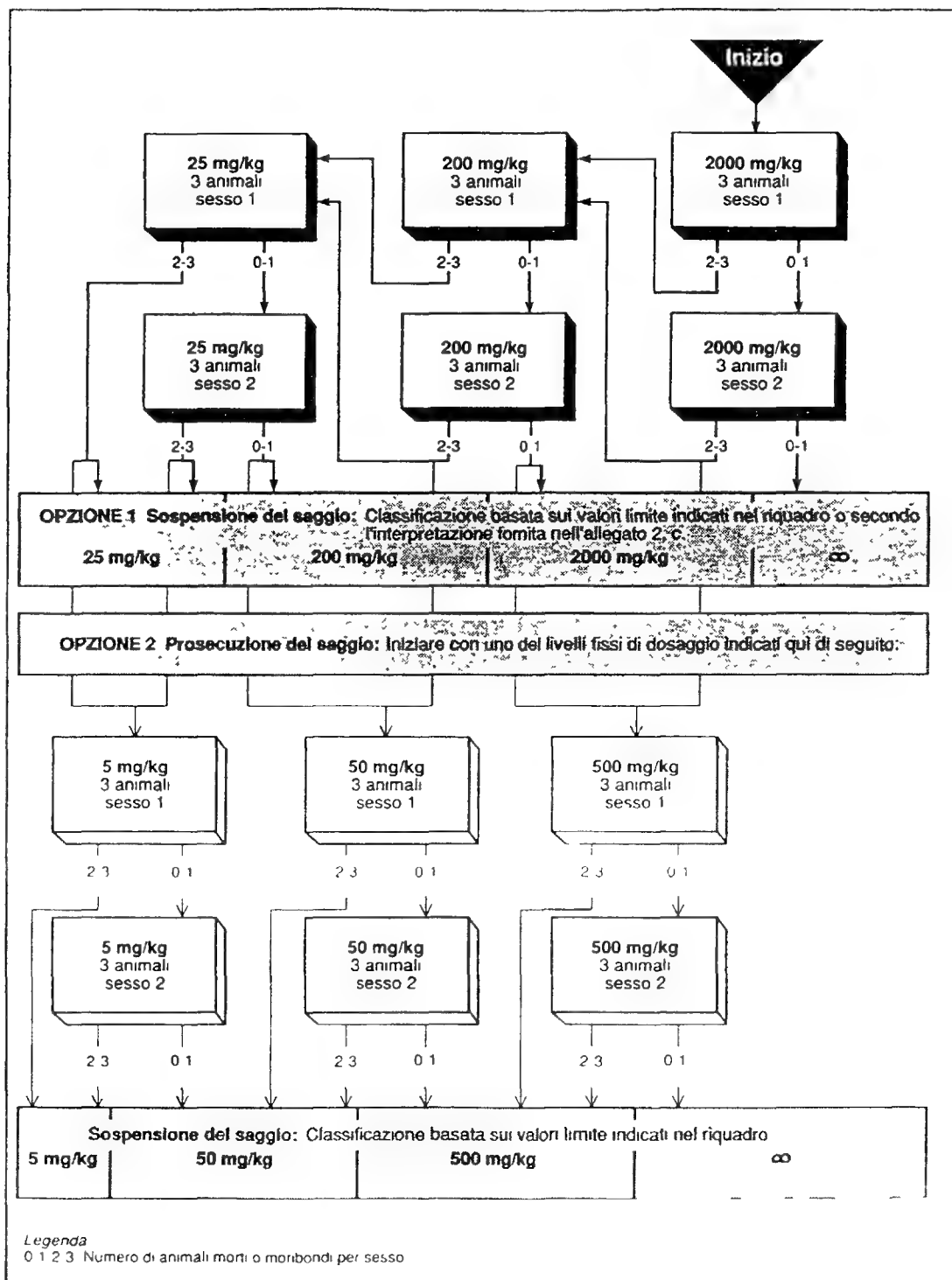
a) Schema procedurale con una dose iniziale di 25 mg/kg di peso corporeo



b) Schema procedurale con una dose iniziale di 200 mg/kg di peso corporeo



c) Schema procedurale con una dose iniziale di 2000 mg/kg di peso corporeo



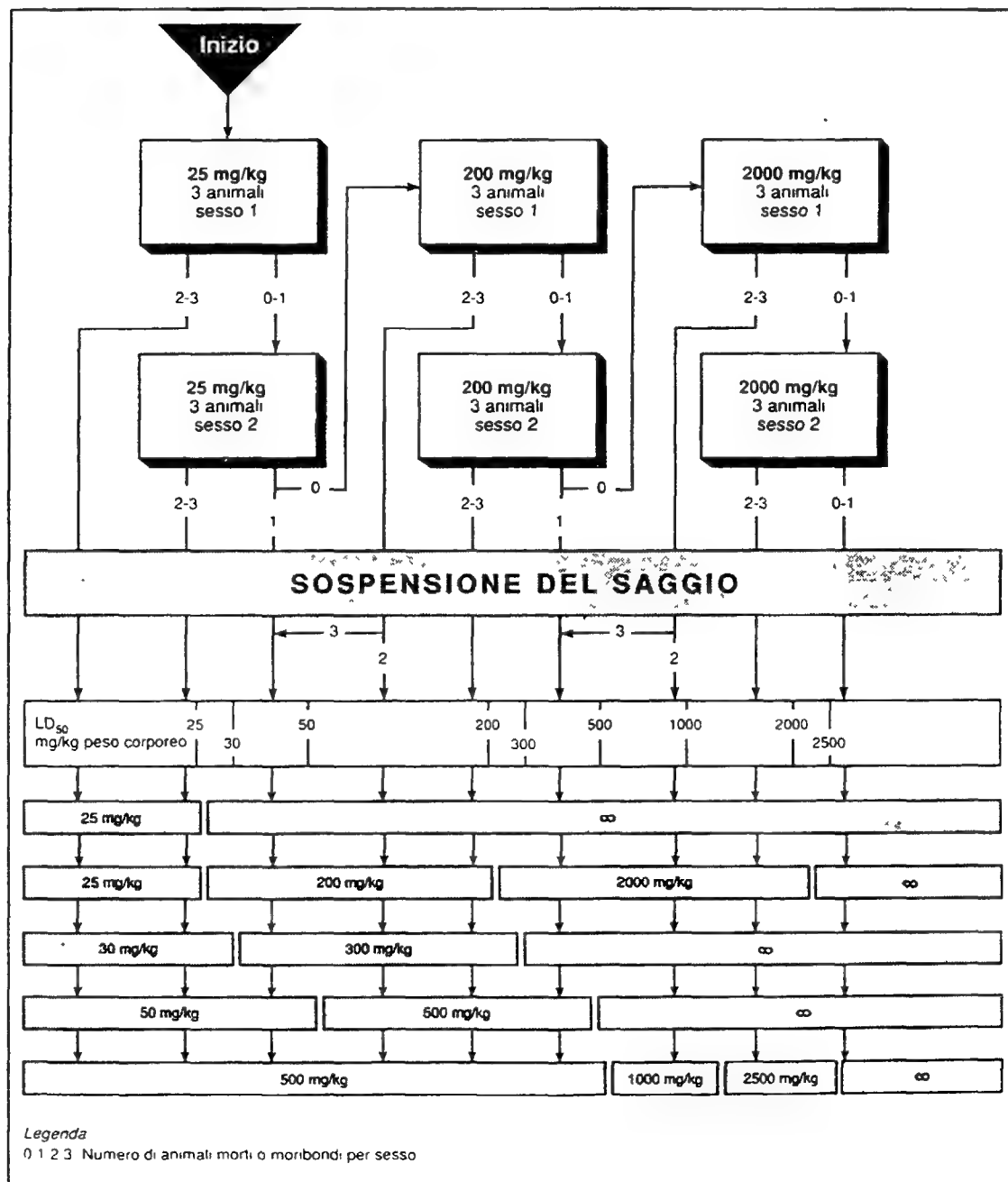
## ALLEGATO 2

## INTERPRETAZIONE DEI RISULTATI IN BASE AL PROCEDIMENTO PREVISTO DALL'OPZIONE 1

Negli schemi riportati nel presente allegato, i riquadri grigi posti sotto il riquadro «sospensione del saggio» recano i valori limite per la classificazione. Secondo lo schema procedurale previsto dall'opzione 1, si segue l'apposita freccia verso il basso fino a raggiungere il riquadro grigio appropriato.

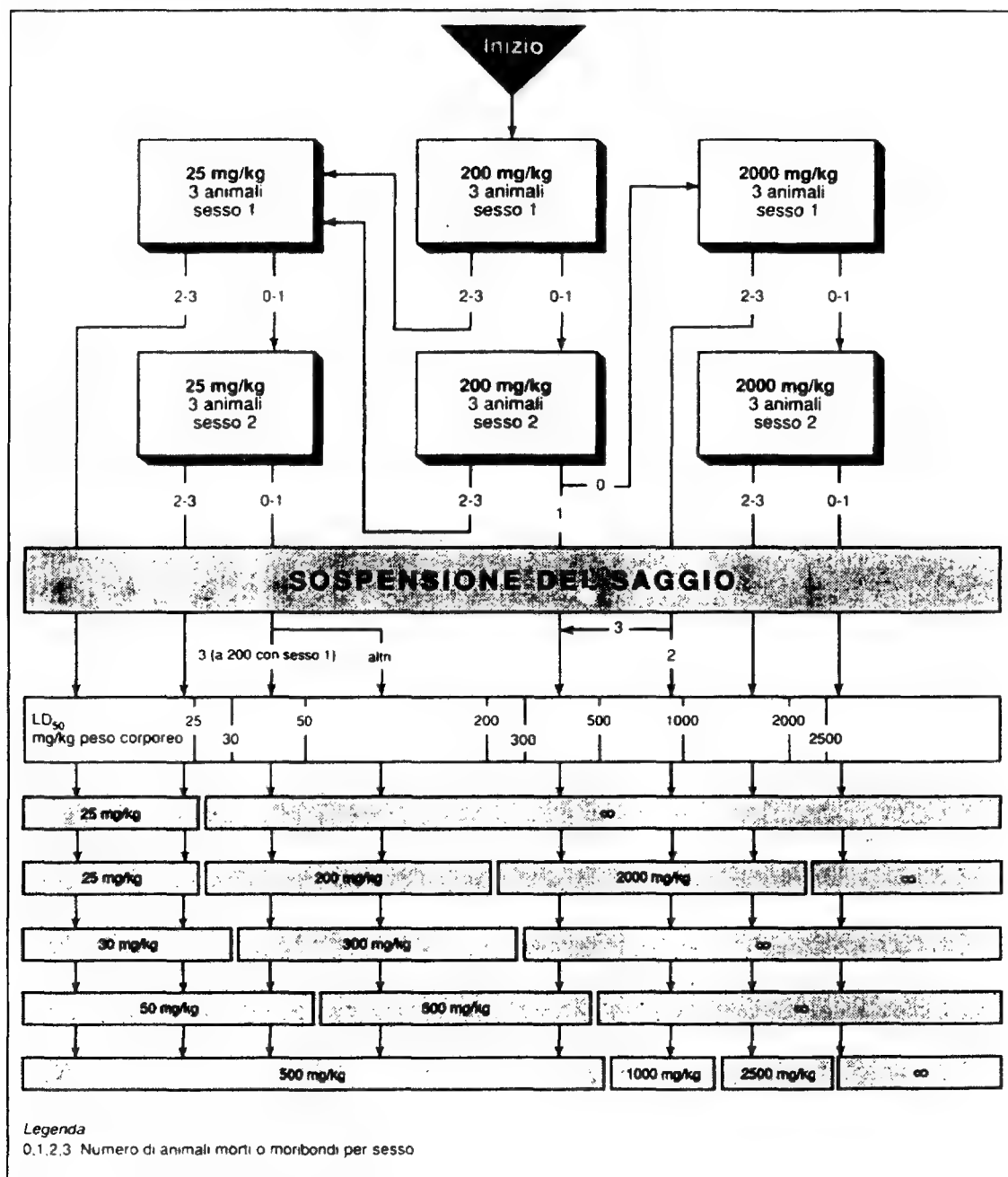
## a) Interpretazione dei risultati in base al procedimento previsto dall'opzione 1

Dose iniziale: 25 mg/kg di peso corporeo



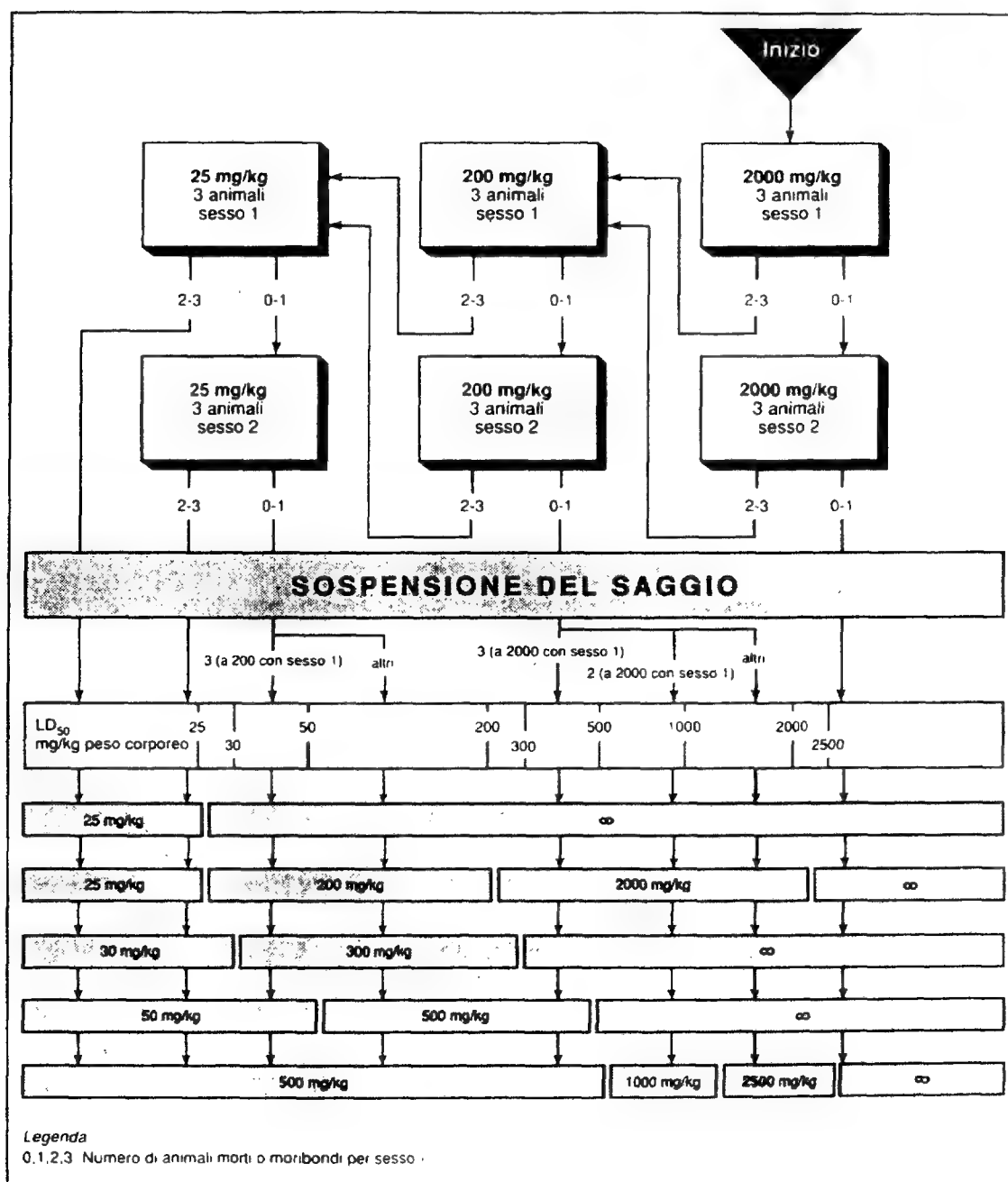
## b) Interpretazione dei risultati in base al procedimento previsto dall'opzione 1

Dose iniziale: 200 mg/kg di peso corporeo



## c) Interpretazione dei risultati in base al procedimento previsto dall'opzione 1

Dose iniziale: 2 000 mg/kg di peso corporeo



## B.2. TOSSICITÀ ACUTA PER INALAZIONE

## 1 METODO

## 1.1 INTRODUZIONE

È utile avere informazioni preliminari sulla distribuzione della dimensione delle particelle, la tensione di vapore, il punto di fusione, punto di ebollizione, il punto di infiammabilità e l'esplosività (se del caso) della sostanza.

Si veda anche introduzione generale, parte B

## 1.2. DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3. SOSTANZE DI RIFERIMENTO

Nessuna.

## 1.4. PRINCIPIO DEL METODO DI SAGGIO

Diversi gruppi di animali da esperimento sono esposti a concentrazioni graduate della sostanza in esame per un determinato periodo di tempo (una concentrazione per gruppo). Si procede poi all'osservazione degli effetti e degli eventi letali. Gli animali che muoiono durante l'esperimento sono sottoposti a necropsopia e quelli che sopravvivono sono sottoposti a necropsopia alla fine dell'esperimento.

Può essere necessario sopprimere umanamente gli animali che mostrano segni gravi e persistenti di sofferenza e di dolore. Non è necessario eseguire la somministrazione di dosi delle sostanze in esame in una maniera che può provocare dolore e sofferenza marcate a motivo di proprietà corrosive o gravemente irritanti.

## 1.5. CRITERI DI QUALITÀ

Nessuno.

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1. Preparazioni

Prima del saggio gli animali sono tenuti nelle condizioni di stabulazione e di alimentazione dell'esperimento per un periodo di almeno 5 giorni. Prima del saggio gli animali, che dovranno essere giovani adulti e sani sono scelti con metodo casuale e assegnati ai gruppi necessari per il saggio. Non è necessario sottoporre gli animali a una esposizione simulata, a meno che ciò non sia richiesto dal tipo di dispositivo utilizzato per l'esposizione.

Le sostanze di prova solide possono richiedere una micronizzazione allo scopo di ottenere particelle di dimensione appropriata.

Ove necessario, alla sostanza in esame può essere aggiunto un veicolo idoneo per facilitare una concentrazione appropriata della sostanza in esame nell'atmosfera e, in tal caso, deve essere utilizzato un gruppo di controllo per il veicolo. Se per facilitare il dosaggio si impiega un veicolo o altri additivi, questi non dovrebbero produrre effetti tossici. Se appropriato, possono essere utilizzati dati storici.

## 1.6.2. Condizioni per il saggio

1.6.2.1 *Animali da esperimento*

Salvo controindicazioni, il ratto è la specie d'elezione. Si dovrebbero utilizzare ceppi di laboratorio comunemente usati. Per ciascun sesso, all'inizio del saggio la variazione ponderale degli animali utilizzati non dovrebbe superare del  $\pm 20\%$  il valore medio.



1 6 2 2      *Numero e sesso*

Per ogni livello di concentrazione vengono utilizzati almeno dieci roditori (5 di sesso femminile e 5 di sesso maschile). Le femmine dovrebbero essere nullipare e non gravide.

*Nota:* nei saggi di tossicità acuta con animali di ordine superiore ai roditori, si dovrebbe prendere in considerazione l'uso di un numero minore di animali.

Le dosi devono essere accuratamente scelte e si deve fare ogni sforzo possibile per non superare dosi moderatamente tossiche. In tali prove si dovrebbe evitare la somministrazione di dosi letali della sostanza in esame.

1 6 2 3      *Concentrazioni di esposizione*

Queste dovranno essere in numero sufficiente, almeno tre, e opportunamente intervallate, onde produrre nei gruppi trattati una graduazione di effetti tossici e di mortalità. I risultati dovrebbero essere sufficienti per fornire una curva mortalità-concentrazione e, quando possibile, permettere un'accettabile determinazione della  $CL_{50}$ .

1 6 2 4      *Saggio limite*

Se un'esposizione di 5 animali maschi e di 5 animali femmine da esperimento per 4 ore a 20 mg/l di un gas o 5 mg/l di un aerosol o di una sostanza particellata (o, se ciò non è possibile, a causa di proprietà fisiche o chimiche, comprese quelle esplosive della sostanza in esame, alla concentrazione massima raggiungibile) non provoca entro 14 giorni mortalità legata al composto in esame, si può considerare che non sono necessarie ulteriori prove.

1.6.2.5 *Tempo di esposizione*

Il periodo di esposizione dovrà essere di 4 ore

1.6.2.6 *Attrezzatura*

Gli animali dovranno essere sottoposti all'esperimento con dispositivi per l'inalazione appositamente progettati per consentire un flusso d'aria dinamico di almeno 12 ricambi d'aria all'ora, per assicurare un adeguato contenuto di ossigeno e un'atmosfera di esposizione distribuita uniformemente. Qualora sia usata una camera, essa dovrà essere progettata in modo da evitare l'affollamento degli animali, da esperimento e al tempo stesso rendere massima l'esposizione alla sostanza in esame mediante inalazione. Come regola generale, onde garantire la stabilità dell'atmosfera nella camera, il «volume» complessivo degli animali del saggio non dovrebbe superare il 5 % di quello della camera di saggio. Si può ricorrere ad una esposizione oro-nasale, della sola testa o di tutto il corpo in camera singola; le prime due modalità di esposizione aiuteranno a rendere minimo l'assorbimento delle sostanze attraverso altre vie.

1.6.2.7 *Periodo di osservazione*

Il periodo di osservazione dovrebbe essere di almeno 14 giorni. Tuttavia la durata dell'osservazione non dovrebbe essere fissata rigidamente. Essa dovrebbe essere determinata dalla natura delle reazioni tossiche, dalla velocità del loro insorgere e dalla durata del periodo di recupero; essa può, quindi, essere estesa se considerato necessario. Il momento in cui si manifestano e scompaiono i sintomi di tossicità e quello nel quale interviene il decesso, sono importanti, soprattutto quando la sostanza tenda a causare mortalità ritardata.

1.6.3. *Procedimento*

Gli animali sono pesati poco prima dell'esposizione e quindi esposti alla concentrazione di saggio nell'apposito dispositivo, per un periodo di 4 ore, dopo aver effettuato l'equilibramento della concentrazione nella camera di inalazione. Il tempo di equilibramento dovrebbe essere breve. Il saggio dovrebbe essere effettuato ad una temperatura di  $22\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$ . Da un punto di vista ottimale l'umidità relativa dovrebbe essere mantenuta tra il 30 e il 70 % ma, in taluni casi (ad esempio, prove di aerosol), ciò può non essere realizzabile. Mantenendo una pressione leggermente negativa all'interno della camera ( $\geq 5$  mm di acqua) si impedirà un trafilamento della sostanza in esame nell'area circostante. Durante l'esposizione, la somministrazione di cibo e acqua deve essere sospesa. Si devono usare sistemi adatti per la generazione e il controllo dell'atmosfera d'esame. Il sistema dovrà assicurare che condizioni di esposizione stabili vengano realizzate il più rapidamente possibile. La camera deve essere progettata e fatta funzionare in modo da mantenere una distribuzione omogenea dell'atmosfera sperimentale all'interno della camera.

Si dovranno misurare o controllare

(a) la velocità del flusso d'aria (in continuo)

(b) la concentrazione effettiva della sostanza in esame misurata nella zona di respirazione almeno tre volte durante l'esposizione (alcune atmosfere, per esempio aerosol ad alta concentrazione, possono richiedere un controllo più frequente). Durante il periodo di esposizione, la concentrazione non dovrebbe variare più del  $\pm 15\%$  del valore medio. Tuttavia nel caso di alcuni aerosol questo livello di regolazione può non essere realizzabile, e in tal caso è accettabile un intervallo più ampio. Per gli aerosol, si deve eseguire con la frequenza necessaria (almeno una volta per gruppo di prova) l'analisi della dimensione delle particelle

(c) temperatura e umidità, in continuo se possibile

Durante e dopo l'esposizione, si procede all'effettuazione e alla registrazione sistematica delle osservazioni effettuate, registrazioni individuali dovranno essere tenute per ciascun animale. Durante il primo giorno le osservazioni dovrebbero essere frequenti. Un attento esame clinico dovrà essere effettuato almeno una volta al giorno per cinque giorni per settimana. Altre osservazioni dovranno essere effettuate quotidianamente con azioni appropriate per minimizzare la perdita di animali da studiare, ad esempio necropsia e refrigerazione degli animali trovati morti e isolamento o sacrificio degli animali deboli e moribondi.

Le osservazioni dovrebbero comprendere le alterazioni della cute e del pelo, degli occhi, delle membrane mucose e del sistema respiratorio, circolatorio, nervoso autonomo e centrale, dell'attività somatomotoria e del comportamento dell'animale. Particolare attenzione dovrebbe essere rivolta all'osservazione del comportamento respiratorio, di tremori, convulsioni, salivazione, diarrea, letargia, sonno e coma. Il momento in cui sopraggiunge il decesso dell'animale dovrà essere registrato con la massima precisione possibile. I valori ponderali degli animali dovranno essere determinati settimanalmente dopo l'esposizione e al momento del decesso.

Gli animali che muoiono durante il saggio e quelli che sopravvivono a conclusione dello stesso sono sottoposti a necropsia con particolare riferimento alle alterazioni del tratto respiratorio superiore e inferiore. Si dovranno registrare tutti i cambiamenti patologici macroscopici. Ove del caso, i tessuti dovrebbero essere prelevati per l'esame istopatologico.

2

## DATI

I dati dovranno essere riassunti in una tabella indicante per ogni gruppo di saggio il numero di animali all'inizio del saggio, il momento del decesso di ciascun animale, il numero di animali che presentano altri sintomi di tossicità, la descrizione degli effetti tossici e i risultati della necropsia. Le variazioni ponderali devono essere calcolate e registrate quando la sopravvivenza sia superiore ad un giorno. Gli animali che sono soppressi per motivi umanitari in conseguenza di sofferenze e dolore dovuti al composto sono registrati come morti dovute al composto. La  $CL_{50}$  dovrà essere determinata con un metodo riconosciuto. La valutazione dei dati dovrà comprendere il rapporto, se esistente, tra l'esposizione degli animali alla sostanza in esame e l'incidenza e gravità di tutte le alterazioni incluse quelle comportamentali e cliniche, le lesioni macroscopiche, le variazioni del peso corporeo, la mortalità e qualsiasi altro effetto tossico.

3

## RELAZIONE

3.1

### RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- specie, ceppo, origine degli animali, condizioni ambientali, dieta ecc.,
- condizioni del saggio.

descrizione dell'apparecchiatura usata per l'esposizione, incluso il modello, il tipo, le dimensioni, la sorgente d'aria, il sistema per la generazione degli aerosol, il metodo di condizionamento dell'aria e il metodo di alloggiamento degli animali nella camera di prova quando questa venga usata. Si dovrà descrivere anche l'apparecchiatura per la misura della temperatura, dell'umidità e della concentrazione di aerosol e della distribuzione delle dimensioni delle particelle di aerosol.

Dati sull'esposizione

Questi dati dovranno essere raccolti in tabelle e presentati con i valori medi e con una misura di variabilità (ad esempio, deviazione standard) e dovranno, se possibile, includere:

- (a) velocità del flusso d'aria attraverso l'apparecchiatura di inalazione,
- (b) temperatura e umidità dell'aria,

- (c) concentrazioni nominali (quantitativo totale della sostanza in esame introdotta nel dispositivo per l'inalazione diviso per il volume d'aria);
- (d) natura dell'eventuale veicolo, se usato;
- (e) concentrazioni effettive nella zona di respirazione;
- (f) il diametro aerodinamico mediano in massa (DAMM) e la deviazione standard geometrica (DSG);
- (g) periodo di equilibratura;
- (h) periodo di esposizione;
- tabulazione dei dati di risposta per sesso e per livello di esposizione (cioè il numero di animali morti o sacrificati durante la prova; il numero di animali che presentano sintomi di tossicità; numero di animali esposti);
- momento della morte durante o dopo l'esposizione, ragioni e criteri usati per la eutanasia di animali;
- tutte le osservazioni;
- $CL_{50}$  per ciascun sesso determinata alla fine del periodo di osservazione (specificando il metodo di calcolo);
- intervallo di confidenza statistica del 95 % per la  $CL_{50}$  (quando questo possa venire fornito);
- curve dose-mortalità e relativo coefficiente angolare (se il metodo di determinazione lo permette);
- risultati dell'esame necroscopico;
- qualsiasi risultato istopatologico;
- discussione dei risultati (particolare attenzione deve essere dedicata all'effetto che la eutanasia di animali durante la prova può avere sul valore calcolato della  $CL_{50}$ );
- interpretazione dei risultati.

### 3.2. VALUTAZIONE E INTERPRETAZIONE

Vedi introduzione generale, parte B

### 4. BIBLIOGRAFIA

Vedi introduzione generale, parte B

## B.3. TOSSICITÀ ACUTA PER VIA CUTANEA

## 1 METODO

## 1.1 INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2. DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3 SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

La sostanza in esame viene applicata a livelli di dose graduati, un livello di dose per gruppo, sulla cute di vari gruppi di animali di saggio. Si procede poi all'osservazione degli effetti e degli eventi letali. Gli animali morti o sacrificati durante il saggio sono sottoposti a necropsopia e i sopravvissuti lo sono a conclusione del saggio.

Può essere necessario sottoporre a eutanasia gli animali che mostrano segni gravi e persistenti di sofferenza e di dolore, non bisogna eseguire la somministrazione di dosi delle sostanze in esame in una maniera che notoriamente provoca dolore e sofferenza marcate a motivo delle proprietà corrosive o gravemente irritanti.

## 1.5 CRITERI DI QUALITÀ

Nessuno

## 1.6 DESCRIZIONE DEL METODO ADOTTATO PER IL SAGGIO

## 1.6.1 Preparazioni

Per almeno cinque giorni prima dell'esperimento, gli animali sono tenuti nelle gabbie usate per il saggio nelle stesse condizioni di stabulazione e di alimentazione dell'esperimento. Prima del saggio, gli animali che dovranno essere giovani adulti e sani, sono scelti con metodo casuale e assegnati ai gruppi sperimentali. Circa 24 ore prima del saggio, si effettua il taglio o la rasatura del pelo nella parte dorsale del corpo della cavia. Durante le operazioni di taglio o rasatura, si deve badare a non ledere la cute dell'animale per evitarne l'abrasione che potrebbe alterarne la permeabilità. Si dovrà preparare almeno il 10 % della superficie corporea per l'applicazione della sostanza in esame. Le sostanze solide, che potranno essere eventualmente ridotte in polvere, dovrebbero essere inumidite con acqua o, se necessario, con un veicolo adatto ad assicurare un buon contatto con la cute. Se viene utilizzato un veicolo, si dovrà tener conto dell'influenza dello stesso sulla penetrazione cutanea della sostanza in esame. Le sostanze liquide generalmente vengono saggiate senza diluizione.

## 1.6.2 Condizioni del saggio

## 1.6.2.1 Animali da esperimento

Possono essere utilizzati ratti o conigli adulti. Si possono utilizzare altre specie animali, ma il loro uso dovrebbe essere giustificato. Dovrebbero essere utilizzati ceppi di laboratorio comunemente usati. Per ciascun sesso, all'inizio della prova l'intervallo di variazione del peso degli animali utilizzati non dovrebbe essere superiore a  $\pm 20\%$  del valore medio.

1.6.2.2. *Numero e sesso*

Per ciascun saggio vengono usati almeno 5 animali a ciascun livello di dosaggio. Essi dovrebbero essere tutti dello stesso sesso. Se si usano femmine, dovrebbero essere nullipare e non gravide. Nel caso siano disponibili informazioni che dimostrano che un sesso è nettamente più sensibile, si dovrebbero usare animali di questo sesso.

*Nota:* nei saggi di tossicità acuta con animali di ordine superiore ai roditori, si dovrà prendere in considerazione l'uso di un numero minore di animali. Le dosi devono essere accuratamente scelte e si deve fare ogni sforzo possibile per non superare dosi moderatamente tossiche. In tali prove si dovrebbe evitare la somministrazione di dosi letali della sostanza in esame.

1.6.2.3. *Livelli di dosaggio*

Questi dovranno essere in numero sufficiente, almeno 3, e adeguatamente intervallati per produrre uno spettro di effetti tossici e di tassi di mortalità. Nel decidere i dosaggi occorre tener presente qualsiasi effetto irritante o corrosivo. I dati dovrebbero essere sufficienti per ottenere una curva dose-risposta e, quando possibile, permettere una determinazione accettabile della  $DL_{50}$ .

1.6.2.4. *Saggio limite*

Si può eseguire un saggio limite ad un livello di dosaggio di almeno 2 000 mg/kg peso corporeo su un gruppo di 5 animali maschi e 5 femmine usando le procedure sopra descritte. Se si produce una mortalità dovuta al composto, può essere necessario considerare uno studio completo.

1.6.2.5. *Periodo di osservazione*

Il periodo di osservazione dovrebbe essere almeno di 14 giorni. Tuttavia tale durata non è tassativa. Essa dovrebbe dipendere dalla natura delle reazioni tossiche, dalla velocità della loro insorgenza e dalla lunghezza del periodo di guarigione; se necessario, quindi, essa potrà essere prolungata. Il momento in cui compaiono e spariscono i sintomi di tossicità, la loro durata e il momento in cui interviene il decesso, sono importanti soprattutto nel caso in cui la sostanza tenda a causare mortalità ritardata.

1.6.3. *Procedimento*

Ogni gabbia deve contenere un solo animale. La sostanza in esame dovrà essere applicata uniformemente su una superficie pari a circa il 10 % della superficie corporea totale. Per le sostanze altamente tossiche, la superficie può essere inferiore, ma dovrà essere ricoperta da uno strato per quanto possibile sottile e uniforme.

Durante il periodo di esposizione di 24 ore, le sostanze in esame dovranno essere tenute a contatto diretto della cute mediante una garza porosa e un cerotto non irritante. La parte su cui viene applicata la sostanza dovrebbe essere ulteriormente coperta in modo opportuno per tenere ferma la garza e la sostanza in esame e assicurare che gli animali non ingeriscano la sostanza stessa. Dispositivi per la limitazione dei movimenti possono essere usati per impedire agli animali di ingerire la sostanza in esame, ma l'immobilizzazione completa non è consigliabile.

Alla fine del periodo di esposizione si dovrà rimuovere la sostanza residua utilizzando acqua, se possibile, o altri prodotti idonei per la pulizia della pelle.

Le osservazioni dovranno essere registrate sistematicamente non appena fatte, badando a tenere separati i dati per ciascun animale. Durante il primo giorno le osservazioni dovranno essere frequenti. Un attento esame clinico dovrà essere effettuato almeno una volta al giorno per 5 giorni per settimana. Le altre osservazioni dovrebbero essere effettuate quotidianamente, agendo appropriatamente per minimizzare la perdita di animali da studiare, ad esempio necropsia o refrigerazione degli animali trovati morti e isolamento o sacrificio degli animali deboli o moribondi.

Le osservazioni dovrebbero tener conto delle alterazioni riscontrate nel pelo, nella cute trattata, negli occhi e nelle membrane mucose e anche nel sistema respiratorio, circolatorio, nel sistema nervoso autonomo e centrale, nell'attività somatomotoria e nel comportamento dell'animale. Particolare attenzione dovrebbe essere rivolta all'osservazione di tremori, convulsioni, salivazione, diarrea, letargia, sonno e coma. Il momento in cui muoiono durante il saggio e quelli che sopravvivono alla fine del saggio sono sottoposti a necropsia. Tutte le variazioni patologiche macroscopiche dovranno essere registrate. Ove del caso, dovrebbero essere prelevati tessuti per l'esame istopatologico.

*Valutazione della tossicità nell'altro sesso*

Dopo il completamento dello studio su un sesso, si somministra almeno un intervallo di dose ad un gruppo di 5 animali dell'altro sesso per controllare che gli animali di questo sesso non siano nettamente più sensibili alla sostanza in esame. In circostanze particolari può essere giustificato l'uso di un minor numero di animali. Nel caso in cui siano disponibili informazioni adeguate che dimostrano che gli animali del sesso controllato sono nettamente più sensibili, si può fare a meno di effettuare la prova su animali dell'altro sesso.

2

**DATI**

I risultati dovranno essere riassunti in forma tabellare indicante per ogni singolo gruppo di saggio il numero di animali presenti all'inizio del saggio, il momento del decesso di ciascun animale, il numero di animali che presentano altri segni di tossicità, la descrizione degli effetti tossici e i risultati della necropsia. Il peso di ciascun animale dovrà essere determinato e registrato poco prima dell'applicazione della sostanza, poi settimanalmente e al momento del decesso; le variazioni ponderali dovranno essere calcolate e registrate quando la sopravvivenza sia superiore a un giorno.

Gli animali che vengono sottoposti ad eutanasia in conseguenza di sofferenza e dolore dovuti al composto vengono registrati come morti in conseguenza del composto. La  $DL_{50}$  può essere determinata con un metodo riconosciuto.

La valutazione dei dati dovrebbe includere il rapporto, se esistente, tra l'esposizione degli animali alla sostanza in esame e l'incidenza e gravità di tutte le alterazioni, incluse quelle comportamentali e cliniche, le lesioni macroscopiche, le variazioni del peso corporeo, la mortalità e qualsiasi altro effetto tossico.

3

**RELAZIONE**

3.1

**RELAZIONE SUL SAGGIO**

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- specie, ceppo, origine degli animali, condizioni ambientali, dieta, ecc.,
- condizioni sperimentali (inclusa la tecnica di pulizia della cute e il tipo di medicazione, occlusiva o non occlusiva),
- livelli di dosaggio (col veicolo, se usato, e concentrazione);
- sesso degli animali sottoposti a somministrazione,
- tabulato dei dati di risposta per dose e livello di dosaggio (cioè il numero di animali morti o sacrificati durante la prova, numero di animali che presentano sintomi di tossicità, numero di animali esposti),
- tempo intercorso tra la somministrazione della sostanza e la morte, ragioni e criteri usati per la eutanasia di animali,
- tutte le osservazioni,
- valore della  $DL_{50}$  per il sesso sottoposto ad uno studio completo, determinato dopo 14 giorni, specificando il metodo di determinazione;
- intervallo di confidenza statistica del 95 % per la  $DL_{50}$  (se può essere fornito),
- curva dose-mortalità e relativo coefficiente angolare (se il metodo di determinazione lo consente),
- risultati necroscopici,
- qualsiasi altro reperto istopatologico,
- risultati di eventuali saggi sull'altro sesso,
- discussione dei risultati (occorre dedicare una particolare attenzione all'effetto che la eutanasia di animali durante la prova può avere sul valore calcolato della  $DL_{50}$ ),
- interpretazione dei risultati.

3.2

**VALUTAZIONE E INTERPRETAZIONE**

Vedi introduzione generale, parte B.

4

**BIBLIOGRAFIA**

Vedi introduzione generale, parte B.

## B.4. TOSSICITÀ ACUTA (IRRITAZIONE CUTANEA)

## 1. METODO

## 1.1. INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2. DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3. SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4. PRINCIPIO DEL METODO DI SAGGIO

*Considerazioni iniziali*

Una attenta considerazione deve essere dedicata a tutte le informazioni disponibili su una sostanza per minimizzare i controlli su sostanze in condizioni che hanno elevate probabilità di produrre gravi reazioni. Nella valutazione se sia pertinente un saggio completo, uno studio su animale singolo o la non esecuzione di ulteriori prove, possono essere utili le seguenti informazioni.

- i) Proprietà chimico-fisiche e reattività chimica. Le sostanze fortemente acide o alcaline (pH dimostrato minore o uguale a 2 o maggiore o uguale a 11,5, per esempio) possono non richiedere il controllo dell'irritazione cutanea primaria se ci si possono attendere proprietà corrosive. Deve essere tenuta presente inoltre la riserva alcalina o acida.
- ii) Se sono disponibili prove convincenti di effetti gravi in prove convalidate *in vitro*, può non essere necessario un saggio completo.
- iii) Risultati di studi di tossicità acuta. Se è stata condotta una prova della tossicità acuta per via cutanea con la sostanza al livello di dosaggio della prova limite (2 000 mg/kg di peso corporeo), e non si è osservata irritazione cutanea, possono essere superflue ulteriori prove. In aggiunta, è superfluo eseguire le prove su materiali che si sono dimostrati fortemente tossici per via cutanea.

La sostanza da saggiare viene applicata in dose unica sulla cute di alcuni animali da esperimento, ognuno dei quali funge come proprio controllo. Dopo un determinato intervallo, si osserva e valuta il grado di irritazione, che viene ulteriormente descritto per fornire una completa valutazione degli effetti. La durata delle osservazioni dovrebbe essere sufficiente per valutare completamente la reversibilità degli effetti osservati.

Può essere necessario sopprimere umanitariamente animali che presentino segni gravi e perduranti di sofferenza e dolore.

## 1.5. CRITERI DI QUALITÀ

Nessuno.

## 1.6. DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1. Preparazioni

Circa 24 ore prima del saggio, si dovrebbe effettuare il taglio o la rasatura del pelo nella parte dorsale del corpo dell'animale.

Durante le operazioni di taglio o rasatura, si dovrebbe badare a non ledere la cute dell'animale. Si dovrebbero utilizzare soltanto animali con cute sana e intatta.



Alcuni ceppi di coniglio hanno delle isolette di pelo dense che sporgono maggiormente in certi periodi dell'anno. Le sostanze in esame non devono essere applicate a queste zone di crescita densa del pelo.

Le sostanze da saggiare che sono solide (che potranno essere eventualmente ridotte in polvere, se necessario), dovranno essere inumidite con acqua o, se necessario, con un veicolo adatto per assicurare un buon contatto con la cute. Nell'utilizzare un veicolo, si dovrà tener conto dell'influenza dello stesso sull'irritazione cutanea causata dalla sostanza in esame. Di norma, le sostanze liquide sono usate senza diluizione.

## 1.6.2. Condizioni di saggio

### 1.6.2.1. Animali da esperimento

Sebbene si possano usare parecchie specie di mammiferi, il coniglio albino è la specie preferibile.

### 1.6.2.2. Numero di animali

Se dai risultati di saggi di preselezione *in vitro* o sulla base di altre considerazioni si sospetta che la sostanza possa produrre necrosi (cioè essere corrosiva), si dovrebbe prendere in considerazione l'esecuzione della prova su un animale singolo. Se i risultati di questo saggio non indicano corrosività, il saggio deve essere completato utilizzando almeno due animali addizionali.

Per il saggio completo, si utilizzano almeno 3 animali adulti sani. Non sono richiesti animali separati per un gruppo testimone non trattato. Animali addizionali possono essere necessari per chiarire risposte dubbie.

### 1.6.2.3. Livelli di dosaggio

Salvo controindicazioni, sulla parte prescelta si applicano 0,5 ml di sostanza liquida oppure 0,5 g di sostanza solida o semisolida. Le zone cutanee adiacenti non trattate di ciascun animale servono come controllo per il saggio.

### 1.6.2.4. Periodo di osservazione

Il periodo di osservazione non va fissato in modo rigido. Esso dovrebbe essere sufficiente per valutare completamente la reversibilità degli effetti osservati, ma normalmente non è necessario superare i 14 giorni dall'applicazione.

## 1.6.3. Procedimento

Ogni gabbia dovrà contenere un solo animale. La sostanza da saggiare dovrà essere applicata su una piccola area (di circa 6 cm<sup>2</sup>) della cute e ricoperta da una garza assicurata con un cerotto non irritante. In caso di sostanze liquide o di alcune paste può essere necessario applicare la sostanza sulla garza e successivamente applicare questa sulla cute. Per tutto il periodo di esposizione, la garza deve essere mantenuta blandamente a contatto con la cute mediante un'apposita medicazione occlusiva o semi-occlusiva. Si deve impedire l'accesso dell'animale alla garza e la risultante ingestione/inalazione della sostanza in esame.

Al termine del periodo di esposizione, la sostanza in esame residua deve essere rimossa, se possibile, usando acqua o un solvente appropriato senza alterare la risposta esistente né l'integrità dell'epidermide.

La durata normale dell'esposizione è 4 ore.

Se si sospetta che la sostanza possa produrre necrosi (cioè che sia corrosiva), la durata dell'esposizione dovrebbe essere ridotta (per esempio a 1 ora o 3 minuti). Per tale prova, si può anche impiegare in primo luogo un animale singolo e, salvo che ciò sia impedito dalla tossicità cutanea acuta del composto in esame, si possono applicare simultaneamente tre garze a questo animale. La prima garza viene rimossa dopo 3 minuti. Se non si osservano reazioni cutanee gravi, si rimuove la seconda garza dopo un'ora. Se le osservazioni a questo stadio indicano che è necessaria un'esposizione di 4 ore e che questa esposizione può essere condotta umanamente, la

terza garza viene rimossa dopo 4 ore, e le risposte vengono valutate. In questo caso (cioè quando è stata possibile un'esposizione di 4 ore), la prova dovrebbe poi essere completata usando almeno 2 animali ulteriori, salvo che ciò non sia considerato umano (per esempio se dopo l'esposizione di 4 ore si osserva necrosi).

Se si osserva una grave reazione cutanea (per esempio necrosi) dopo 3 minuti o dopo 1 ora, la prova viene immediatamente interrotta.

In determinate condizioni, per esempio in funzione di previste utilizzazioni ed esposizioni umane, può essere opportuno prolungare l'esposizione.

#### 1.6.3.1 Osservazione e valutazione

Dopo la rimozione della garza, gli animali dovranno essere osservati per cercare eventuali manifestazioni di eritema o edema e i risultati valutati dopo 60 minuti e poi dopo 24, 48 e 72 ore. L'irritazione cutanea viene valutata e registrata secondo il sistema della tabella 1. Ulteriori osservazioni possono essere necessarie se la reversibilità non è completamente accertata entro 72 ore. In aggiunta all'osservazione di irritazioni, devono essere descritti in modo completo eventuali gravi lesioni, come corrosione (distruzione irreversibile di tessuto cutaneo) e altri effetti tossici.

È possibile usare tecniche come l'esame istopatologico o la misura dello spessore delle pieghe cutanee per chiarire reazioni o risposte dubbie mascherate dalla colorazione della pelle da parte della sostanza in esame.

### 2. DATI

I risultati dovrebbero essere riassunti in forma tabellare indicante per ogni singolo animale il grado di irritazione per l'eritema e l'edema durante tutto il periodo di osservazione. Si dovrebbe prestare anche alla registrazione di qualsiasi lesione grave, alla descrizione del grado e del tipo di irritazione, della reversibilità o corrosività e di qualsiasi altro effetto tossico osservato.

### 3. RELAZIONE

#### 3.1. RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- specie, ceppo, origine degli animali usati, condizioni ambientali, dieta, ecc.)
- condizioni sperimentali (incluse le proprietà chimico-fisiche pertinenti della sostanza chimica, la tecnica di preparazione e pulizia della cute e il tipo di medicazione: occlusiva o semi-occlusiva);
- per ciascun animale e per ogni periodo di osservazione il tabulato dei dati delle risposte relative all'irritazione (ad esempio 1, 24, 48 e 72 ore, ecc., dopo l'eliminazione della garza);
- descrizione di qualsiasi lesione grave osservata, inclusa la corrosività;
- descrizione del grado e della natura dell'irritazione osservata e di qualsiasi rilevamento istopatologico;
- descrizione di qualsiasi effetto tossico diverso dall'irritazione cutanea;
- discussione dei risultati;
- interpretazione dei risultati;

#### 3.2. VALUTAZIONE E INTERPRETAZIONE

Vedi introduzione generale, parte B

### 4. BIBLIOGRAFIA

Vedi introduzione generale, parte B

## Appendice

TABELLA: VALUTAZIONE DELLA REAZIONE CUTANEA

Eritema e formazione di escara		Valutazione
Nessun eritema		0
Eritema molto leggero (appena percettibile)	.	1
Eritema ben definito	..	2
Eritema da moderato a grave	...	3
Eritema grave (rosso barbabietola) o formazione di escara (danni in profondità) che impedisce la valutazione dell'eritema	....	4
Formazione di edema		
Nessun edema	.	0
Edema molto leggero (appena percettibile)	..	1
Edema leggero (bordi della superficie cutanea ben definiti dal gonfiore)	...	2
Edema moderato (bordi sollevati di circa 1 mm)	....	3
Edema forte (sollevato più di 1 mm e che si estende oltre la superficie dell'esposizione)	.....	4

## B.5. TOSSICITÀ ACUTA (IRRITAZIONE OCULARE)

## 1 METODO

## 1.1 INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2 DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3 SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

*Considerazioni iniziali*

Attenta considerazione deve essere dedicata a tutte le informazioni disponibili su una sostanza per minimizzare l'esecuzione di prove in condizioni in cui le sostanze hanno elevate probabilità di produrre gravi reazioni. Le seguenti informazioni possono essere utili a questo proposito

- i) Proprietà chimico-fisiche e reattività chimica. Può non essere necessario eseguire la prova con sostanze fortemente acide o alcaline, che per esempio ci si possa aspettare diano nell'occhio un pH di 2 o meno o di 11,5 o più, se ci si possono attendere gravi lesioni. Si deve tenere in considerazione anche la riserva alcalina o acida.

- ii) Risultati di studi alternativi ben convalidati; l'irritazione oculare non dovrebbe essere esaminata ulteriormente in materiali che hanno già dimostrato di avere potenziali proprietà corrosive o gravemente irritanti, in quanto si presume che tali sostanze possano produrre effetti gravi sugli occhi in un saggio che utilizzi il metodo qui descritto.
- iii) Risultati di studi di irritazione cutanea. I materiali che hanno presentato una capacità corrosiva definita o una grave capacità di irritazione cutanea in uno studio di irritazione cutanea non devono essere sottoposti ad ulteriore controllo della capacità irritante oculare, in quanto si presume che tali sostanze possano produrre gravi effetti sugli occhi.

La sostanza da saggiare viene applicata in dose unica su un solo occhio di ognuno di alcuni animali da esperimento; l'occhio non trattato serve da controllo. Il grado di irritazione è valutato secondo una opportuna scala a determinati intervalli e ulteriormente descritto per fornire una completa valutazione degli effetti. La durata delle osservazioni dovrebbe essere sufficiente per valutare completamente la reversibilità o l'irreversibilità degli effetti osservati.

Può essere necessario sopprimere umanitariamente animali che presentano segni gravi e perduranti di sofferenza e dolore.

#### 1.5. CRITERI DI QUALITÀ

Nessuno

#### 1.6. DESCRIZIONE DEL METODO DI SAGGIO

##### 1.6.1. Preparazioni

Durante le 24 ore precedenti l'inizio dell'esperimento, si devono esaminare entrambi gli occhi degli animali provvisoriamente selezionati per il saggio. Gli animali che presentano irritazioni agli occhi, difetti oculari o lesioni preesistenti alla cornea non devono essere utilizzati.

##### 1.6.2. Condizioni per il saggio

###### 1.6.2.1. Animali da esperimento

Sebbene siano stati utilizzati vari animali, si raccomanda di effettuare il saggio con conigli albini adulti e sani.

###### 1.6.2.2. Numero di animali

Se si prevedono effetti marcati, si dovrebbe prendere in considerazione un saggio su animale singolo. Se i risultati di questo saggio su un solo coniglio fanno pensare che la sostanza sia gravemente irritante (effetto reversibile) o corrosiva (effetto irreversibile) nei confronti dell'occhio con l'utilizzo della procedura descritta, può non essere necessario controllare ulteriormente il potere di irritazione oculare in animali successivi. Occasionalmente, saggi ulteriori su animali addizionali possono essere opportuni per studiare aspetti specifici.

Nei casi differenti dal saggio su animale singolo, si devono usare almeno 3 animali. Animali addizionali possono essere necessari per chiarire risposte equivocate.

###### 1.6.2.3. Livelli di dosaggio

Per saggiare le sostanze liquide si impiega una dose di 0,1 ml. Per le sostanze solide, le paste e le sostanze particellate, la quantità utilizzata dovrebbe avere il volume di 0,1 ml o il peso approssimativo di 0,1 g (il peso deve sempre essere registrato). Se la sostanza in esame è solida o granulare, dovrà essere ridotta in polvere fine. Il volume delle particelle dovrebbe essere misurato dopo averle leggermente compattate ad esempio battendo leggermente il contenitore usato per la misurazione.

Per le sostanze contenute in spruzzatori a pompa o contenitori di aerosol pressurizzati, si deve espellere il liquido e raccoglierne 0,1 ml, e instillarli nell'occhio come descritto per i liquidi.

###### 1.6.2.4. Periodo di osservazione

La durata del periodo di osservazione non dovrebbe essere fissata rigidamente. Essa dovrà essere sufficiente per valutare la reversibilità o l'irreversibilità degli effetti osservati, ma normalmente non supererà i 21 giorni dall'instillazione.

**1 6 3      Procedimento**

Ogni gabbia dovrebbe contenere un solo animale. La sostanza da saggiare dovrebbe essere applicata nella sacca congiuntivale di un occhio di ciascun animale, dopo aver leggermente distaccato la palpebra inferiore dal bulbo oculare. Per evitare la fuoriuscita del materiale, le palpebre devono essere tenute delicatamente chiuse per circa un secondo. L'occhio non trattato serve da controllo.

Se si ritiene che la sostanza possa provocare un dolore non tollerabile si può usare un anestetico locale prima dell'instillazione della sostanza in esame. Il tipo, la concentrazione e il momento di applicazione dell'anestetico locale devono essere scelti accuratamente per assicurare che il suo uso non dia luogo a differenze significative di reazione alla sostanza in esame. L'occhio di controllo deve essere anestetizzato in modo simile.

Per 24 ore dopo l'instillazione della sostanza in esame, gli occhi degli animali non dovrebbero essere lavati. Se appropriato, dopo 24 ore si può effettuare un lavaggio.

Per alcune sostanze che da questo saggio risultano irritanti, può essere opportuno eseguire prove addizionali utilizzando dei conigli i cui occhi vengono lavati poco dopo l'instillazione della sostanza. In questi casi si raccomanda di usare 3 conigli. Mezzo minuto dopo l'instillazione, gli occhi dei conigli vengono lavati per mezzo minuto usando un volume e una velocità di flusso tali da non provocare lesioni.

**1 6 3 1      Osservazione e valutazione**

Gli occhi dovrebbero essere esaminati dopo 1, 24, 48 e 72 ore. Se dopo 72 ore non si notano lesioni oculari, lo studio può essere interrotto.

In caso di complicazioni persistenti alla cornea o di altre irritazioni oculari, può risultare necessario proseguire l'osservazione per determinare l'evoluzione delle lesioni e la loro reversibilità o irreversibilità. Oltre all'esame della cornea, dell'iride e della congiuntiva, si dovrà registrare e includere nella relazione ogni altra eventuale lesione. Per ogni esame si deve registrare il livello di reazione oculare (vedi tabella in appendice). (La valutazione delle reazioni oculari è soggetta a varie interpretazioni. Per assistere il laboratorio di saggio e coloro che fanno ed interpretano le osservazioni, può essere usata una guida illustrata dell'irritazione oculare).

L'utilizzazione di una lente binoculare, di una lampada a fessura, di un biomicroscopio o di un altro ausilio idoneo, può facilitare l'esame delle reazioni. Dopo la registrazione delle osservazioni effettuate dopo 24 ore, gli occhi di una parte o di tutti i conigli possono ancora essere esaminati con l'ausilio della fluoresceina.

**2            DATI**

I risultati dovrebbero essere riassunti in un tabulato indicante per ogni animale la valutazione dell'irritazione ai tempi di osservazione prescritti. Una descrizione del grado e del tipo di irritazione, la presenza di lesioni gravi e qualsiasi effetto rilevato, diverso dagli effetti oculari, dovranno essere riportati.

**3            RELAZIONE****3 1          RELAZIONE SUL SAGGIO**

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- informazioni relative agli animali (specie, ceppo, origine degli animali, condizioni ambientali, dieta ecc.),
- condizioni dell'esperimento (comprese le caratteristiche fisico-chimiche significative della sostanza in esame),
- tabulato degli effetti irritanti/corrosivi per ogni singolo animale ad ogni tempo a cui viene effettuata l'osservazione (ad esempio 1, 24, 48 e 72 ore),
- descrizione di eventuali lesioni gravi osservate,
- descrizione narrativa del grado e della natura dell'irritazione o corrosione osservata, inclusa l'area di cornea interessata e la reversibilità,

- descrizione del metodo adottato per classificare l'irritazione a 1, 24, 48 e 72 ore (ad esempio lampada manuale a fessura, biomicroscopio, fluoresceina);
- descrizione di qualsiasi effetto topico non oculare riscontrato;
- discussione dei risultati;
- interpretazione dei risultati.

### 3.2. VALUTAZIONE E INTERPRETAZIONE

Vedi introduzione generale, parte B

### 4. BIBLIOGRAFIA

Vedi introduzione generale, parte B

#### Appendice

#### TABELLA: CLASSIFICAZIONE DELLE LESIONI OCULARI

##### Cornea

*Opacità: grado di densità (per la lettura viene scelta la superficie più densa):*

Nessuna ulcerazione o opacità .....	0
Zone sporadiche o diffuse di opacità (diverse dalla opacità leggera della luminosità normale), particolari dell'iride nettamente visibili .....	1
Zona traslucida chiaramente visibile, particolari dell'iride leggermente oscurati .....	2
Zona madreperlacea, nessun dettaglio dell'iride visibile, dimensione della pupilla appena distinguibile ...	3
Cornea opaca, iride non distinguibile attraverso l'opacità .....	4

##### Iride

Normale .....	0
Rughe notevolmente aperte, congestione gonfiore, iperemia circumcorneale modesta, iniezione, l'uno o l'altro di questi effetti o una combinazione di alcuni degli stessi, l'iride reagisce ancora alla luce (una reazione lenta è positiva) .....	1
Nessuna reazione alla luce, emorragia, lesioni macroscopiche (uno qualsiasi o tutti questi effetti) .....	2

##### Congiuntiva

*Rossore (della congiuntiva palpebrale e bulbare, della cornea e dell'iride)*

Vasi sanguigni normali .....	0
Alcuni vasi sanguigni decisamente iperemici (congestionati) .....	1
Colore cremisi diffuso, i singoli vasi sanguigni non sono facilmente distinguibili .....	2
Rosso bovino diffuso .....	3

*Chemosis: palpebre e/o membrane nittitanti*

Nessun gonfiore .....	0
Qualsiasi gonfiore superiore alla norma (incluse le membrane nittitanti) .....	1
Gonfiore evidente con parziale ectropion .....	2
Gonfiore con palpebre socchiuse (circa per la metà) .....	3
Gonfiore con palpebre quasi chiuse (più della metà) .....	4

## B 6 SENSIBILIZZAZIONE CUTANEA

## I METODO

## I 1 Introduzione

*Note*

La sensibilità dei saggi e la loro efficacia nell'individuazione di potenziali sensibilizzatori della cute umana costituiscono parametri importanti in un sistema di classificazione della tossicità per la tutela della salute pubblica

Non esiste un unico metodo sperimentale atto a identificare correttamente tutte le sostanze dotate di un potenziale sensibilizzante per la cute umana e quindi sistematicamente applicabile

Nella scelta del metodo occorre tener conto di fattori quali le caratteristiche fisiche di una sostanza, compresa la sua capacità di penetrazione cutanea

Sono stati elaborati due tipi di saggio su porcellini d'India: il saggio con utilizzo di adiuvanti, nel quale uno stato allergico viene potenziato sciogliendo o sospendendo la sostanza in esame in adiuvante completo di Freund (ACF), e il saggio senza utilizzo di adiuvante

I saggi con utilizzo di adiuvante offrono generalmente un più elevato grado di precisione nell'individuare un potenziale di sensibilizzazione cutanea nell'uomo rispetto ai metodi che non prevedono l'uso dell'adiuvante completo di Freund. Essi sono pertanto preferibili

Il "Guinea-Pig Maximisation Test" (GPMT) è un test con utilizzo di adiuvante ampiamente usato. Malgrado esistano diversi altri metodi per identificare il potenziale di sensibilizzazione cutanea di una sostanza, il GPMT è considerato il metodo con adiuvante d'elezione

Per molte classi di sostanze chimiche, i saggi senza utilizzo di adiuvante (fra cui il più diffuso è quello di Buehler) sono considerati meno sensibili

In alcuni casi il saggio di Buehler, che prevede un'applicazione topica della sostanza, può risultare preferibile all'iniezione intradermica utilizzata nel Guinea Pig Maximisation Test. Qualora si opti per il saggio di Buehler, si dovrà fornire una giustificazione scientifica

Il Guinea-Pig Maximisation Test (GPMT) e il saggio di Buehler sono descritti nel presente metodo. È possibile il ricorso ad altri metodi, purché siano debitamente convalidati e venga fornita una giustificazione scientifica

In caso di risultato positivo di un saggio di screening riconosciuto, la sostanza in esame può essere considerata un potenziale sensibilizzante e non è necessario condurre un ulteriore test GPMT. Tuttavia in caso di risultato negativo del saggio di screening è necessario condurre un test GPMT attenendosi alla procedura descritta nel presente metodo di saggio

Vedi anche introduzione generale, parte B

## I 2 Definizioni

*Sensibilizzazione cutanea* (dermatite allergica da contatto) è una reazione cutanea a una sostanza mediata da fattori immunologici. Nell'uomo la reazione può essere caratterizzata da prurito, eritema, edema, papule, vescicole, bolle o da una combinazione di queste manifestazioni. In altre specie le reazioni possono differire e limitarsi alla comparsa di eritemi e di edemi

*Esposizione di induzione* esposizione sperimentale di un soggetto alla sostanza in esame al fine di indurre uno stato di ipersensibilità

*Periodo di induzione* periodo della durata minima di una settimana, successivo all'esposizione di induzione, entro il quale può manifestarsi uno stato di ipersensibilità

*Esposizione di provocazione* in un soggetto già trattato, esposizione sperimentale alla sostanza in esame, effettuata successivamente al periodo di induzione al fine di accertare se il soggetto sviluppa una reazione di ipersensibilità

**1.3. Sostanze di riferimento**

La sensibilità e l'attendibilità della tecnica sperimentale utilizzata devono essere verificate ogni sei mesi utilizzando sostanze notoriamente dotate di proprietà di sensibilizzazione cutanea di grado leggero-medio.

In un saggio eseguito correttamente, per sensibilizzanti di tipo leggero-medio si dovrebbe avere una risposta pari ad almeno il 30 % con il metodo con adiuvanti e ad almeno il 15 % con il metodo senza adiuvanti.

Si farà preferibilmente ricorso alle seguenti sostanze:

Numero CAS	Numero EINECS	Denominazione EINECS	Denominazione corrente
101-86-0	202-983-3	$\alpha$ -esilcinnamaldeide	$\alpha$ -esilcinnamaldeide
149-30-4	205-736-8	benzothiazol-2-tiolo (mercapto-benzothiazolo)	kaptax
94-09-7	202-303-5	benzocaina	norcaina

Qualora le circostanze lo giustificino, potranno essere utilizzate altre sostanze di controllo conformi ai criteri suelencati.

**1.4. Principio del metodo di saggio**

In un primo tempo gli animali vengono esposti alla sostanza da saggiare con iniezioni intradermiche e/o applicazione epidermica (esposizione di induzione). Dopo un periodo di riposo di 10-14 giorni (periodo di induzione), in cui si può sviluppare una risposta immunitaria, essi vengono esposti alla dose di provocazione. L'estensione e la gravità della reazione cutanea all'esposizione di provocazione vengono confrontate con la reazione sviluppata dagli animali di controllo trattati con un placebo nella fase di induzione e sottoposti all'esposizione di provocazione.

**1.5. Descrizione dei metodi di saggio**

Se lo si ritiene necessario, si procederà alla rimozione della sostanza da saggiare utilizzando acqua o un solvente appropriato, in modo da non alterare la reazione in corso, né intaccare l'integrità dell'epidermide.

**1.5.1 Guinea-Pig Maximisation Test (GMPT)****1.5.1.1. Preparazioni**

Porcellini d'India albini, giovani e sani, vengono acclimatati alle condizioni di laboratorio per almeno 5 giorni prima dell'inizio del saggio. Prima dell'esperimento, gli animali vengono suddivisi in modo casuale ed assegnati al gruppo da trattare o al gruppo di controllo. In funzione del metodo di saggio utilizzato, il pelo verrà tagliato, rasato o rimosso con una sostanza depilatoria, avendo cura di non danneggiare la cute. Gli animali vengono pesati all'inizio e alla fine del saggio.

**1.5.1.2. Condizioni sperimentali****1.5.1.2.1. Animali da esperimento**

Si utilizzano porcellini d'India albini di ceppi comunemente usati in laboratorio.

**1.5.1.2.2. Numero e sesso**

Si utilizzano animali di sesso maschile e/o femminile. Le femmine dovranno essere nullipare e non gravide.

Il gruppo sottoposto a trattamento deve essere composto da almeno 10 animali, il gruppo di controllo da un minimo di 5. Qualora il primo gruppo comprenda meno di 20 esemplari ed il secondo meno di 10 e non sia possibile concludere che la sostanza in esame è un sensibilizzante, si consiglia di proseguire lo studio fino a disporre di almeno 20 animali trattati e 10 di controllo.



## 1 5 1 2 3 Livelli di dosaggio

La concentrazione della sostanza in esame utilizzata per ogni esposizione di induzione deve essere ben tollerata a livello sistemico e corrispondere alla dose massima suscettibile di produrre un'irritazione cutanea di grado leggero-medio. La concentrazione utilizzata per l'esposizione di provocazione deve corrispondere alla dose massima che non cagioni irritazione. Se necessario, la concentrazione appropriata può essere determinata con uno studio pilota condotto su due o tre animali. A questo scopo è preferibile utilizzare animali trattati con l'adiuvante completo di Freund.

## 1 5 1 3 Procedimento

## 1 5 1 3 1 Induzione

Giorno 0 — gruppo trattato

Nella regione della spalla, debitamente depilata, si praticano tre serie di due iniezioni intradermiche da 0,1 ml ciascuna. Le due iniezioni di ciascuna serie devono essere praticate l'una a sinistra e l'altra a destra della linea mediana.

Iniezione 1: miscela 1:1 (v/v) ACF/acqua o soluzione salina fisiologica.

Iniezione 2: la sostanza in esame in un veicolo adatto alla concentrazione selezionata.

Iniezione 3: la sostanza in esame alla concentrazione desiderata, formulata in una miscela 1:1 (v/v) ACF/acqua o soluzione salina fisiologica.

Nell'iniezione 3, le sostanze idrosolubili vengono disciolte nella fase acquosa prima di essere miscelate con l'ACF. Le sostanze liposolubili o insolubili vengono messe in sospensione nell'ACF prima di essere combinate con la fase acquosa. La concentrazione finale della sostanza in esame deve essere uguale a quella utilizzata nell'iniezione 2.

Le iniezioni 1 e 2 vengono praticate l'una accanto all'altra e quanto più possibile in prossimità della testa, mentre la 3 è praticata verso la parte caudale della zona d'esame.

Giorno 0 — gruppo di controllo

Tre serie di due iniezioni intradermiche, ciascuna del volume di 0,1 ml, sono praticate negli stessi punti scelti per gli animali trattati.

Iniezione 1: miscela 1:1 (v/v) ACF/acqua o soluzione salina fisiologica.

Iniezione 2: il veicolo non diluito.

Iniezione 3: formulazione 50 % p/v del veicolo in una miscela 1:1 (v/v) ACF/acqua o soluzione salina fisiologica.

Giorno 5-7 — gruppo trattato e gruppo di controllo

Circa 24 ore prima dell'applicazione topica di induzione, se la sostanza non è un irritante cutaneo l'area di prova, debitamente tosata e/o rasata, viene trattata con 0,5 ml di laurilsolfato di sodio al 10 % in vaselina, al fine di provocare un'irritazione locale.

Giorno 6-8 — gruppo trattato

L'area di prova viene nuovamente depilata. Una carta da filtro (2×4 cm), impregnata della sostanza in esame incorporata in un veicolo adatto, viene applicata sull'area di prova e tenuta in contatto con la cute per 48 ore mediante una medicazione occlusiva. La scelta del veicolo deve essere motivata. Le sostanze solide vengono ridotte in polvere e incorporate in un veicolo adatto. I liquidi, se del caso, possono essere applicati direttamente.

Giorno 6-8 — gruppo di controllo

L'area di prova viene nuovamente depilata. Il solo veicolo viene applicato con le stesse modalità sull'area di prova e tenuto a contatto per 48 ore mediante una medicazione occlusiva.

## 1 5 1 3 2 Provocazione (challenge)

Giorno 20-22 — gruppo trattato e gruppo di controllo

Si rimuove il pelo dai fianchi degli animali trattati e degli animali di controllo. Su un fianco si applica una garza o una compressa impregnata della sostanza in esame e, se opportuno, sull'altro si applica una garza o una compressa impregnata del solo veicolo. Le compresse vengono tenute a contatto con la cute per 24 ore mediante una medicazione occlusiva.

## 1.5.1.3.3. Osservazione e valutazione: gruppo trattato e gruppo di controllo

- circa 21 ore dopo la rimozione della compressa, la zona sottoposta a "challenge" viene pulita e tosata e/o rasata e depilata, se necessario;
- circa 3 ore più tardi (approssimativamente 48 ore dall'inizio dell'applicazione di provocazione) la reazione cutanea viene esaminata e classificata in base alla scala di valutazione riportata in appendice;
- circa 24 ore dopo detto esame si procede a una seconda osservazione (72 ore) e a una nuova classificazione delle reazioni cutanee.

È consigliabile procedere ad una lettura cieca nei due gruppi di animali.

Qualora sia necessario chiarire i risultati ottenuti nel primo "challenge", una seconda esposizione di provocazione, ove del caso con un nuovo gruppo di controllo, potrà essere effettuata a circa una settimana di distanza dalla prima. Il nuovo "challenge" potrà essere realizzato anche sul gruppo di controllo iniziale.

Tutte le reazioni cutanee e qualsiasi risultato insolito, comprese le reazioni sistemiche, derivanti dall'esposizione di induzione e di provocazione, dovranno essere osservate e classificate in base alla scala di valutazione di Magnusson/Kligman (vedi appendice). Per chiarire eventuali reazioni dubbie si potrà far ricorso ad altre tecniche, quali l'esame istopatologico o la misurazione dello spessore delle pieghe cutanee.

## 1.5.2. Saggio di Buehler

## 1.5.2.1. Preparazioni

Porcellini d'India albini, giovani e sani, vengono acclimati alle condizioni di laboratorio per almeno 5 giorni prima dell'inizio del saggio. Prima dell'esperimento, gli animali vengono suddivisi in modo casuale ed assegnati al gruppo da trattare o al gruppo di controllo. In funzione del metodo di saggio utilizzato, il pelo verrà tagliato, rasato o rimosso con una sostanza depilatoria, avendo cura di non danneggiare la cute. Gli animali vengono pesati all'inizio e alla fine del saggio.

## 1.5.2.2. Condizioni sperimentali

## 1.5.2.2.1. Animali da esperimento

Si utilizzano porcellini d'India albini di ceppi comunemente usati in laboratorio.

## 1.5.2.2.2. Numero e sesso

Si utilizzano animali di sesso maschile e/o femminile. Le femmine dovranno essere nullipare e non gravide.

Il gruppo sottoposto a trattamento deve essere composto da almeno 20 animali, il gruppo di controllo da un minimo di 10.

## 1.5.2.2.3. Livelli di dosaggio

La concentrazione della sostanza in esame utilizzata per ogni esposizione di induzione deve corrispondere alla dose massima suscettibile di produrre un'irritazione cutanea moderata e non eccessiva. La concentrazione utilizzata per l'esposizione di provocazione deve corrispondere alla dose massima che non cagioni irritazione. Se necessario, la concentrazione appropriata può essere determinata con uno studio pilota condotto su due o tre animali.

Nel caso di sostanze idrosolubili, l'acqua o una soluzione diluita non irritante di surfactante rappresentano il veicolo più appropriato. Per le altre sostanze si preferiranno una miscela di etanolo all'80 % ed acqua per la fase di induzione e dell'acetone per la fase di provocazione.

## 1.5.2.3. Procedimento

## 1.5.2.3.1. Induzione

Giorno 0 — gruppo trattato

Gli animali vengono tosati su un fianco. La compressa utilizzata per il saggio viene impregnata della sostanza in esame incorporata in un veicolo idoneo (la scelta del veicolo deve essere motivata; se del caso, le sostanze liquide possono essere applicate non diluite). La compressa viene applicata sull'area di prova e tenuta a contatto con la pelle per sei ore mediante un cerotto occlusivo e una fasciatura adeguata.

La medicazione deve essere occlusiva. Si potrà ricorrere a un tampone d'ovatta, rotondo o quadrato e di circa 4-6 cm<sup>2</sup>. Per garantire l'occlusione, è opportuno limitare la libertà di movimento degli animali con un sistema adeguato. Se si utilizza una fasciatura, possono essere necessarie esposizioni supplementari.

Giorno 0 — gruppo di controllo

Gli animali vengono tosati su un fianco. Il solo veicolo viene applicato con modalità analoghe a quelle utilizzate per il gruppo trattato. La compressa viene tenuta a contatto con la pelle per sei ore mediante un cerotto occlusivo e una fasciatura adeguata. Se si dimostra che non è necessario disporre di un gruppo di controllo cui sia stato somministrato un placebo, si potrà utilizzare un gruppo di controllo non sottoposto a tale trattamento.

Giorni 6-8 e 13-15 — gruppo trattato e gruppo di controllo

Si esegue la stessa applicazione del giorno 0 sulla medesima area di prova (rasata, se necessario) sulla stesso fianco il giorno 6-8 e nuovamente il giorno 13-15.

#### 1.5.2.3.2 Provocazione (challenge)

Giorno 27-29 — gruppo trattato e gruppo di controllo

Il fianco non trattato degli animali trattati e degli animali di controllo viene tosato. Si procede quindi all'applicazione di un cerotto occlusivo o di una compressa contenente un'adeguata quantità della sostanza in esame, alla massima concentrazione non irritante, sulla parte posteriore del fianco non trattato in entrambi i gruppi di animali.

Se necessario, si applica inoltre un cerotto occlusivo o una compressa contenente il solo veicolo sulla parte anteriore del fianco non trattato di entrambi i gruppi di animali. Il cerotto o la compressa vengono tenuti a contatto con la pelle per 6 ore mediante un'adeguata medicazione.

#### 1.5.2.3.3 Osservazione e valutazione

- Circa 21 ore dopo la rimozione del cerotto, la zona sottoposta a "challenge" viene depilata,
- circa tre ore più tardi (approssimativamente 30 ore dopo l'applicazione di provocazione) le reazioni cutanee vengono esaminate e classificate in base alla scala di valutazione riportata in appendice,
- circa 24 ore dopo detto esame (approssimativamente 54 ore dopo l'applicazione di provocazione) si procede a una seconda osservazione e a una nuova classificazione delle reazioni cutanee.

È consigliabile procedere ad una lettura cieca nei due gruppi di animali.

Qualora sia necessario chiarire ulteriormente i risultati ottenuti nel primo "challenge", una seconda esposizione di provocazione, ove del caso con un nuovo gruppo di controllo, potrà essere effettuata a circa una settimana di distanza dalla prima. Il nuovo "challenge" potrà essere realizzato anche sul gruppo di controllo iniziale.

Tutte le reazioni cutanee e qualsiasi risultato insolito, comprese le reazioni sistemiche, derivanti dall'esposizione di induzione e di provocazione, dovranno essere osservate e classificate in base alla scala di valutazione di Magnusson/Kligman (vedi appendice). Per chiarire eventuali reazioni dubbie si potrà far ricorso ad altre tecniche, quali l'esame istopatologico o la misurazione dello spessore delle pieghe cutanee.

## 2 DATI (GPMT E SAGGIO DI BUEHLER)

I dati saranno riassunti in forma tabulare, indicando, per ogni animale, le reazioni cutanee rilevate nel corso di ogni osservazione.

**3. RELAZIONE (GPMT E SAGGIO DI BUEHLER)**

Se il saggio sul porcellino d'India è preceduto da una prova preliminare, si avrà cura di fornirne la descrizione o il riferimento (p. es. Local Lymph Node Assay (LLNA), Mouse Ear Swelling Test (MEST), compreso il procedimento particolareggiato, insieme ai risultati ottenuti con le sostanze da saggiare e le sostanze di riferimento.

**Relazione sul saggio (GPMT E SAGGIO DI BUEHLER)**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni.

*Animali da esperimento*

- ceppo di porcellino d'India utilizzato;
- numero, età e sesso degli animali;
- origine, condizioni di alloggiamento, dieta, ecc.,
- peso di ogni singola cavia all'inizio dell'esperimento.

*Condizioni sperimentali:*

- tecnica di preparazione dell'area di applicazione della compressa;
- materiali utilizzati e tecnica di preparazione e di applicazione della compressa,
- risultato dello studio pilota e conclusioni relative alle concentrazioni di induzione e di provocazione da utilizzare nel saggio;
- modalità di preparazione, applicazione e rimozione della sostanza in esame.
- motivazione della scelta del veicolo;
- concentrazioni del veicolo e della sostanza utilizzate per le esposizioni di induzione e di provocazione, nonché quantità totale di sostanza applicata per l'induzione e la provocazione

*Risultati:*

- un riepilogo dei risultati dell'ultimo controllo di sensibilità e attendibilità (vedi 1.3), comprese le informazioni sulla sostanza, la concentrazione e il veicolo utilizzato;
- tutte le osservazioni effettuate su ogni singolo animale, compreso il sistema di classificazione;
- la descrizione della natura e dell'entità degli effetti osservati;
- tutti i reperti dell'esame istopatologico

*Discussione dei risultati.**Conclusioni.***4. RIFERIMENTI**

Il presente metodo corrisponde al metodo OCSE TG 406

*Appendice*

## TABELLA

scala di Magnusson/Kligman per la classificazione delle reazioni al saggio di provocazione cutanea

0 = assenza di modificazioni visibili

1 = entema localizzato o a distribuzione irregolare

2 = entema modesto e confluyente

3 = entema intenso associato a tumefazione

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**•B.7 TOSSICITÀ A DOSE RIPETUTA (28 GIORNI) PER VIA ORALE****1. METODO****1.1. Introduzione**

Vedi introduzione generale, parte B.

**1.2. Definizioni**

Vedi introduzione generale, parte B.

**1.3. Principio del metodo di saggio**

La sostanza in esame viene somministrata in dosi giornaliere graduate ad alcuni gruppi di animali da esperimento, un livello di dose per gruppo, per un periodo di 28 giorni. Durante il periodo di somministrazione gli animali vengono giornalmente esaminati al fine di rilevare eventuali segni di tossicità. Gli animali deceduti o soppressi durante l'esperimento vengono sottoposti a necropsopia. Al termine del saggio gli animali superstiti vengono soppressi e sottoposti a necropsopia.

Il presente metodo attribuisce particolare importanza agli effetti neurologici in quanto parametro specifico di valutazione e comporta la necessità di un'accurata osservazione clinica degli animali per ottenere il maggior numero possibile di informazioni. Tale metodo è finalizzato all'individuazione di sostanze chimiche dotate di un potenziale neurotossico, che potranno successivamente richiedere indagini più approfondite al riguardo. Esso può inoltre fornire indicazioni sugli effetti immunologici e sulla tossicità per l'apparato riproduttivo.

**1.4. Descrizione del metodo di saggio****1.4.1. Preparazioni**

Animali adulti, giovani e sani, vengono suddivisi in modo casuale e assegnati a gruppi da trattare e a gruppi di controllo. Le gabbie dovranno essere sistemate in modo da ridurre al minimo eventuali effetti dovuti alla loro collocazione. Gli animali vengono identificati individualmente e tenuti nelle loro gabbie per un periodo di almeno 5 giorni prima dell'inizio del saggio, in modo da potersi acclimatare alle condizioni di laboratorio.

La sostanza in esame viene somministrata a mezzo di sonda gastrica, con gli alimenti e con l'acqua. La modalità di somministrazione orale viene scelta in funzione della finalità dello studio e delle proprietà fisico-chimiche della sostanza.

Se necessario, la sostanza in esame viene disciolta o messa in sospensione in un veicolo adeguato. Ove possibile, si preferirà una soluzione/sospensione acquosa, o, come seconda alternativa, una soluzione/emulsione in olio (per esempio olio di mais), o ancora, infine, una soluzione in altri veicoli. Per i veicoli non acquosi, dovranno esserne note le caratteristiche di tossicità. È opportuno determinare la stabilità della sostanza in esame nel veicolo.

**1.4.2. Condizioni sperimentali****1.4.2.1. Animali da esperimento**

Il ratto è la specie d'elezione, ma sono ammesse anche altre specie di roditori. Si utilizzeranno animali adulti, giovani e sani, di ceppi comunemente usati in laboratorio. Le femmine dovranno essere nullipare e non gravide. La somministrazione dovrà prima possibile al termine dello svezzamento, e comunque non oltre la nona settimana di vita.

All'inizio dello studio, la variazione di peso degli animali dovrà essere minima e non essere superiore al  $\pm 20$  per cento del peso medio per ogni sesso.

Qualora, prima di uno studio a lungo termine, si effettui uno studio preliminare con somministrazione orale ripetuta, si utilizzeranno di preferenza in entrambi animali provenienti dallo stesso ceppo e aventi la medesima origine.

**1.4.2.2. Numero e sesso**

Per ciascun livello di dosaggio dovranno essere utilizzati almeno 10 animali (cinque femmine e 5 maschi). Se il protocollo sperimentale prevede la soppressione di animali nel corso dello studio, il numero totale dovrà essere aumentato in ragione del numero di animali che si prevede di sacrificare.

Inoltre, un gruppo satellite di 10 animali (cinque per sesso) potrà essere trattato alla dose massima per 28 giorni e tenuto in osservazione nei 14 giorni successivi al fine di valutare la reversibilità, la persistenza o la comparsa tardiva di effetti tossici. È altresì previsto l'utilizzo di un gruppo satellite di 10 animali di controllo (cinque animali per sesso).

#### 1 4 2 3 Livelli di dosaggio

Si utilizzano generalmente almeno tre gruppi da trattare e un gruppo di controllo. Quest'ultimo, fatta eccezione per la somministrazione della sostanza in esame, dovrà essere trattato in modo identico ai gruppi sottoposti a trattamento. Qualora la sostanza da saggiare venga incorporata in un veicolo, al gruppo di controllo verrà somministrato il medesimo veicolo nel volume massimo utilizzato.

Se, in base alla valutazione di altri dati, sussistono motivi per ritenere che un dosaggio di 1 000 mg/kg pc/d non dovrebbe produrre effetti, è possibile eseguire un saggio limite. In mancanza di dati al riguardo, potrà essere effettuato uno studio finalizzato alla determinazione di un range entro il quale selezionare le dosi da somministrare.

I livelli di dosaggio dovranno essere selezionati tenendo conto di tutti i dati esistenti sulla tossicità e le caratteristiche (tossico-)cinetiche della sostanza da saggiare o di sostanze affini. Il livello massimo di dosaggio dovrà essere tale da indurre effetti tossici senza tuttavia cagionare la morte o sofferenze gravi. Sarà inoltre definita una serie decrescente di dosaggi al fine di individuare eventuali risposte a dosi determinate e dimostrare l'assenza di effetti avversi al dosaggio minimo (NOAEL, no-observed-adverse effects). Per la determinazione dei livelli decrescenti di dosaggio risulta spesso ottimale applicare un fattore di divisione compreso tra due e quattro, è comunque preferibile aggiungere un quarto gruppo di studio piuttosto che avere uno scarto eccessivo (superiore ad un fattore 10) tra una dose e l'altra.

Se la sostanza è somministrata con gli alimenti o con l'acqua, è importante verificare che le quantità di sostanza necessarie non alterino il bilancio idrico o nutrizionale. Se la sostanza in esame è somministrata con la dieta, si può utilizzare sia una concentrazione dietetica (ppm), sia un livello di dosaggio costante in funzione del peso degli animali, avendo cura di specificare quale sia l'alternativa prescelta. Se la sostanza è somministrata tramite sonda gastrica, la dose deve essere somministrata ogni giorno alla stessa ora e modificata in modo da mantenere un dosaggio costante in funzione del peso dell'animale.

Qualora, prima di uno studio a lungo termine, si effettui uno studio preliminare con somministrazione orale ripetuta, la dieta degli animali dovrà essere identica in entrambi.

#### 1 4 2 4 Saggio limite

Qualora un saggio, effettuato in conformità con il metodo descritto, con un livello di dosaggio di almeno 1 000 mg/kg di peso corporeo/giorno o, in caso di somministrazione con gli alimenti o l'acqua, ad una concentrazione equivalente (in funzione del peso corporeo), non produca effetti tossici evidenti e se i dati relativi a sostanze di struttura affine non sono suggestivi di tossicità, può non essere necessario eseguire uno studio completo utilizzando tre dosaggi. Il saggio limite è giustificato, salvo nel caso in cui l'esposizione umana comporti la necessità di utilizzare un più elevato livello di dosaggio.

#### 1 4 2 5 Periodo di osservazione

Il periodo di osservazione ha una durata di 28 giorni. Gli animali del gruppo satellite selezionati per effettuare ulteriori osservazioni dovranno essere esaminati per almeno altri 14 giorni senza alcun trattamento al fine di individuare l'insorgenza, la persistenza o la scomparsa tardiva degli effetti tossici.

#### 1 4 3 Procedimento

La sostanza in esame viene somministrata agli animali giornalmente, sette giorni su sette, per un periodo di 28 giorni. La scelta di somministrare la sostanza cinque giorni alla settimana deve essere opportunamente motivata. Se effettuata mediante intubazione, la somministrazione avverrà in una singola dose mediante sonda gastrica o apposita cannula. Il volume massimo di liquido somministrabile in una sola volta dipende dalla taglia dell'animale. Esso non dovrebbe superare 1 ml/100 g di peso corporeo, eccetto nel caso di soluzioni acquose, dove sono ammessi 2 ml/100 g di peso corporeo. Salvo nel caso di sostanze irritanti o corrosive suscettibili di produrre effetti esacerbati a concentrazioni più elevate, la variabilità del volume di saggio dovrà essere ridotta al minimo ritoccando la concentrazione, in modo da mantenere un volume costante per qualsiasi livello di dosaggio.

#### 1 4 3 1 Osservazioni generali

Osservazioni cliniche generali devono essere effettuate almeno una volta al giorno, preferibilmente alla stessa ora e tenendo conto del periodo probabile di massima intensità degli effetti dopo la somministrazione. Si registreranno informazioni concernenti le condizioni di salute degli animali. Almeno due volte al giorno, tutti gli animali vengono esaminati al fine di determinare la morbidità e la mortalità. Gli animali moribondi o recanti segni di grave sofferenza o dolore saranno immediatamente esclusi dallo studio, sottoposti ad eutanasia e a necropsia.

Prima dell'esposizione iniziale (per consentire un confronto sullo stesso soggetto) e almeno una volta alla settimana successivamente tutti gli animali vengono sottoposti ad osservazioni cliniche particolareggiate. A tale scopo gli animali vengono tolti dalle gabbie, collocati in un recinto standard ed esaminati di preferenza sempre alla stessa ora. Le osservazioni vengono accuratamente registrate, possibilmente utilizzando sistemi di punteggio esplicitamente definiti dal laboratorio che esegue il saggio. Si avrà cura di ridurre al minimo le variazioni delle condizioni sperimentali e le osservazioni saranno condotte di preferenza da persone che non siano al corrente del trattamento. Si terrà conto, tra l'altro, di tutte le alterazioni della cute, del pelo, degli occhi, delle membrane mucose, della comparsa di secrezioni ed escrezioni e dell'attività del sistema nervoso autonomo (p. es. lacrimazione, piloerezione, ampiezza pupillare, ritmo respiratorio insolito). Verranno inoltre registrate le modifiche osservate nel comportamento, nella postura e nella risposta alla manipolazione, come pure la presenza di movimenti clonici o tonici, stereotipi (p. es. tolettatura eccessiva, continuo girare in tondo) o comportamenti insoliti (p. es. automutilazione, marcia a ritroso).

Nella quarta settimana di esposizione si procede alla valutazione della reattività sensoriale a diversi tipi di stimolo (p. es. uditivi, visivi e propriocettivi), della forza di prensione e dell'attività motoria. Ulteriori dettagli sui metodi utilizzabili sono riportati in letteratura (vedi introduzione generale parte B).

Le osservazioni funzionali previste per la quarta settimana di esposizione possono essere evitate nel caso di uno studio preliminare ad un successivo studio subcronico (90 giorni). In questa eventualità, le osservazioni funzionali saranno incluse nello studio complementare. D'altro canto le informazioni ricavate possono essere utili nella determinazione dei livelli di dosaggio per un successivo studio subcronico.

In via eccezionale, le osservazioni funzionali potranno essere evitate anche per i gruppi che presentino segni di tossicità suscettibili di interferire in modo significativo con i risultati delle prove funzionali.

#### 1.4.3.2. Peso corporeo e consumo di cibo e di acqua

Tutti gli animali devono essere pesati almeno una volta alla settimana. Il consumo di cibo e di acqua viene determinato con scadenza almeno settimanale. Se la sostanza in esame viene somministrata con l'acqua, anche il consumo di acqua deve essere misurato almeno una volta alla settimana.

#### 1.4.3.3. Ematologia

Al termine del periodo di prova si effettueranno i seguenti controlli ematologici: ematocrito, concentrazione dell'emoglobina, conteggio degli eritrociti, conteggio dei leucociti totali e formula leucocitaria, conteggio delle piastrine e determinazione del tempo/potenziale di coagulazione.

I campioni di sangue devono essere prelevati in un sito determinato immediatamente prima o durante la soppressione degli animali e conservati in condizioni adeguate.

#### 1.4.3.4. Biochimica clinica

Esami biochimico clinici finalizzati allo studio dei principali effetti tossici sui tessuti ed in particolare sui reni e sul fegato dovranno essere effettuati sui campioni di sangue prelevati da tutti gli animali immediatamente prima o durante la loro soppressione (eccetto gli animali trovati morti e/o soppressi nel corso del saggio). È preferibile che gli animali vengano tenuti a digiuno dalla sera precedente il prelievo di sangue<sup>(1)</sup>. Le analisi sul plasma o sul siero comprenderanno il sodio, il potassio, il glucosio, il colesterolo totale, l'urea, la creatinina, le proteine totali e l'albmina, almeno due enzimi indicatori degli effetti epatocellulari (come l'alanina aminotransferasi, l'aspartato aminotransferasi, la fosfatasi alcalina, la gamma glutamil transpeptidasi e la sorbitolo deidrogenasi). Determinazioni di altri enzimi (di origine epatica o altro) e degli acidi biliari possono talvolta fornire indicazioni utili.

<sup>(1)</sup> Per un certo numero di analisi nel siero e nel plasma, ed in particolare per la determinazione del glucosio, è preferibile che gli animali siano a digiuno dalla sera precedente. In caso contrario infatti si ha una maggiore variabilità nei risultati, cosa che può dissimulare gli effetti meno evidenti e ostacolare l'interpretazione. D'altro canto, però, il digiuno può modificare il metabolismo generale degli animali e, soprattutto negli studi sull'alimentazione, perturbare l'esposizione libera alla sostanza in esame. Se si opta per il digiuno, gli esami biochimico clinici dovranno essere effettuati dopo le osservazioni funzionali della quarta settimana.



I seguenti esami delle urine possono essere facoltativamente effettuati nell'ultima settimana dello studio utilizzando un volume d'urina raccolto ad orari fissi, aspetto, volume, osmolalità o densità relativa, pH, albumina, glucosio e sangue-eritrociti.

Sono inoltre raccomandati studi sui marker serici delle lesioni tissutali generali. Altre determinazioni dovranno essere eseguite qualora si abbia motivo di ritenere o di sospettare che le proprietà della sostanza in esame possano alterare i profili metabolici riguardanti il calcio, il fosfato, i trigliceridi a digiuno, gli ormoni specifici, la metemoglobina e la colinesterasi. Tali parametri dovranno essere determinati per certe classi di sostanze o determinati composti specifici.

Nel complesso è opportuno adottare un approccio flessibile, che tenga conto della specie utilizzata e degli effetti osservati e/o previsti della sostanza in esame.

Se i dati storici di base risultano inadeguati, è opportuno determinare i parametri ematologici e biochimico-chimici prima dell'inizio del saggio.

#### 1.4.3.5 Necropsia macroscopica

Tutti gli animali dello studio dovranno essere sottoposti ad una necropsia completa, comprendente un accurato esame della superficie esterna del corpo, di tutti gli orifizi, della cavità cranica, toracica e addominale e del loro contenuto. Il fegato, i reni, le ghiandole surrenali, i testicoli, gli epididimi, il timo, la milza, il cervello e il cuore di tutti gli animali saranno opportunamente sezionati e pesati quanto più rapidamente possibile onde evitarne la disidratazione.

I seguenti tessuti dovranno essere conservati nel mezzo di fissazione, più adeguato in funzione del tipo di tessuto e degli esami istopatologici previsti: tutti i tessuti recanti lesioni macroscopiche, encefalo (le regioni rappresentative comprendono cervello, cervelletto e ponte), midollo spinale, stomaco, intestino tenue e crasso (comprese le placche di Peyer), fegato, reni, ghiandole surrenali, milza, cuore, timo, tiroide, trachea e polmoni (conservati con insufflazione di un fissativo e successiva immersione), gonadi, organi genitali accessori (p. es. utero, prostata), vescica, linfonodi (preferibilmente un linfonodo sulla via di somministrazione e un linfonodo distante da essa, in modo da coprire gli effetti sistemici), nervi periferici (nervo sciatico o nervo tibiale), possibilmente in stretta prossimità del muscolo, e una sezione del midollo osseo (o, in alternativa, un preparato fresco di midollo osseo aspirato). In base all'esito dell'esame clinico e ad altri risultati può risultare opportuno esaminare altri tessuti. Dovranno inoltre essere conservati tutti gli organi ritenuti organi bersaglio potenziali in funzione delle proprietà note della sostanza in esame.

#### 1.4.3.6 Esame istopatologico

Un esame istopatologico completo sarà effettuato sugli organi e i tessuti conservati di tutti gli animali del gruppo di controllo e del gruppo trattato con dosaggio elevato. Detto esame sarà esteso agli animali degli altri gruppi di dosaggio qualora nel gruppo a dosaggio elevato vengano osservate alterazioni indotte dalla sostanza.

Si procederà all'esame di tutte le lesioni macroscopiche.

Nel caso si utilizzi un gruppo satellite, un esame istopatologico dovrà essere eseguito sui tessuti e gli organi per i quali siano stati osservati effetti nei gruppi trattati.

## 2 DATI

Dovranno essere forniti i dati individuali di ciascun animale. Inoltre, tutti i dati dovranno essere riassunti in una tabella indicante, per ogni gruppo, il numero di animali all'inizio del saggio, il numero di animali rinvenuti morti durante il saggio o sottoposti ad eutanasia nonché il momento del decesso o della soppressione di ciascun animale, il numero di animali recanti segni di tossicità, una descrizione degli effetti tossici con indicazione del momento della comparsa, della durata e della gravità di detti effetti, il numero di animali che presentano lesioni, il tipo di lesione e la percentuale di animali per ogni tipo di lesione.

Se possibile, i risultati numerici devono essere valutati sulla base di un metodo statistico adeguato e generalmente riconosciuto. I metodi statistici devono essere selezionati durante la fase di progettazione dello studio.

**RELAZIONE****Relazione sul saggio**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

*Animali da esperimento:*

- specie/ceppo utilizzati;
- numero, età e sesso degli animali;
- origine, condizioni di alloggiamento, dieta ecc.;
- peso di ciascun animale determinato all'inizio del saggio, con cadenza settimanale nel periodo successivo e al termine del saggio.

*Condizioni sperimentali:*

- motivazione della scelta del veicolo utilizzato, se diverso dall'acqua;
- motivazione della scelta del livello di dosaggio;
- informazioni dettagliate sulla formulazione della sostanza e sulla preparazione della dieta, concentrazione ottenuta, stabilità e omogeneità della preparazione;
- modalità precise di somministrazione della sostanza in esame;
- se del caso, conversione della concentrazione della sostanza somministrata con gli alimenti o con l'acqua (ppm) in dose effettiva (mg/kg di peso corporeo/giorno);
- informazioni dettagliate sulla qualità del cibo e dell'acqua.

*Risultati:*

- peso corporeo/modificazioni del peso corporeo;
- consumo di cibo e, se del caso, consumo di acqua;
- dati concernenti la risposta tossica per sesso e per dose, compresi i segni di tossicità;
- natura, gravità e durata degli effetti clinici osservati (ed eventuale reversibilità);
- valutazione dell'attività sensoriale, della forza di prensione e dell'attività motoria;
- esami ematologici e relativi valori di riferimento;
- esami biochimico-clinici e relativi valori di riferimento;
- peso corporeo al momento della soppressione degli animali e peso degli organi;
- esito dell'esame necroscopico;
- una descrizione particolareggiata di tutti i reperti istopatologici;
- dati relativi all'assorbimento, se disponibili;
- ove del caso, elaborazione statistica dei risultati.

*Discussione dei risultati.**Conclusioni.***RIFERIMENTI**

Il presente metodo corrisponde al metodo OCSE TG 407.\*

## B.8. TOSSICITÀ A DOSE RIPETUTA (28 GIORNI) PER INALAZIONE

## 1 METODO

## 1.1 INTRODUZIONE

È utile avere informazioni preliminari sulla distribuzione delle dimensioni delle particelle, la tensione di vapore, il punto di fusione, il punto di ebollizione, il punto di infiammabilità e la esplosività (se del caso) della sostanza.

Vedi anche introduzione generale, parte B

## 1.2 DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3 SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

Diversi gruppi di animali da esperimento sono esposti quotidianamente per un periodo determinato a concentrazioni graduate della sostanza in esame; si utilizza una concentrazione per gruppo, somministrata per 28 giorni. Se si fa uso di un veicolo per ottenere una concentrazione appropriata della sostanza in esame nell'atmosfera, si dovrà prevedere anche un gruppo di animali di controllo trattati con il veicolo. Durante il periodo di trattamento, gli animali vengono esaminati quotidianamente per rilevare i sintomi di tossicità. Gli animali che muoiono durante il saggio e quelli che sopravvivono sono sottoposti a necropsia alla fine del saggio.

## 1.5 CRITERI DI QUALITÀ

Nessuno

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1 Preparazioni

Per almeno 5 giorni prima dell'esperimento gli animali sono mantenuti nelle stesse condizioni di stabulazione e di alimentazione dell'esperimento. Prima del saggio, gli animali, che dovranno essere giovani e sani, sono scelti con metodo casuale e assegnati ai vari gruppi previsti. Se necessario, alla sostanza in esame può essere aggiunto un veicolo idoneo per facilitare la generazione di una concentrazione appropriata della sostanza in esame nell'atmosfera. Se per facilitare il dosaggio si utilizza un veicolo o altri additivi, questi dovranno non produrre effetti tossici. Se appropriato, possono essere utilizzati i dati storici.

## 1.6.2 Condizioni per il saggio

## 1.6.2.1 Animali da esperimento

Salvo controindicazione, il ratto è la specie d'elezione. Si dovranno utilizzare animali giovani e sani da ceppi di laboratorio comunemente usati.

All'inizio dello studio, l'intervallo di variazione ponderale degli animali usati non dovrebbe superare  $\pm 20\%$  del valore medio.

**1.6.2.2. Numero e sesso**

Per ogni gruppo in esame dovranno essere utilizzati almeno 10 animali (5 di sesso maschile e 5 di sesso femminile). Le femmine dovrebbero essere nullipare e non gravide. Ove siano programmati sacrifici intermedi, il numero degli animali dovrà essere aumentato per includere quello degli animali da sacrificare prima del termine della prova. Inoltre, un gruppo satellite di 10 animali (5 animali per sesso) può essere sottoposto al trattamento con il livello superiore di dosaggio per 28 giorni ed esaminato, nei seguenti 14 giorni, per quanto riguarda la reversibilità o la persistenza o l'insorgenza ritardata degli effetti tossici. Inoltre si userà in tale caso, un gruppo satellite pure di 10 animali di controllo (5 animali per sesso).

**1.6.2.3. Concentrazioni di esposizione**

Sono richieste almeno tre concentrazioni con un controllo, oppure, se viene utilizzato un veicolo, un controllo del veicolo (corrispondente alla massima concentrazione del veicolo). Gli animali del gruppo di controllo dovranno essere trattati in modo identico agli animali dei gruppi trattati, ad eccezione del trattamento con la sostanza in esame. La massima concentrazione dovrebbe produrre effetti tossici, ma senza causare mortalità, o almeno causando una mortalità molto bassa. La concentrazione più bassa non dovrebbe causare alcun sintomo di tossicità. Nei casi in cui sia possibile stimare l'esposizione umana prevista, il livello di dosaggio più basso dovrebbe superare questo livello. Dal punto di vista ottimale la concentrazione intermedia dovrebbe produrre effetti tossici minimi. Nel caso in cui siano utilizzate più concentrazioni intermedie, queste dovrebbero essere intervallate in modo tale da produrre una graduazione di effetti tossici. Nei gruppi esposti alle concentrazioni bassa e intermedia e nei controlli, l'incidenza dei decessi dovrebbe essere bassa al fine di consentire una valutazione significativa dei risultati.

**1.6.2.4. Tempo di esposizione**

La durata dell'esposizione giornaliera dovrà essere di 6 ore. Tuttavia, per esigenze specifiche, si possono utilizzare esposizioni di diversa durata.

**1.6.2.5. Apparecchiature**

Gli animali dovranno essere esposti al composto in dispositivi per l'inalazione appositamente progettati per consentire un flusso dinamico dell'aria di almeno 12 ricambi l'ora per garantire un adeguato contenuto di ossigeno e un'atmosfera uniformemente distribuita. Qualora sia usata una camera, essa deve essere progettata in modo da minimizzare l'affollamento degli animali da esperimento e al tempo stesso rendere massima l'esposizione mediante inalazione alla sostanza in esame. Come regola generale per garantire la stabilità dell'atmosfera della camera, il «volume» complessivo degli animali di saggio non dovrebbe superare il 5 % di quello della camera di saggio. Si può ricorrere ad una esposizione oro-nasale, della sola testa, oppure di tutto il corpo in camera individuale; le prime due modalità d'esposizione renderanno minima l'assunzione delle sostanze attraverso altre vie.

**1.6.2.6. Periodo di osservazione**

Durante l'intero trattamento e il periodo di recupero, gli animali dovranno essere esaminati quotidianamente per rilevare i segni di tossicità. Il momento del decesso e il momento in cui si manifestano e scompaiono i sintomi di tossicità dovranno essere registrati.

**1.6.3. Procedimento**

Gli animali vengono esposti giornalmente alla sostanza in esame per 5-7 giorni alla settimana per un periodo di 28 giorni. Gli animali di ogni gruppo satellite, previsto per proseguire le osservazioni, dovranno essere tenuti per altri 14 giorni, senza alcun trattamento, al fine di rilevare la scomparsa oppure la persistenza degli effetti tossici. L'esperimento dovrà essere effettuato ad una temperatura di  $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$ .

Dal punto di vista ottimale, l'umidità relativa dovrà essere mantenuta tra il 30 e il 70 % ma, in taluni casi (ad esempio prove di alcuni aerosol), ciò può non essere realizzabile. Mantenendo una leggera pressione negativa all'interno della camera ( $\leq 5$  mm d'acqua) si impedirà il trafileamento della sostanza in esame nell'area circostante. Durante l'esposizione, la somministrazione di cibo e acqua dovrebbe essere sospesa.

Dovrà essere realizzato un sistema dinamico d'inalazione con un adeguato sistema analitico di controllo della concentrazione. Si raccomanda di effettuare un esperimento di prova per stabilire le concentrazioni idonee di esposizione. La velocità di flusso dell'aria dovrà essere regolata in modo da rendere uniformi le condizioni nella camera di esposizione. Il sistema dovrebbe consentire di raggiungere al più presto possibile le condizioni d'esposizione stabili.

Dovranno essere misurati o controllati:

- (a) la velocità del flusso d'aria (in continuo),
- (b) la concentrazione effettiva della sostanza in esame nella zona di respirazione. Durante il periodo giornaliero di esposizione, la concentrazione non dovrà variare oltre il  $\pm 15\%$  del valore medio. Tuttavia, nel caso di alcuni aerosol, questo livello di controllo potrebbe non essere realizzabile, e sarebbe quindi accettabile un intervallo più ampio. Per tutta la durata dello studio, le concentrazioni dovranno essere mantenute per quanto possibile costanti da un giorno all'altro. Per gli aerosol, si dovrà eseguire almeno un'analisi delle dimensioni di particelle per gruppo di prova e per settimana.
- (c) Temperatura e umidità, in continuo se possibile

Durante e dopo l'esposizione si procede all'effettuazione e alla registrazione sistematica delle osservazioni, registri individuali dovranno essere mantenuti per ciascun animale. Tutti gli animali dovranno essere esaminati giornalmente e dovranno essere registrati i sintomi di tossicità, compresi il momento del loro insorgere, il loro grado e la loro durata. Le osservazioni effettuate dovrebbero comprendere le alterazioni della cute e del pelo, degli occhi, delle membrane mucose e dei sistemi respiratorio, circolatorio, nervoso autonomo e centrale, dell'attività somatomotoria e del comportamento dell'animale. La misura del peso degli animali dovrà essere effettuata ogni settimana. Si raccomanda, inoltre, che anche il consumo di alimento sia misurato ogni settimana. L'osservazione regolare degli animali è necessaria per minimizzare la perdita di animali da studiare causata da cannibalismo, autolisi dei tessuti o errata collocazione. Al termine dello studio, gli animali sopravvissuti, esclusi quelli del gruppo satellite, vengono sottoposti ad esame necroscopico. Gli animali moribondi e gli animali in stato di grave sofferenza o dolore dovrebbero essere rimossi appena notati, soppressi umanamente e sottoposti a necroscopia.

Al termine del saggio tutti gli animali, compresi quelli di controllo, saranno sottoposti ai seguenti esami:

1. ematologia, comprendente almeno l'ematocrito, la concentrazione di emoglobina, la conta degli eritrociti, la conta totale e differenziale dei leucociti e una misura del potenziale di coagulazione,
2. biochimica clinica del sangue, comprendente almeno un parametro della funzionalità epatica e renale nel siero: alanina aminotransferasi (prima conosciuta come glutammico-piruvico transaminasi), aspartato aminotransferasi (prima conosciuta come glutammico-ossalacetico transaminasi), azoto ureico, albumina, creatinina ematica, bilirubina totale e proteine sieriche totali.

Altre determinazioni che possono risultare necessarie per una adeguata valutazione tossicologica, comprendono il calcio, il fosforo, il cloruro, il sodio, il potassio, il glucosio a digiuno, l'analisi dei lipidi, gli ormoni, l'equilibrio acido/base, la metaemoglobina, l'attività colinesterasica.

Ove necessario, si possono effettuare altre analisi biochimico-cliniche per estendere l'indagine degli effetti osservati.

#### 1.6.3.1 Necroscopia

Tutti gli animali usati nello studio dovrebbero essere sottoposti a necroscopia completa. Per evitare la disidratazione, almeno il fegato, i reni, le ghiandole surrenali, i polmoni e i testicoli dovrebbero essere pesati a umido appena possibile dopo la dissezione. Organi e tessuti (il tratto respiratorio, fegato, reni, milza, testicoli, ghiandole surrenali, cuore e qualsiasi organo presentante lesioni macroscopiche o variazioni delle dimensioni) dovrebbero essere conservati in un materiale idoneo per un eventuale futuro esame istopatologico. I polmoni dovrebbero essere asportati intatti, pesati e trattati con un fissatore idoneo ad assicurare che la struttura dei polmoni venga mantenuta.

#### 1.6.3.2 Esame istopatologico

Gli organi e i tessuti degli animali del gruppo trattato con la concentrazione più elevata e del gruppo di controllo dovranno essere sottoposti ad esame istologico. Gli organi e i tessuti che presentano alterazioni attribuibili alla sostanza in esame, somministrata al più alto livello di dosaggio, dovranno essere esaminati in tutti i gruppi trattati con i dosaggi inferiori. Gli animali di ogni gruppo satellite dovranno essere sottoposti ad esame istologico, in particolare per gli organi e i tessuti che risultano colpiti da effetti tossici negli altri gruppi trattati.

### 2 DATI

I risultati dovranno essere riassunti sotto forma di tabelle indicanti, per ogni gruppo trattato, il numero di animali all'inizio e il numero di animali che presentano ciascun tipo di lesione.

## 3. RELAZIONE

## 3.1. RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- specie, ceppo, origine degli animali, condizioni ambientali, dieta, ecc.;
- condizioni del saggio:

Descrizione dell'apparecchiatura di esposizione, incluso il disegno, tipo, dimensioni, la fonte d'aria, il sistema per la formazione degli aerosol, il metodo di condizionamento dell'aria, il trattamento dell'aria di scarico e il metodo di stabulazione degli animali in una camera sperimentale, quando questa venga usata. Dovrebbe essere fornita una descrizione della strumentazione usata per misurare la temperatura, l'umidità e, se del caso, la stabilità delle concentrazioni di aerosol o la distribuzione delle dimensioni delle particelle.

Dati relativi all'esposizione:

Essi dovrebbero essere tabulati e presentati con valori medi e con una misura della variabilità (ad esempio deviazione standard) e dovrebbero includere:

- a) velocità del flusso d'aria attraverso l'apparecchiatura di inalazione;
  - b) temperatura e umidità dell'aria;
  - c) concentrazioni nominali (quantitativo globale della sostanza in esame introdotta nel dispositivo di inalazione diviso per il volume dell'aria);
  - d) tipo di veicolo, se usato;
  - e) concentrazioni effettive nella zona di respirazione;
  - f) diametro aerodinamico mediano in massa (DAMM) e deviazione standard geometrica (DSG);
- dati relativi agli effetti tossici per sesso e per concentrazione;
  - momento del decesso durante lo studio, o se gli animali sono sopravvissuti sino al suo termine;
  - descrizione di effetti tossici o altri effetti; livello senza effetti;
  - momento in cui è stato rilevato ciascun sintomo anormale e suo decorso;
  - dati relativi al consumo di alimento e al peso corporeo;
  - analisi ematologiche effettuate e loro risultati;
  - analisi biochimiche-cliniche effettuate e loro risultati;
  - risultati della necropsopia;
  - descrizione dettagliata di tutti i risultati istopatologici;
  - elaborazione statistica dei risultati, ove possibile;
  - discussione dei risultati;
  - interpretazione dei risultati.

## 3.2. VALUTAZIONE E INTERPRETAZIONE

Vedi introduzione generale, parte B

## 4. BIBLIOGRAFIA

Vedi introduzione generale, parte B

## B.9 TOSSICITÀ A DOSE RIPETUTA (28 GIORNI) PER VIA CUTANEA

## 1 METODO

## 1.1 INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2 DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3 SOSTANZA DI RIFERIMENTO

Nessuna

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

La sostanza in esame è applicata ogni giorno sulla pelle di alcuni gruppi di animali da esperimento, in dosi graduate, un livello di dose per gruppo, per un periodo di 28 giorni. Durante il periodo di applicazione, gli animali vengono osservati quotidianamente per rilevare i sintomi di tossicità. Si sottopongono a necropsia gli animali morti durante la prova e al termine del saggio vengono sottoposti a necropsia gli animali sopravvissuti.

## 1.5. CRITERI DI QUALITÀ

Nessuno

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1 Preparazioni

Per un periodo di almeno 5 giorni prima della prova gli animali sono mantenuti nelle stesse condizioni di stabulazione e di alimentazione del saggio. Prima del saggio gli animali, che dovranno essere giovani e sani, sono scelti con metodo casuale e assegnati ai gruppi previsti per il trattamento e per il controllo. Poco prima dell'esperimento si effettua il taglio del pelo nella parte dorsale del corpo degli animali. Si può procedere alla rasatura, ma essa dovrebbe essere effettuata circa 24 ore prima dell'esperimento. Di norma è necessario ripetere il taglio o la rasatura a intervalli di circa una settimana. Durante il taglio o la rasatura si dovrà badare a non ledere la cute dell'animale. Per l'applicazione della sostanza in esame, si dovrebbe preparare almeno il 10 % della superficie corporea. Nel determinare l'entità dell'area da preparare e le dimensioni della copertura è opportuno tenere presente il peso dell'animale. Le sostanze solide, che possono essere ridotte in polvere se appropriato, dovranno essere inumidite sufficientemente con acqua o, se necessario, con un veicolo adatto ad assicurare un buon contatto con la pelle. In generale le sostanze liquide sono saggiate in forma non diluita. Dal punto di vista ottimale, applicazioni quotidiane vengono effettuate sulla base di 5-7 giorni per settimana.

## 1.6.2 Condizioni per il saggio

## 1.6.2.1 Animali per l'esperimento

Possono essere utilizzati ratti adulti, conigli o porcellini d'India. Si possono utilizzare altre specie animali, ma il loro uso dovrà essere giustificato.

All'inizio dello studio l'intervallo di variazione di peso degli animali non dovrebbe superare  $\pm 20\%$  del valore medio.

**1.6.2.2. Numero e sesso**

Per ciascun livello di dosaggio dovrebbero essere utilizzati almeno 10 animali (5 di sesso femminile e 5 di sesso maschile) con cute sana. Le femmine dovrebbero essere nullipare e non gravide. Qualora siano stati programmati sacrifici intermedi di alcuni animali, il numero degli animali dovrà essere aumentato per includere quello degli animali da sacrificare prima del termine della prova. Inoltre, un altro gruppo (gruppo satellite) di 10 animali (5 animali per sesso) può essere sottoposto al trattamento con il livello massimo di dosaggio per 28 giorni e tenuto in osservazione per 14 giorni dopo il trattamento per rilevare la reversibilità, la persistenza o l'insorgenza ritardata degli effetti tossici. Inoltre si utilizzerà in tale caso pure un gruppo satellite di 10 animali di controllo (5 animali per sesso).

**1.6.2.3. Livelli di dosaggio**

Sono richiesti almeno 3 livelli di dosaggio, almeno 6 ore al giorno, con un gruppo di controllo oppure, nel caso venga usato un veicolo, con un gruppo di controllo del veicolo. L'applicazione della sostanza in esame dovrebbe essere effettuata ogni giorno alla stessa ora e modificata ad intervalli (settimanali e bisettimanali) al fine di mantenere un livello di dosaggio costante in funzione del peso dell'animale. Gli animali del gruppo di controllo dovranno essere trattati in modo identico agli animali del saggio, ad eccezione che per l'applicazione delle sostanze da saggiare.

Se, per facilitare il dosaggio, viene utilizzato un veicolo, al gruppo di controllo dovrà essere somministrato il veicolo allo stesso modo che ai gruppi trattati e nella stessa quantità somministrata al gruppo con il dosaggio più elevato. Il livello di dosaggio più elevato della sostanza in esame dovrebbe causare effetti tossici ma senza causare mortalità oppure causando una mortalità molto limitata. Il livello di dosaggio più basso non dovrebbe provocare alcun sintomo di tossicità. Nei casi in cui vi sia una stima utilizzabile dell'esposizione umana, il livello di dosaggio più basso dovrebbe superarla. Dal punto di vista ottimale, il livello intermedio dovrebbe provocare effetti tossici osservabili minimi. Nei casi in cui siano usati più livelli di dosaggio intermedi, essi dovrebbero essere intervallati al fine di causare una graduazione di effetti tossici. Nei gruppi a livello di dosaggio basso e medio e di controllo, l'incidenza dei decessi dovrebbe essere bassa per consentire una valutazione significativa dei risultati.

Se l'applicazione della sostanza in esame dovesse causare una grave irritazione della cute, sarà opportuno ridurne le concentrazioni, e ciò può causare una diminuzione oppure l'assenza degli altri effetti tossici al livello di dosaggio più elevato. Inoltre, se la cute è stata gravemente danneggiata, può essere necessario interrompere il saggio e iniziare uno nuovo a concentrazioni più basse.

**1.6.2.4. Saggio limite**

Qualora un saggio preliminare, effettuato con un livello di dosaggio di 1 000 mg/kg di peso corporeo, oppure con una dose superiore in relazione all'eventuale esposizione umana, se nota, non causi effetti tossici, ulteriori saggi possono essere considerati non necessari.

**1.6.2.5. Periodo di osservazione**

Gli animali da esperimento dovrebbero essere esaminati quotidianamente al fine di rilevare i segni della tossicità. Il momento del decesso e quello in cui appaiono e scompaiono i sintomi di tossicità dovrebbero essere registrati.

**1.6.3. Procedimento**

Ogni gabbia dovrebbe contenere un solo animale. Da un punto di vista ottimale, la sostanza in esame viene applicata agli animali 7 giorni la settimana per un periodo di 28 giorni. Gli animali di ogni eventuale gruppo satellite previsto per proseguire le osservazioni dovrebbero essere tenuti per altri 14 giorni, senza subire trattamenti, al fine di rilevare l'eventuale guarigione o la persistenza degli effetti tossici. La durata dell'esposizione dovrebbe essere almeno di 6 ore/giorno.

La sostanza in esame dovrebbe essere applicata uniformemente su un'area pari a circa il 10 % della superficie corporea totale. Per le sostanze altamente tossiche, la superficie coperta può essere inferiore, ma la maggior parte dell'area trattata dovrebbe essere ricoperta da uno strato per quanto possibile sottile e uniforme.

Durante il periodo di esposizione, la sostanza in esame viene tenuta a contatto della cute mediante una garza porosa e un cerotto non irritante. La parte su cui viene applicata la sostanza dovrà essere ulteriormente coperta in modo opportuno per tenere ferma la garza e la sostanza in esame e affinché gli animali non possano ingerire la sostanza stessa. Dispositivi per la limitazione dei movimenti possono essere utilizzati per impedire agli animali di ingerire la sostanza in esame, ma non è consigliabile l'immobilizzazione completa dell'animale. Come alternativa si può usare un «dispositivo protettivo a collare».



Alla fine del periodo di esposizione, la sostanza residua dovrà essere rimossa utilizzando acqua, se possibile, o altri prodotti idonei per la pulizia della pelle

Tutti gli animali dovranno essere esaminati quotidianamente e dovranno essere registrati i segni di tossicità, inclusi il momento dell'insorgenza, il loro grado e durata

Le osservazioni dovrebbero includere le alterazioni della cute e del pelo, degli occhi e delle membrane mucose, e anche dei sistemi respiratorio, circolatorio, nervoso autonomo e centrale, dell'attività somatomotoria e del comportamento dell'animale. La misura del peso degli animali dovrà essere effettuata ogni settimana. Si raccomanda, inoltre, che il consumo sia anche misurato ogni settimana. L'esame periodico degli animali è necessario per impedire la perdita degli animali dello studio, dovuta a cause come cannibalismo, autolisi dei tessuti o errata collocazione. Al termine del saggio, tutti gli animali sopravvissuti, ad eccezione del gruppo satellite, sono sottoposti a necropsopia. Gli animali moribondi e gli animali in condizioni di grave sofferenza o dolore dovranno essere rimossi appena notati, soppressi umanamente e sottoposti a necropsopia

Al termine del saggio tutti gli animali, compresi quelli di controllo, saranno sottoposti ai seguenti esami

- (i) ematologia, comprendente almeno l'ematocrito, la concentrazione di emoglobina, la conta degli eritrociti, la conta totale e differenziale dei leucociti e una misura del potenziale di coagulazione,
- (ii) biochimica clinica del sangue, comprendente almeno un parametro della funzionalità epatica e renale nel siero: alanina aminotransferasi (prima conosciuta come glutammico-piruvico transaminasi), aspartato aminotransferasi (prima conosciuta come glutammico-ossalacetico transaminasi), azoto ureico, albumina, creatinina ematica, bilirubina totale e proteine sieriche totali

Altre determinazioni, che possono risultare necessarie per un'adeguata valutazione tossicologica, comprendono il calcio, il fosforo, il cloruro, il sodio, il potassio, il glucosio a digiuno, l'analisi dei lipidi, gli ormoni, l'equilibrio acido/base, la metaemoglobina, l'attività colinesterasica

Per estendere l'indagine degli effetti osservati, se necessario, si possono utilizzare ulteriori esami biochimico-clinici

#### 1.6.4 Necropsopia

Tutti gli animali dello studio dovranno essere sottoposti a necropsopia completa. Per evitare la disidratazione, il fegato, i reni, le ghiandole surrenali e i testicoli dovrebbero essere pesati unificati il più presto possibile dopo la dissezione. Gli organi e i tessuti, cioè la cute normale e trattata, il fegato, i reni, la milza, i testicoli, le ghiandole surrenali, il cuore e gli organi bersaglio (cioè gli organi che presentano lesioni macroscopiche o variazioni di dimensioni) dovranno essere conservati in un mezzo adatto per l'eventuale futuro esame istopatologico

#### 1.6.5 Esame istopatologico

Gli organi e i tessuti degli animali del gruppo ad alto dosaggio e del gruppo di controllo opportunamente preservati dovranno essere sottoposti ad esame istologico. Gli organi e i tessuti che presentano lesioni attribuibili alla sostanza in esame somministrata al dosaggio più elevato dovranno essere esaminati anche per i gruppi a dosaggio inferiore. Gli animali dell'eventuale gruppo satellite dovranno essere sottoposti ad esame istologico, in particolare per gli organi e i tessuti che risultano colpiti da effetti tossici negli altri gruppi trattati

#### 2 DATI

I risultati dovranno essere riassunti in una tabella indicante, per ogni gruppo trattato, il numero di animali all'inizio del saggio e il numero di animali che mostra ciascun tipo di lesione

Tutti i risultati osservati dovranno essere valutati con un adeguato metodo statistico. Può essere utilizzato qualsiasi metodo statistico riconosciuto

**3. RELAZIONE****3.1 RELAZIONE SUL SAGGIO**

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- dati sugli animali (specie, ceppo, origine, condizioni ambientali, dieta, ecc.);
- condizioni di prova (incluso il tipo di medicazione: occlusiva o non occlusiva);
- livello di dosaggio (incluso il veicolo, se usato) e concentrazioni;
- livello senza effetti, dove possibile;
- effetti tossici per sesso e dosaggio;
- il momento del decesso durante il saggio, oppure se gli animali sono sopravvissuti sino al termine;
- effetti tossici o altri effetti;
- momento dell'osservazione di ciascun sintomo anomalo e suo successivo decorso;
- dati relativi al consumo di alimenti e al peso corporeo;
- esami ematologici effettuati e loro risultati;
- esami biochimico-clinici effettuati e loro risultati;
- risultati della necropsopia;
- descrizione dettagliata di tutti i risultati istopatologici;
- elaborazione statistica dei risultati, ove possibile;
- discussione dei risultati;
- interpretazione dei risultati.

**3.2. VALUTAZIONE E INTERPRETAZIONE**

Vedi introduzione generale, parte B

**4. BIBLIOGRAFIA**

Vedi introduzione generale, parte B

## B 10. MUTAGENICITÀ (MAMMIFERI: SAGGIO CITOGNETICO «IN VITRO»)

## 1 METODO

## 1.1 INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2 DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3 SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

Il test citogenetico *in vitro* è un test di mutagenesi a breve termine per la rivelazione di aberrazioni cromosomiche strutturali nelle cellule di mammifero in coltura. Possono essere utilizzate sia colture di linee cellulari stabilizzate che colture cellulari primarie. Dopo esposizione alle sostanze chimiche d'esame con e senza sistema di attivazione metabolica appropriato, le colture cellulari vengono trattate con inibitori del fuso, come colchicina, per accumulare le cellule allo stadio di metafase della mitosi (metafase c). Le cellule sono raccolte in tempi adeguati e vengono allestiti dei preparati cromosomici. Le preparazioni sono colorate e le metafasi sono analizzate per individuare le anomalie cromosomiche.

## 1.5 CRITERI DI QUALITÀ

Nessuno

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1 Preparazioni

## 1.6.1.1 Cellule

Si utilizzano linee cellulari stabilizzate o colture di cellule primarie, per esempio cellule di criceto cinese e linfociti umani. Le sostanze chimiche da esaminare vengono preparate in terreno di coltura o sciolte in veicoli appropriati prima del trattamento delle cellule.

## 1.6.1.2 Sistema di attivazione metabolica

Le cellule vanno esposte alla sostanza in esame sia in presenza che in assenza di un sistema appropriato di attivazione metabolica. Il sistema più comunemente usato è una frazione post mitocondriale integrata di cofattori, preparata partendo da fegati di roditori trattati con agenti induttori di enzimi.

## 1.6.2 Condizioni per il saggio

*Numero di colture*

Per ogni punto dell'esperimento si usano almeno due colture.

*Uso di controlli negativi e positivi*

Come controlli negativi si impiegano solvente (quando il solvente non è costituito dal terreno di coltura o dall'acqua), miscela di attivazione con enzimi epatici, miscela di attivazione con enzimi epatici e solvente, e controlli non trattati. Ogni esperimento comporta anche un controllo positivo, quando viene impiegata la

miscela di attivazione con enzimi epatici per attivare la sostanza in esame, si deve usare come controllo positivo un composto noto per richiedere attivazione metabolica.

#### *Dosi*

Si usano almeno 3 dosi del composto in esame con almeno un intervallo d'un fattore logaritmico tra di esse; la dose più elevata deve inibire l'attività mitotica del 50 % circa o presentare qualche altro segno di citotossicità. Se non è tossica, la sostanza in esame deve esser saggiata fino al limite di solubilità, o fino ad una concentrazione massima di 5 mg/ml.

#### *Condizioni di coltura*

Vanno impiegati terreno di coltura e condizioni d'incubazione (per esempio temperatura, recipienti di coltura, concentrazione di CO<sub>2</sub>, e l'umidità) appropriate.

### 1.6.3. Procedimento

#### 1.6.3.1 Preparazione delle colture

Linee cellulari stabilizzate: le cellule sono generate da colture di riserva (per esempio mediante tripsinizzazione o «scuotimento»), seminate in recipienti di coltura in densità appropriate e messe in incubazione a 37 °C

Linfociti umani: un quantitativo di sangue intero eparinizzato è aggiunto a un terreno di coltura contenente fitoemoagglutinina, siero fetale bovino e antibiotici e viene posto in incubazione a 37 °C.

#### 1.6.3.2. *Trattamento delle colture con il composto in esame*

##### (i) Trattamento senza miscela di attivazione con enzimi epatici

Se possibile, tutti i trattamenti devono coprire almeno il periodo di un intero ciclo cellulare e gli schemi di fissazione devono assicurare l'analisi delle prime mitosi post-trattamento di cellule trattate a differenti stadi del ciclo.

Quando il trattamento non copre la durata di un intero ciclo cellulare, i tempi di fissazione sono scelti in modo da campionare cellule a stadi diversi del ciclo cellulare durante il trattamento, per esempio G<sub>1</sub>, S e G<sub>2</sub>. La sostanza in esame è aggiunta a colture di linee cellulari stabilizzate quando sono nella fase di crescita esponenziale. Le colture di linfociti umani vengono trattate quando si trovano ancora in una condizione semisincrona.

##### (ii) Trattamento con miscela di attivazione di enzimi epatici

Per il trattamento, il composto in esame, combinato con il sistema di attivazione, deve essere presente il più a lungo possibile senza esercitare un effetto tossico sulle cellule. Se, per motivi di tossicità, questo trattamento non copre la durata di un intero ciclo cellulare, si scelgono molteplici tempi di fissazione in modo da campionare cellule a diversi stadi del ciclo cellulare nel corso del trattamento, ossia G<sub>1</sub>, S e G<sub>2</sub>.

#### *Raccolta delle cellule:*

Le colture cellulari sono trattate con l'inibitore del fuso per un tempo adeguato prima della raccolta. Ciascuna coltura è raccolta e trattata separatamente per la preparazione di cromosomi.

Sono necessari almeno due tempi di raccolta. Si raccomanda che uno coincida approssimativamente con un ciclo cellulare, e l'altro sia effettuato più tardi. Ciò serve a far sì che siano coperti tutti gli stadi del ciclo cellulare e a tener conto di ritardi del ciclo cellulare.

#### 1.6.3.3 Preparazione di cromosomi

Le preparazioni di cromosomi comportano il trattamento ipotonico delle cellule, la fissazione, la disseminazione su vetrini e la colorazione.

**Analisi:**

Almeno 100 metafasi ben distribuite per coltura vengono analizzate per individuarne le aberrazioni cromosomiche. I vetrini ricevono, prima dell'analisi, un numero di codice. Nei linfociti umani si analizzano soltanto metafasi contenenti 46 centromeri. Nelle linee cellulari stabilizzate si analizzano solo metafasi contenenti un numero di centromeri pari al numero modale  $\pm 2$ .

In aggiunta, va valutato l'indice mitotico o qualche altro indice di citotossicità, ove appropriato, per ciascun livello di dosaggio durante la prova.

**2. DATI**

I dati sono presentati sotto forma di tabelle. Aberrazioni di tipo cromatidico («gaps», rotture, interscambi), cromosomico («gaps», rotture, «minutes», anelli, dicentrici, policentrici) e il numero di metafasi aberranti (con e senza «gaps») vengono registrati separatamente per tutte le colture trattate e di controllo.

I dati vengono valutati con metodi statistici appropriati.

I risultati sperimentali devono essere confrontati con controlli negativi provati in parallelo

Si conducono almeno due esperimenti indipendenti. Tuttavia, se ciò può essere giustificato scientificamente, può essere sufficiente un esperimento singolo. Non è necessario eseguire il secondo in maniera identica all'esperimento iniziale. Al contrario può essere preferibile modificare certe condizioni sperimentali allo scopo di ottenere dati più utili.

**3. RELAZIONE****3.1. RELAZIONE SUL SAGGIO**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

- cellule utilizzate;
- condizioni nelle quali è stato effettuato il test: composizione del terreno, concentrazione di CO<sub>2</sub>, temperature d'incubazione, dosi, tempo di trattamento, durata del trattamento con l'inibitore del fuso mitotico e loro concentrazione, tipo di miscela d'attivazione di enzimi epatici usata, controlli positivi e negativi;
- numero di colture cellulari;
- numero di metafasi analizzate (dati indicati separatamente per ogni coltura);
- indice mitotico, o altra indicazione di citotossicità;
- tipo e numero di aberrazioni indicato separatamente per ogni coltura trattata e di controllo, numero modale di cromosomi nelle linee cellulari stabilizzate usate;
- valutazione statistica;
- discussione dei risultati;
- interpretazione dei risultati.

**3.2. VALUTAZIONE E INTERPRETAZIONE**

Vedi introduzione generale, parte B

**4. BIBLIOGRAFIA**

Vedi introduzione generale, parte B

**B.11. MUTAGENICITÀ (MAMMIFERI: MIDOLLO OSSEO — SAGGIO CITOGENETICO *IN VIVO* — ANALISI CROMOSOMICA)****1. METODO****1.1. INTRODUZIONE**

Vedi introduzione generale, parte B

**1.2. DEFINIZIONI**

Vedi introduzione generale, parte B

**1.3. SOSTANZA DI RIFERIMENTO**

Nessuna.

**1.4. PRINCIPI DEL METODO DI SAGGIO**

Questo test citogenetico *in vivo* è un test di mutagenesi a breve termine per l'individuazione di aberrazioni cromosomiche strutturali. Dette aberrazioni cromosomiche vengono generalmente valutate nelle prime mitosi successive al trattamento. Con i mutageni chimici la maggior parte delle aberrazioni provocate sono di tipo cromatidico.

Il test utilizza cellule di midollo osseo di mammiferi esposti a sostanze chimiche attraverso adeguate vie di somministrazione e successivamente sacrificati ad intervalli sequenziali. Gli animali vengono ulteriormente trattati, prima del sacrificio, con inibitori del fuso, quali la colchicina, per accumulare cellule allo stadio mitotico della metafase (c-metafase). A partire dalle cellule vengono ricavate preparazioni cromosomiche essiccate che vengono poi colorate; le metafasi vengono poi sottoposte ad analisi microscopica per individuare le aberrazioni cromosomiche.

**1.5. CRITERI DI QUALITÀ**

Nessuno.

**1.6. DESCRIZIONE DEL METODO DI SAGGIO****1.6.1. Preparazioni**

Le sostanze chimiche in esame vengono disciolte in soluzione fisiologica. Qualora non siano solubili, vengono disciolte o messe in sospensione in solventi adatti.

Vengono utilizzate soluzioni fresche del composto in esame. Qualora venga utilizzato un solvente per facilitare il dosaggio, esso non deve interferire con il composto, né produrre effetti tossici.

**1.6.2. Condizioni per il saggio****1.6.2.1. Animali sperimentali**

Vengono utilizzati roditori quali ratti, topi o criceti cinesi. Vengono scelti a caso soggetti giovani adulti, che vengono poi assegnati ai gruppi di trattamento e di controllo.

**1.6.2.2. Numero e sesso**

Si impiegano almeno 5 animali di sesso femminile e 5 di sesso maschile per ogni gruppo sperimentale e di controllo. Pertanto vanno sacrificati 10 animali per gruppo per tempo, se si includono nel programma sperimentale vari tempi di controllo del saggio dopo il trattamento. Per il gruppo di controllo positivo è sufficiente un singolo tempo di campionamento.

**1.6.2.3 Via di somministrazione**

In genere le sostanze in esame vanno somministrate in un'unico trattamento. Il trattamento può essere ripetuto a intervalli regolari sulla base di dati tossicologici. Tuttavia lo schema di trattamento ripetuto può essere applicato soltanto se la sostanza in esame non ha effetti citotossici sul midollo osseo. La somministrazione avviene in genere per via orale o mediante iniezione intraperitoneale. Altre vie di somministrazione possono essere adatte.

**1.6.2.4 Controlli positivi e negativi**

Come controllo positivo viene utilizzata una sostanza di cui è nota la capacità di produrre aberrazioni cromosomiche *in vivo*, inoltre anche un gruppo di controllo negativo (solvente) deve essere incluso nel piano di ogni esperimento.

**1.6.2.5 Dosi**

Per il «dossier» di base viene utilizzata una dose della sostanza in esame, che consiste nella dose massima tollerata o in quella che produce qualche indicazione di citotossicità come, ad esempio, la parziale inibizione della mitosi.

Per composti «non tossici» la dose massima (limite) da saggiare nel caso di singola somministrazione è di 2 000 mg/kg di peso corporeo.

Se si impiega un programma a dosi ripetute, la dose limite è 1 000 mg/kg di peso corporeo per giorno.

Possono essere utilizzate dosi addizionali qualora siano indicate da motivazioni scientifiche.

Qualora il test sia usato come prova di verifica vanno utilizzate almeno altre due dosi.

**1.6.3 Procedimento**

Il test può essere eseguito in due modi:

- (i) gli animali vengono trattati con il composto in esame una volta alla dose tollerata più elevata. In prima istanza, i campioni vengono prelevati 24 ore dopo il trattamento. Se a questo punto, i risultati sono chiaramente positivi può non essere necessario un ulteriore campionamento. Se tuttavia i risultati sono negativi o dubbi, poiché la cinetica del ciclo cellulare può essere influenzata dal composto chimico in esame, si effettuano un campionamento più precoce e uno più tardivo, adeguatamente distanziati in un intervallo che va da 6 a 48 ore.

Quando vengono usati livelli di dosaggio addizionali, si dovrebbero prelevare campioni ad intervalli particolarmente sensibili ovvero, se questi non sono noti, 24 ore dopo il trattamento.

- (ii) Se informazioni farmacocinetiche e metaboliche suggeriscono un programma di trattamento ripetuto, si può utilizzare la somministrazione di dosi ripetute e i campioni dovrebbero essere prelevati 6 e 24 ore dopo l'ultimo trattamento.

**Preparazione del midollo osseo**

Prima di venire sacrificati, agli animali viene iniettata per via intraperitoneale un'adeguata dose di inibitore del fuso mitotico in modo da ottenere un adeguato numero di cellule in c-metafase. Si ottengono campioni di midollo osseo da ambedue i femori degli animali appena sacrificati, dopo applicazione di una soluzione isotonica. Dopo un adeguato trattamento ipotonico le cellule vengono fissate e quindi strisciate su vetrini. Dopo l'essiccazione si procede alla colorazione.

**Analisi**

Prima dell'analisi microscopica, ai vetrini viene attribuito un numero di codice. Per l'individuazione delle aberrazioni cromosomiche strutturali vengono analizzati, per ciascun animale, almeno 50 metafasi ben «aperte» con un numero completo di centromeri. In aggiunta, l'indice mitotico può essere determinato per ciascun animale.

**2. DATI**

I dati sono presentati sotto forma di tabelle. Le aberrazioni di tipo cromatidico e isocromatidico («gaps», rotture, interscambi), il numero di metafasi aberranti (con o senza «gaps») e gli indici mitotici, ove determinati, vengono registrati separatamente per tutti gli animali trattati e per quelli di controllo. Vengono inoltre registrate per ogni gruppo trattato e di controllo le medie e le deviazioni standard. I dati vengono valutati con metodi statistici appropriati.

**3. RELAZIONE****3.1. RELAZIONE SUL SAGGIO**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

- specie, ceppo ed età degli animali utilizzati;
- numero di animali di ciascun sesso nei gruppi trattati e di controllo;
- condizioni del saggio: descrizione dettagliata dello schema di trattamento e di campionamento, livelli di dosaggio, durata del trattamento con l'inibitore del fuso usato e relativa concentrazione;
- numero di metafasi analizzate per animale;
- indici mitotici, ove determinati;
- tipo e numero di aberrazioni, indicate separatamente per ogni animale trattato e per ogni animale di controllo;
- sintomi di tossicità nel corso dello studio;
- valutazione statistica;
- discussione dei risultati;
- interpretazione dei risultati.

**3.2. VALUTAZIONE E INTERPRETAZIONE**

Vedi introduzione generale, parte B

**4. BIBLIOGRAFIA**

Vedi introduzione generale, parte B



## B.12. MUTAGENICITÀ, SAGGIO DEL MICRONUCLEO

## 1 METODO

## 1.1 INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2 DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3 SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

Il saggio del micronucleo è un saggio *in vivo*, a breve termine, effettuato su mammiferi, per individuare danno cromosomico o dell'apparato mitotico ad opera di sostanze chimiche. Questo saggio si basa sulla constatazione di un aumento dei micronuclei negli eritrociti policromatici degli animali sottoposti al trattamento rispetto a quelli osservati negli animali di controllo.

I micronuclei sono formati da frammenti di cromosomi o da cromosomi interi perduti durante la mitosi. Quando gli eritroblasti si trasformano in eritrociti, il nucleo principale viene espulso, mentre il micronucleo può rimanere nel citoplasma. Per questo saggio vengono analizzati eritrociti policromatici del midollo osseo di animali opportunamente esposti alle sostanze in esame attraverso vie di somministrazione adatte. Il midollo osseo viene prelevato e vengono effettuati strisci, successivamente colorati. Gli eritrociti policromatici vengono esaminati al microscopio per individuare i micronuclei e viene stabilita la proporzione fra eritrociti policromatici e normocromatici.

## 1.5 CRITERI DI QUALITÀ

Nessuno

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1 Preparazioni

Le sostanze chimiche vengono disciolte in soluzione fisiologica. Qualora non siano solubili, vengono disciolte o sospese in solventi adatti. Se viene utilizzato un solvente per facilitare il dosaggio, esso non deve interferire con il composto né produrre effetti tossici. Normalmente, vengono impiegate soluzioni fresche del composto in esame.

## 1.6.2 Condizioni del saggio

## 1.6.2.1 Animali sperimentali

Si raccomanda l'uso di topi, ma è possibile usare altri mammiferi. Vengono scelti a caso soggetti giovani adulti destinati ai gruppi di trattamento e ai gruppi di controllo.

## 1.6.2.2 Numero e sesso

Si impiegano almeno 5 animali di sesso femminile e 5 di sesso maschile per ogni gruppo sperimentale e di controllo. Pertanto vanno sacrificati 10 animali per ciascun intervallo di tempo se si includono nel programma sperimentale diversi tempi di saggio dopo il trattamento. Per il gruppo di controllo positivo è sufficiente un singolo tempo di campionamento.

**1.6.2.3. Via di somministrazione**

In genere le sostanze in esame dovrebbero essere somministrate un'unica volta. Il trattamento può essere ripetuto a intervalli regolari sulla base di dati tossicologici. Tuttavia lo schema di trattamento ripetuto può essere applicato soltanto se la sostanza in esame non ha effetti citotossici sul midollo osseo. La somministrazione avviene in genere per via orale o mediante iniezione intraperitoneale. Anche altre vie di somministrazione possono essere adeguate.

**1.6.2.4 Controlli positivi e negativi**

Per ogni esperimento vengono usati controlli positivi e negativi (solvente).

**1.6.2.5 Dosi**

Per il dossier di base viene utilizzata una dose della sostanza in esame che consiste nella dose massima tollerata o in quella che produce qualche indicazione di citotossicità come, ad esempio, un cambiamento del rapporto fra eritrociti policromatici e normocromatici.

Per composti «non tossici» la dose massima (limite) da studiare dopo somministrazione di una dose singola è di 2 000 mg/kg di peso corporeo.

Se si impiega un protocollo a dosi ripetute, la dose limite è 1 000 mg/kg di peso corporeo per giorno.

Possono essere utilizzate dosi addizionali qualora siano giustificate da motivazioni scientifiche.

Qualora il saggio sia usato come prova di verifica dovrebbero essere utilizzate almeno altre due dosi.

**1.6.3. Procedimento**

Il saggio può essere eseguito in due modi:

- (i) gli animali vengono trattati con il composto in esame una sola volta. I tempi di campionamento dovrebbero coincidere con la risposta massima del saggio, che varia con il composto in esame. Pertanto, si prelevano campioni di midollo osseo almeno due volte iniziando non prima di 12 ore dopo il trattamento e non oltre le 48 ore.

Quando vengono usati livelli di dosaggio addizionali, si dovrebbero prelevare campioni ad intervalli particolarmente sensibili ovvero, se questi non sono noti, 24 ore dopo il trattamento.

- (ii) Se informazioni farmacocinetiche e metaboliche suggeriscono un protocollo di trattamento ripetuto, si può utilizzare la somministrazione di dosi ripetute e i campioni dovrebbero essere prelevati una volta, non prima di 12 ore dopo l'ultimo trattamento.

**Preparazione del midollo osseo:**

Si ottengono campioni di midollo osseo da ambedue i femori di animali appena sacrificati e si sospendono in siero fetale di vitello. Le cellule vengono sedimentate mediante centrifugazione ed il surnatante viene scartato. Gocce della sospensione omogenea vengono disposte su vetrini e strisciate. Dopo l'essiccazione si procede alla colorazione.

**Analisi:**

Prima dell'analisi microscopica, ai vetrini viene attribuito un numero di codice. Vengono osservati almeno 1 000 eritrociti policromatici per animale, per determinare l'incidenza dei micronuclei.

Il rapporto fra eritrociti policromatici e normocromatici viene determinato per ciascun animale contando un totale di 1 000 eritrociti.

**2 DATI**

I dati sono presentati sotto forma di tabelle. Il numero di eritrociti policromatici osservati, il numero di eritrociti che presentano micronuclei e la percentuale delle cellule con micronuclei vengono elencati separatamente per ogni animale trattato e per ogni animale di controllo, come pure il rapporto fra eritrociti policromatici e normocromatici. Vengono inoltre elencate, per ogni gruppo di sperimentazione e di controllo, le medie e le deviazioni standard. I dati vengono valutati con metodi statistici appropriati.

**3 RELAZIONE****3.1 RELAZIONE SUL SAGGIO**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

- specie, ceppo ed età degli animali utilizzati,
- numero di animali di ciascun sesso nei gruppi trattati e di controllo,
- condizioni del test: descrizione dettagliata dello schema del trattamento e del prelievo di campioni, dosi, dati relativi alla tossicità, controlli negativi e positivi,
- criteri adottati per il conteggio dei micronuclei,
- rapporto dose/effetto, ove possibile,
- sintomi di tossicità nel corso dello studio,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati.

**3.2 VALUTAZIONE E INTERPRETAZIONI**

Vedi introduzione generale, parte B.

**4 BIBLIOGRAFIA**

Vedi introduzione generale, parte B.

**B.13. MUTAGENICITÀ — BATTERI — *ESCHERICHIA COLI* — SAGGIO DI REVERSIONE****1. METODO****1.1. INTRODUZIONE**

Vedi introduzione generale, parte B

**1.2. DEFINIZIONI**

Vedi introduzione generale, parte B

**1.3. SOSTANZE DI RIFERIMENTO**

Nessuna.

**1.4. PRINCIPIO DEL METODO DI SAGGIO**

Il sistema di reversione del triptofano (trp) in *Escherichia coli* è un test microbiologico che misura la reversione trp<sup>-</sup> → trp<sup>+</sup> indotta da sostanze chimiche che causano mutazioni del tipo «sostituzione di base» nel genoma del microorganismo.

I batteri sono esposti alla sostanza chimica in esame con e senza attivazione metabolica. Dopo un adeguato periodo d'incubazione in terreno minimo, le colonie revertanti vengono contate e confrontate con il numero di revertanti spontanei presenti in una coltura di controllo non trattata e/o trattata con solvente.

**1.5. CRITERI DI QUALITÀ**

Nessuno.

**1.6. DESCRIZIONE DEL SAGGIO**

Per l'analisi possono essere utilizzati i seguenti metodi: 1) il metodo della preincubazione; 2) il metodo della incorporazione diretta, in cui i batteri e la sostanza saggiata sono mescolati in uno strato di agar molle e versati sulla superficie di una piastra di terreno selettivo agarizzato.

**1.6.1. Preparazioni****1.6.1.1. Batteri**

I batteri vengono coltivati a 37 °C fin quasi al termine della fase di crescita esponenziale o all'inizio della fase stazionaria. La densità approssimativa delle cellule dovrebbe essere di 10<sup>8</sup>-10<sup>9</sup> cellule per ml.

**1.6.1.2. Attivazione metabolica**

I batteri dovrebbero essere esposti alla sostanza in esame in presenza e assenza di un adeguato sistema di attivazione metabolica. Il sistema più comunemente usato è una frazione post-mitocondriale integrata di co-fattori preparata dal fegato di roditori trattati con agenti induttori di enzimi.

## 1 6 2 Condizioni del saggio

## 1 6 2 1 Ceppi

Si dovrebbero usare tre ceppi, WP2, WP2 uvr A e WP2 uvr A pKM 101. Si debbono usare metodi noti per la preparazione e per la conservazione delle colture. Debbono essere oggetto di controlli le richieste nutrizionali e l'identità genetica dei ceppi, la loro sensibilità alle radiazioni ultraviolette o alla mitomicina C e la resistenza all'ampicillina del ceppo WP2 uvr A pKM 101. I vari ceppi debbono anche produrre revertanti spontanei entro i valori limite attesi per ogni ceppo.

## 1 6 2 2 Terreni

Viene utilizzato un terreno adeguato per l'espressione e la selezione dei mutanti, con uno strato adeguato di agar molle sovrastante.

## 1 6 2 3 Controlli negativi e positivi

Vanno eseguiti controlli concomitanti del non trattato e del solvente. I controlli positivi vanno eseguiti per due motivi:

## (i) Per confermare la sensibilità dei ceppi batterici

Metilmetan solfonato, 4 nitrochinolina ossido o etilnitrosourea possono essere utilizzati come controlli positivi per i test in assenza di attivazione metabolica.

## (ii) Per garantire l'attività di un adeguato sistema metabolico

Un controllo positivo dell'attività di un sistema metabolico per tutti i ceppi consiste nell'utilizzazione di 2-amminoantracene. Quando possibile sarebbe opportuno effettuare un controllo positivo con una sostanza della stessa classe chimica del composto in esame.

## 1 6 2 4 Quantità di sostanza in esame per piastra

Vengono effettuati esperimenti con almeno 5 dosi diverse, con intervalli semilogaritmici tra di loro. Le sostanze sono saggiate fino al limite di solubilità o tossicità. La tossicità è evidenziata da una riduzione del numero di revertanti spontanei, da una diminuzione del fondo di crescita ovvero dal grado di sopravvivenza delle colture trattate. Le sostanze non tossiche dovrebbero essere saggiate fino alla concentrazione di 5 mg per piastra prima di essere considerate negative.

## 1 6 2 5 Condizioni d'incubazione

Le piastre vengono esposte in incubazione per un periodo variante da 48 a 72 ore a 37 °C.

## 1 6 3 Procedimento

Per il metodo di incorporazione diretta in piastra, senza attivazione enzimatica, la sostanza in esame viene aggiunta a 0,1 ml di coltura fresca e a 2,0 ml di agar molle. Per quanto riguarda quello con attivazione metabolica, si aggiungono all'agar molle 0,5 ml di miscela di attivazione di enzimi epatici, contenente un'adeguata quantità di frazione postmitocondriale, dopo l'aggiunta della sostanza in esame e dei batteri. Il contenuto di ogni tubo viene agitato e versato sulla superficie di una piastra con terreno selettivo agarizzato. Si lascia solidificare l'agar e le piastre vengono messe in incubazione a 37 °C per un periodo che va dalle 48 alle 72 ore.

Alla fine del periodo d'incubazione vengono contate le colonie revertanti per ciascuna piastra. Per quanto riguarda il metodo di preincubazione, una miscela contenente sostanza saggiata, 0,1 ml di coltura batterica fresca e un'adeguata quantità di miscela di attivazione di enzimi epatici o la stessa quantità di tampone viene preincubata prima di aggiungere 2,0 ml di agar molle. Tutte le altre fasi del procedimento sono uguali a quelle relative al metodo di incorporazione diretta.

Per ambedue i metodi ogni piastramento viene fatto almeno in triplicato.

**2 DATI**

Il numero di colonie revertanti per piastra viene riportato sia per la serie di controllo che per le serie trattate. Sia per la serie trattata che per quella di controllo si dovrebbe riportare il valore della conta di ogni singola piastra, il numero medio di colonie revertanti per piastra e le deviazioni standard.

I dati dovrebbero essere valutati con adeguati metodi statistici.

Si eseguono almeno due esperimenti indipendenti. Non è necessario eseguire il secondo in un modo identico all'esperimento iniziale. Al contrario può essere preferibile modificare certe condizioni sperimentali allo scopo di ottenere dati più utili.

**3. RELAZIONE****3.1 RELAZIONE SUL SAGGIO**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

- batteri, ceppo usato;
- condizioni usate nell'esperimento: dosi, tossicità, composizione dei terreni; procedure di trattamento (preincubazione, incubazione); sistema di attivazione metabolica; sostanze di riferimento, controlli negativi;
- conta per piastre singole, numero medio di colonie revertanti per piastra, deviazione standard, rapporto dose/effetto se possibile;
- discussione dei risultati;
- interpretazione dei risultati.

**3.2 VALUTAZIONE E INTERPRETAZIONE**

Vedi introduzione generale, parte B

**4. BIBLIOGRAFIA**

Vedi introduzione generale, parte B

B.14 MUTAGENICITÀ — *SALMONELLA TYPHIMURIUM* — SAGGIO DI REVERSIONE

## 1 METODO

## 1.1 INTRODUZIONE

Vedi introduzione generale, parte B

## 1.2 DEFINIZIONI

Vedi introduzione generale, parte B

## 1.3 SOSTANZE DI RIFERIMENTO

Nessuna

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

Il sistema di reversione dell'istidina (his) in *Salmonella typhimurium* è un test microbiologico che misura la reversione his<sup>-</sup> → his<sup>+</sup> indotta da sostanze chimiche che causano mutazioni di tipo «sostituzione di base» o mutazioni di tipo «inserzione-delezione» (frame shift) nel genoma del microorganismo.

I batteri sono esposti alla sostanza chimica in esame con e senza attivazione metabolica e inoculati su piastre di terreno minimo. Dopo un adeguato periodo d'incubazione, le colonie revertanti vengono contate e confrontate con il numero di revertanti spontanei presenti in una coltura di controllo non trattata e/o trattata con il solvente.

## 1.5 CRITERI DI QUALITÀ

Nessuno

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

## 1.6.1 Preparazioni

## 1.6.1.1 Batteri

Sono utilizzate colture batteriche fresche fatte crescere a 37 °C, sino alla tarda fase di crescita esponenziale o all'inizio di quella stazionaria. La densità delle cellule dovrebbe essere di circa 10<sup>8</sup> - 10<sup>9</sup> cellule per ml.

## 1.6.1.2 Attivazione metabolica

I batteri dovrebbero essere esposti alla sostanza in esame in presenza e assenza di un adeguato sistema di attivazione metabolica. Il sistema più comunemente usato è una frazione postmitocondriale integrata di coliformi preparata da fegato di roditori trattati con agenti induttori enzimatici.

## 1.6.2 Condizioni per il saggio

## 1.6.2.1 Ceppi

Debbono essere usati almeno quattro ceppi: TA 1535, TA 1537 o TA 97, TA 98 e TA 100, possono inoltre essere usati anche altri ceppi, quali il TA 1538 e TA 102. Debbono inoltre essere usati metodi noti per la preparazione per la conservazione delle colture. Debbono essere oggetto di controlli le richieste nutrizionali e l'identità genetica dei ceppi, nonché la loro sensibilità alle radiazioni ultraviolette e al cristallo violetto e la resistenza all'ampicillina. I vari ceppi debbono anche produrre revertanti spontanei entro i valori limite previsti per ogni ceppo.

1.6.2.2. *Terreni*

Viene usato un adeguato terreno selettivo con uno strato adeguato di agar molle sovrastante.

1.6.2.3. *Controlli positivi e negativi*

Vanno effettuati controlli paralleli non trattati e trattati col solvente. I controlli positivi vanno eseguiti per due motivi:

- (i) per confermare le sensibilità dei ceppi batterici.

I seguenti composti possono essere utilizzati per i saggi che non comportano attivazione metabolica:

Ceppo	Reversione in presenza di
TA 1535, TA 100	sodio azide
TA 1538, TA 98, TA 97	2-nitrofluorene
TA 1537	9-amminoacridina
TA 102	idroperossido di cumene

- (ii) Per garantire l'attività di un adeguato sistema metabolico.

Un controllo positivo dell'attività di un sistema metabolico per tutti i ceppi consiste nell'utilizzazione di 2-amminoantracene. Possibilmente sarebbe opportuno effettuare un controllo positivo con una sostanza della stessa classe chimica di quella del composto in esame.

1.6.2.4. *Quantità di sostanza in esame per piastra*

Vengono effettuati esperimenti con almeno 5 dosi diverse, con intervalli semilogaritmici tra di loro. Le sostanze sono saggiate fino al limite di solubilità o tossicità. La tossicità è evidenziata da una riduzione del numero di revertanti spontanei, da una riduzione del fondo di crescita ovvero dal grado di sopravvivenza delle colture trattate. Le sostanze non tossiche dovrebbero essere saggiate fino alla concentrazione di 5 mg per piastra prima di essere considerate negative.

1.6.2.5. *Condizioni d'incubazione*

Le piastre vengono esposte in incubazione per un periodo variante da 48 a 72 ore a 37 °C.

1.6.3. *Procedimento*

Per il metodo di incorporazione diretta in piastra, senza attivazione enzimatica, la sostanza in esame viene aggiunta a 0,1 ml di coltura fresca e a 2,0 ml di agar molle. Per quanto riguarda quello con attivazione metabolica, si aggiungono all'agar molle 0,5 ml di miscela di attivazione di enzimi epatici, contenente un'adeguata quantità di frazione postmitocondriale, dopo l'aggiunta della sostanza in esame e dei batteri. Il contenuto di ogni tubo viene agitato e versato sulla superficie di una piastra con terreno selettivo agarizzato. Si lascia solidificare l'agar e le piastre vengono messe in incubazione a 37 °C per un periodo che va dalle 48 alle 72 ore. Alla fine del periodo d'incubazione vengono contate le colonie revertanti per ciascuna piastra. Per quanto riguarda il metodo di preincubazione, una miscela contenente la sostanza saggiata, 0,1 ml di coltura batterica fresca e un'adeguata quantità di miscela di attivazione di enzimi epatici o la stessa quantità di tampone viene preincubata prima di aggiungere 2,0 ml di agar molle. Tutte le altre fasi del procedimento sono uguali a quelle relative al metodo di incorporazione diretta. Per ambedue i metodi ogni piastramento viene fatto almeno in triplicato.

2. *DATI*

Il numero di colonie revertanti per ciascuna piastra viene riportato sia per la serie di controllo che per le serie trattate. Sia per la serie trattata che per quella di controllo vanno riportati il valore della conta di ogni singola piastra, il numero medio di colonie revertanti per piastra e le deviazioni standard.

I dati vanno valutati con adeguati metodi statistici.

Si eseguono almeno due esperimenti indipendenti. Non è necessario eseguire il secondo in un modo identico all'esperimento iniziale. Al contrario può essere preferibile modificare certe condizioni sperimentali allo scopo di ottenere dati più utili.



**3 RELAZIONE****3.1 RELAZIONE SUL SAGGIO**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni

- batteri, ceppo usato,
- condizioni usate nell'esperimento: dosi, tossicità, composizione dei terreni, procedure di trattamento (preincubazione, incubazione), sistema di attivazione metabolica, sostanze di riferimento, controlli negativi,
- conta per piastre singole, numero medio di colonie revertanti per piastra, deviazione standard, relazione dose/effetto se possibile,
- discussione dei risultati,
- interpretazione dei risultati

**3.2 VALUTAZIONE E INTERPRETAZIONE**

Vedi introduzione generale, parte B

**4 BIBLIOGRAFIA**

Vedi introduzione generale, parte B

## B.15. MUTAZIONE GENICA: SACCHAROMYCES CEREVISIAE

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B.

## 1.2 Definizioni

Vedi introduzione generale, parte B.

## 1.3 Sostanze di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

Per misurare l'induzione di mutazioni geniche indotte da agenti chimici, con e senza attivazione metabolica, può essere fatto uso di una varietà di ceppi aploidi e diploidi del lievito *Saccharomyces cerevisiae*.

Sono stati utilizzati sistemi di mutazione in avanti in ceppi aploidi, come la misura della mutazione da mutanti rossi, richiedenti adenina (*ade-1*, *ade-2*), a doppi mutanti bianchi richiedenti adenina; e sistemi selettivi come l'induzione della resistenza alla canavanina.

Il sistema di retromutazione più largamente convalidato comporta l'uso del ceppo aploide XV 185-14C che porta le mutazioni di tipo «senza senso» (*ochre*) *ade-2-1*, *arg-4-17*, *lys-1-1* e *trp-5-48*, le quali possono essere revertite da mutageni che inducono sostituzioni di base nel sito specifico o mutazioni che sopprimono «ochre». Il ceppo XV 185-14C porta altresì il marcatore *his-1-7*, mutazione di tipo «senso sbagliato» revertita principalmente da mutazioni nel secondo sito, e il marcatore *hom-3-10* che viene revertito da mutageni che inducono mutazioni del tipo «inserzione-delezione».

Fra i ceppi diploidi del *S. cerevisiae* il solo largamente convalidato è il ceppo *D<sub>7</sub>*, omozigote per *ilv-1-92*.

## 1.5 Criteri qualitativi

Nessuno.

## 1.6. Descrizione del metodo di saggio

*Preparati*

È opportuno preparare le soluzioni delle sostanze in esame e dei composti di controllo o di riferimento, servendosi di un veicolo appropriato, al momento dell'effettuazione del test. Con i composti organici non solubili in acqua si devono usare soluzioni di solventi organici quali l'etanolo, l'acetone e il dimetilsolfossido (DMSO) a non più del 2 % in volume (v/v). La concentrazione finale del solvente non dovrebbe influenzare in modo significativo la vitalità cellulare e le caratteristiche di crescita.

*Attivazione metabolica*

Le cellule vanno esposte alle sostanze in esame sia in presenza che in assenza di un sistema appropriato di attivazione metabolica esogena.

Il sistema più comunemente usato è una frazione postmitocondriale integrata con cofattori, ottenuta dai fegati di roditori pretrattati con agenti che inducono enzimi. Per l'attivazione metabolica può essere appropriato anche l'uso di altre specie, di altri tessuti, di altre frazioni postmitocondriali o di altri procedimenti.

*Condizioni di effettuazione del saggio***Ceppi**

I ceppi più largamente usati negli studi sulle mutazioni geniche sono il ceppo aploide XV 185 14C e il ceppo diploide D. Possono essere appropriati anche altri ceppi.

**Terreni di coltura**

Per la determinazione della sopravvivenza delle cellule e del numero dei mutanti è fatto uso di terreni di coltura appropriati.

**Uso di controlli negativi e positivi**

È opportuno procedere in parallelo a controlli positivi, non trattati e con il solo solvente. Per ciascun evento genetico specifico vanno usate appropriate sostanze di controllo positivo.

**Concentrazioni**

Occorre far uso di almeno 5 concentrazioni adeguatamente intervallate della sostanza in esame. Per le sostanze tossiche la concentrazione più elevata usata nei test non deve ridurre la sopravvivenza a meno del 5-10 %. Le sostanze relativamente insolubili in acqua vanno saggiate fino al loro limite di solubilità secondo procedimenti appropriati. Per le sostanze non tossiche completamente solubili in acqua la concentrazione massima va determinata caso per caso.

**Condizioni di incubazione**

Le piastre vengono incubate per 4-7 giorni a temperatura da 28° a 30 °C nell'oscurità.

**Frequenze delle mutazioni spontanee**

È opportuno usare subcolture con frequenze delle mutazioni spontanee entro i limiti accettati come normali.

**Numero delle repliche**

Per la determinazione dei prototrofi che si inducono per mutazione genica e della sopravvivenza cellulare è opportuno fare uso di almeno tre piastre di replica per concentrazione. Nel caso di esperimenti nei quali si usino marcatori a bassa frequenza di mutazione, quali *hmr* 3-10, per poter ottenere dati aventi rilevanza statistica è necessario aumentare il numero delle piastre.

**Procedimento**

Il trattamento dei ceppi di *S. cerevisiae* viene normalmente effettuato secondo un procedimento di test in sospensione liquida con impiego di cellule quiescenti o in crescita. Gli esperimenti iniziali dovrebbero essere condotti su cellule in crescita. Si espongono alla sostanza in esame per una durata fino a 18 ore a temperatura da 28° a 37 °C e in agitazione  $1.5 \times 10^7$  cellule/ml, in casi opportuni, nel corso del trattamento si aggiunge una quantità adeguata di un sistema di attivazione metabolica. Al termine del trattamento si procede alla centrifugazione ed al lavaggio delle cellule ed alla loro semina su un terreno di coltura appropriato. Dopo incubazione si analizzano le piastre per la determinazione della sopravvivenza e dell'induzione della mutazione genica.

Se il primo esperimento è negativo il secondo esperimento dovrebbe essere condotto su cellule quiescenti, se il primo esperimento è positivo, viene confermato in un appropriato esperimento indipendente.

**2****DATI**

I dati devono essere presentati in forma di tabelle, con indicazione del numero delle colonie contate, del numero di mutanti, della sopravvivenza e della frequenza dei mutanti. Tutti i risultati devono essere confermati in un esperimento indipendente. I dati devono essere stabiliti secondo metodi statistici appropriati.

**3 RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- ceppo usato,
- condizioni di effettuazione del test: cellule in fase stazionaria o in crescita, composizione dei terreni, temperatura e durata dell'incubazione, sistemi di attivazione metabolica,
- condizioni del trattamento: livelli di esposizione, procedimento e durata del trattamento, temperatura di trattamento, controlli positivi e negativi,
- numero delle colonie contate, numero di mutanti, sopravvivenza e frequenza dei mutanti, relazione dose/risposta se disponibile, valutazione statistica dei dati,
- discussione dei risultati,
- interpretazione dei risultati.

**3.2 Valutazione ed interpretazione**

Vedi introduzione generale, parte B

**4. RIFERIMENTI**

Vedi introduzione generale, parte B.

B.16. RICOMBINAZIONE MITOTICA *SACCHAROMYCES CEREVISIAE*

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B

## 1.2 Definizioni

Vedi introduzione generale, parte B

## 1.3 Sostanze di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

La ricombinazione mitotica in *Saccharomyces cerevisiae* può essere rilevata fra geni (o in linea più generale fra un gene e il suo centromero) e all'interno dei geni. La prima delle due eventualità è denominata crossing-over mitotico e genera prodotti reciproci, mentre la seconda eventualità è per lo più non reciproca ed è denominata conversione genica. Il crossing-over viene generalmente determinato mediante la produzione di colonie o settori recessivi omozigoti in un ceppo eterozigote, mentre la conversione genica viene determinata attraverso la produzione di revertanti prototrofici in un ceppo auxotrofico eteroallelomorfo portante due diversi alleli del medesimo gene. I ceppi più comunemente usati per la rilevazione della conversione genica mitotica sono i ceppi D<sub>4</sub> (eteroallelomorfo in *ade 2* e *trp 5*), D<sub>7</sub> (eteroallelomorfo in *trp 5*), BZ<sub>14</sub> (eteroallelomorfo in *arg 4*) e JD1 (eteroallelomorfo in *his 4* e *trp 5*). Il crossing over mitotico produttore settori omozigoti di colore rosso e rosa può essere determinato nel ceppo D<sub>1</sub> o in D<sub>7</sub> (che misura anche la conversione genica mitotica e la retromutazione in *ilv 1-92*), essendo entrambi i ceppi eteroallelomorfi per alleli complementanti di *ade 2*.

## 1.5 Criteri qualitativi

Nessuno

## 1.6 Descrizione del metodo di saggio

*Preparazioni*

È opportuno preparare le soluzioni della sostanza in esame e dei composti di controllo o di riferimento, facendo uso di un solvente appropriato, al momento di procedere all'effettuazione del test. Con i composti organici non solubili in acqua è opportuno usare solventi organici come l'etanolo, l'acetone e il dimetilsolfossido (DMSO) a non più del 2% (v/v). La concentrazione finale del solvente non dovrebbe alterare significativamente la vitalità cellulare e le caratteristiche di crescita.

*Attivazione metabolica*

Le cellule devono essere esposte alle sostanze in esame sia in presenza che in assenza di un sistema appropriato di attivazione metabolica esogena. Il sistema più comunemente usato è una frazione postmitocondriale supplementare con cofattori e ottenuta dai fegati di roditori pretrattati con agenti che inducono enzimi. Per l'attivazione metabolica può essere appropriato anche l'impiego di altre specie, di altri tessuti, di altre frazioni postmitocondriali o di altri procedimenti.

*Condizioni sperimentali**Ceppi*

I ceppi più frequentemente usati sono i ceppi diploidi D<sub>4</sub>, D<sub>7</sub>, D<sub>1</sub>, e JD1. Può essere appropriato anche l'impiego di altri ceppi.

### Terreni di coltura

Per la determinazione della sopravvivenza e della frequenza della ricombinazione mitotica si devono usare terreni di coltura appropriati.

### Uso di controlli negativi e positivi

È opportuno effettuare in parallelo controlli positivi, controlli non trattati o trattati con solo solvente. Per ciascun tipo specifico di ricombinazione devono essere usate le appropriate sostanze di controllo positivo.

### Concentrazioni

È opportuno fare uso di almeno cinque concentrazioni della sostanza in esame adeguatamente intervallate. Tra i fattori da prendere in considerazione vi sono la citotossicità e la solubilità. La concentrazione più bassa non deve produrre alcun effetto sulla vitalità cellulare. Per le sostanze tossiche, la più alta concentrazione saggiata non deve ridurre la sopravvivenza a meno del 5-10%. Le sostanze relativamente insolubili in acqua devono essere saggiate fino al loro limite di solubilità secondo procedimenti appropriati. Per le sostanze non tossiche altamente solubili in acqua la concentrazione massima del test va determinata caso per caso.

Le cellule possono essere esposte alle sostanze in esame in fase stazionaria o in fase di crescita per periodi fino a 18 ore. Nel caso di tempi di trattamento prolungati occorre tuttavia accertare mediante esame microscopico che nelle culture non vi sia formazione di spore, la cui presenza invaliderebbe il test.

### Condizioni di incubazione

Le piastre vengono incubate nell'oscurità per 4-7 giorni a temperatura da 28 ° a 30 °C. Le piastre usate per l'analisi dei settori omozigoti di colore rosso e roseo derivanti dal crossing over mitotico vanno tuttavia tenute in frigorifero (4 °C) per un altro ciclo di uno o due giorni prima dell'analisi, per dare tempo allo sviluppo del pigmento nelle colonie ricombinanti.

### Frequenze della ricombinazione mitotica spontanea

È opportuno usare subcolture con frequenze di ricombinazione mitotica spontanea entro i limiti accettati come normali.

### Numero delle repliche

Per la determinazione dei prototrofi prodotti dalla conversione genica mitotica e per quella della sopravvivenza è opportuno fare uso di un minimo di tre piastre di replica per concentrazione. Nella determinazione della omozigosi recessiva derivante dal crossing-over mitotico il numero delle piastre va aumentato in modo da ottenere un numero adeguato di colonie.

### Procedimento

Il trattamento dei ceppi di *S. cerevisiae* viene normalmente effettuato in un procedimento di test in sospensione liquida con cellule in fase stazionaria o in fase di crescita. Esperimenti iniziali dovrebbero essere condotti su cellule in fase di crescita. Si espongono alla sostanza in esame per una durata fino a 18 ore a temperatura da 28 ° a 37 °C con scuotimento  $1 - 5 \times 10^7$  cellule/ml; nel corso del trattamento, nei casi opportuni si aggiunge una quantità adeguata di un sistema di attivazione metabolica. Al termine del trattamento si procede alla centrifugazione ed al lavaggio delle cellule ed alla loro semina su un terreno di coltura appropriato. Dopo l'incubazione si analizzano le piastre per la determinazione della sopravvivenza e dell'induzione della ricombinazione mitotica.

Se il primo esperimento è negativo il secondo dovrebbe essere eseguito su cellule quiescenti, se il primo esperimento è positivo, il secondo viene confermato in un esperimento indipendente appropriato.

## 2

### DATI

I dati devono essere presentati in forma di tabelle, con indicazione del numero dei ricombinanti, della sopravvivenza e della frequenza dei ricombinanti.

Tutti i risultati devono essere confermati in un esperimento indipendente. I dati vanno stabiliti per valutazioni secondo metodi statistici appropriati.

## B.17. CELLULE DI MAMMIFERI IN VITRO SAGGIO DI MUTAZIONI GENICHE

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B

## 1.2 Definizione

Vedi introduzione generale, parte B

## 1.3 Sostanze di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

Per la rilevazione di mutazioni indotte da sostanze chimiche può essere fatto uso di sistemi di coltura di cellule di mammiferi. Fra i tipi di cellule più largamente usati figurano le cellule di linfoma di topo L 5178Y e le linee CHO e V-79 di cellule di hamster cinese. In queste linee cellulari i sistemi più comunemente usati misurano mutazioni nei loci della timidina chinasi (TK), della ipoxantina guanina fosforibosil transferasi (HPRT) <sup>(1)</sup> e della  $\text{Na}^+/\text{K}^+$  ATPase. I sistemi di mutazioni della TK e della HPRT evidenziano mutazioni del tipo «sostituzione di base», mutazioni del tipo «inserzione-delezione» e piccole delezioni, il sistema  $\text{Na}^+/\text{K}^+$  segnala soltanto mutazioni del tipo «sostituzione di base».

Le cellule deficienti di timidina chinasi (TK), a causa della mutazione in avanti  $\text{TK}^+$  -  $\text{TK}$  sono resistenti alla bromodeossiridina (BrdU), alla fluorodeossiridina (FdU) e alla trifluorotimidina (TFT) non essendo detti antimetaboliti incorporati in nucleotidi cellulari dalla timidina chinasi del sistema enzimatico «di recupero» i nucleotidi occorrenti per il metabolismo cellulare sono ottenuti unicamente dalla sintesi de novo. In presenza di timidina chinasi la BrdU, la FdU e la TFT sono per contro incorporate nei nucleotidi, con conseguente inibizione del metabolismo cellulare e della citotossicità. Le cellule mutanti sono così in grado di proliferare in presenza di BrdU, FdU o di TFT, mentre le cellule normali, che contengono timidina chinasi, non lo possono fare.

Analogamente le cellule con insufficienza di HPRT sono selezionate per resistenza alla 8 azaguanina (AG) o alla 6-tioguanina (TG). Le cellule con alterazione della  $\text{Na}^+/\text{K}^+$  ATPase sono selezionate per resistenza alla ouabaina.

Per la determinazione della citotossicità si misura l'effetto della sostanza in esame sulla capacità di formazione di colonie (efficienza di clonaggio) o sui tassi di crescita delle colture. La determinazione della frequenza dei mutanti si effettua a sua volta seminando numeri noti di cellule in un terreno contenente l'agente selettivo per individuare le cellule mutanti, e in un terreno senza agente selettivo per determinare l'efficienza di clonaggio. Dopo un appropriato periodo di incubazione si contano le colonie. Le frequenze dei mutanti si calcolano in base al numero delle colonie di mutanti con la correzione relativa all'efficienza di clonaggio delle cellule.

## 1.5 Criteri qualitativi

Nessuno

## 1.6 Descrizione del metodo di saggio

## Preparazioni

## Cellule

Per il tipo di determinazione qui considerato è disponibile tutta una serie di linee cellulari. Esse comprendono dei subcloni di cellule L5178Y, CHO o di cellule V-79 delle quali sono state dimostrate la sensibilità agli agenti mutageni chimici, l'elevata efficienza di clonaggio e la bassa frequenza di mutazioni spontanee. Le cellule possono essere controllate periodicamente per quel che riguarda la stabilità del cariotipo, ed è comunque opportuno accertare l'assenza in esse di contaminazione da micoplasma. È possibile usare anche altri tipi di cellule, a condizione che ne sia pienamente documentata la validità per la determinazione delle mutazioni geniche indotte chimicamente.

<sup>(1)</sup> Già HGPRT

**2 DATI**

I dati devono essere presentati in forma di tabelle. Devono essere presentati i conteggi delle singole piastre, per la sostanza in esame e per il controllo, sia per l'induzione delle mutazioni che per la sopravvivenza. Devono altresì essere indicati il numero medio delle colonie per piastra e la deviazione standard. La frequenza delle mutazioni va espressa quale numero dei mutanti in relazione al numero delle cellule sopravvissute. La sopravvivenza e l'efficienza di clonaggio sono espresse in forma di percentuale del livello del controllo. I dati devono essere valutati secondo metodi statistici appropriati.

**3 RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- tipo di cellule usate, numero delle colture di cellule, metodi per il mantenimento delle colture di cellule,
- condizioni di effettuazione del test: composizione dei terreni, concentrazione di CO<sub>2</sub>, concentrazione della sostanza in esame, solvente usato, temperatura di incubazione, tempo di incubazione, durata del periodo di espressione (se necessario, con indicazione del numero delle cellule seminate, delle subcolture e dello schema di mantenimento), durata del trattamento, densità delle cellule durante il trattamento, tipo di sistema di attivazione metabolica dei mammiferi usato, controlli positivi e negativi, agente selettivo usato,
- ragioni della selezione delle dosi,
- metodo usato per il conteggio delle cellule vitali e delle cellule mutanti,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati

**3.2 Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

**4 RIFERIMENTI**

Vedi introduzione generale, parte B.



**3 RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile

- ceppo usato,
- condizioni di effettuazione del test: cellule in fase stazionaria o di crescita, composizione dei terreni, temperatura e durata dell'incubazione, sistemi di attivazione metabolica,
- condizioni del trattamento, concentrazione di esposizione, procedimento e durata del trattamento, temperatura di trattamento, controlli positivi e negativi,
- numero di colonie contate, numero dei ricombinanti, frequenza della sopravvivenza e della ricombinazione, relazione dose/risposta se possibile, valutazione statistica dei dati,
- discussione dei risultati,
- interpretazione dei risultati

**3.2. Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

**4 RIFERIMENTI**

Vedi introduzione generale, parte B.

#### Terreni di coltura

È necessario valersi di terreni di coltura e di condizioni di incubazione (temperatura, recipienti di coltura, concentrazioni di CO<sub>2</sub>, umidità, ecc.) appropriati. I terreni e i sieri vanno scelti in relazione ai sistemi selettivi e al tipo di cellule usati nella determinazione.

#### Sostanza in esame

Le sostanze in esame possono essere preparate in terreni di coltura ovvero disciolte o poste in sospensione in veicoli appropriati prima del trattamento delle cellule. La concentrazione finale del veicolo nel sistema di coltura non deve influire sulla vitalità delle cellule o sul loro tasso di crescita.

#### Attivazione metabolica

È opportuno esporre le cellule alla sostanza in esame sia in presenza che in assenza di un sistema esogeno di attivazione metabolica dei mammiferi. Alternativamente, quando si fa uso di tipi di cellule con attività metabolica endogena è opportuno che l'entità e la natura di detta attività siano conosciute come appropriate alla classe clinica che si sta esaminando.

#### Condizioni sperimentali

##### Uso di controlli positivi e negativi

È opportuno includere in ciascun esperimento dei controlli positivi, valendosi sia di un composto ad azione diretta che di un composto per il quale occorre attivazione metabolica; è altresì opportuno effettuare un controllo negativo (del veicolo).

Quali esempi di sostanze che si prestano ad essere usate come controlli positivi si possono citare le seguenti:

- composti ad azione diretta:
  - etilmetansulfonato,
  - icantone,
- composti ad azione indiretta:
  - 2-acetilaminofluorene,
  - 7, 12-dimetilbenzantracene,
  - N-nitrosodimetilamina

Se del caso, si può ancora aggiungere un ulteriore controllo positivo della medesima classe chimica della sostanza in esame.

#### Concentrazioni

È opportuno fare uso di diverse concentrazioni della sostanza in esame. Dette concentrazioni devono produrre un effetto tossico proporzionale alle concentrazioni stesse, nel senso che la concentrazione più elevata dà luogo ad un livello ridotto di sopravvivenza, mentre alla concentrazione più bassa la sopravvivenza è approssimativamente dello stesso ordine che nel controllo negativo. Le sostanze relativamente insolubili in acqua vanno saggiate fino al loro limite di solubilità secondo procedure appropriate. Per le sostanze non tossiche completamente solubili in acqua la concentrazione più elevata della sostanza all'esame va determinata caso per caso.

#### Procedimento

Il numero delle cellule usate per le varie colture deve essere in relazione con la frequenza delle mutazioni spontanee; un criterio di carattere generale consiste nell'usare un numero di cellule vitali pari al decuplo dell'inverso delle frequenze delle mutazioni spontanee.

Le cellule vanno esposte all'effetto delle sostanze per una durata adeguata; nella maggior parte dei casi è efficace un'esposizione da 2 a 5 ore. Le cellule che non hanno un'attività metabolica endogena sufficiente devono di preferenza essere esposte alla sostanza in esame sia in presenza che in assenza di un appropriato sistema di attivazione metabolica. Al termine del periodo di esposizione le cellule vengono lavate da ogni traccia della sostanza in esame e poste in coltura per la determinazione dell'efficienza di clonaggio e per consentire l'espressione del fenotipo mutante.

Al termine del periodo di espressione, che deve essere sufficientemente lungo per rendere possibile un'espressione fenotipica pressoché ottimale dei mutanti indotti, le cellule vengono coltivate in un mezzo rispettivamente con e senza agenti selettivi per la determinazione del numero dei mutanti e dell'efficienza di clonaggio.

Tutti i risultati vengono confermati in un esperimento indipendente.

esperimenti autoradiografici che per le determinazioni LSC effettuate senza attivazione metabolica e la 4-NQO (4-nitrochinolina N ossido), la N dimetilnitrosamina e a sua volta un esempio di composto per controllo positivo quando sia fatto uso di sistemi di attivazione metabolica

#### Concentrazioni

E opportuno fare uso di concentrazioni multiple della sostanza in esame in una gamma adeguata ai fini della determinazione della risposta. La concentrazione più elevata deve dar luogo a qualche effetto citotossico. I composti relativamente insolubili in acqua vanno saggiati fino al loro limite di solubilità. Per le sostanze non tossiche altamente solubili in acqua la concentrazione massima della sostanza in esame va determinata caso per caso.

#### Cellule

Per il mantenimento delle colture è opportuno fare uso di terreni di crescita, di concentrazioni di CO<sub>2</sub> e di condizioni di temperatura e di umidità appropriate. Le linee cellulari stabilizzate devono essere controllate periodicamente per escludere la presenza di contaminazione da micoplasma.

#### Attivazione metabolica

Con le colture primarie di epatociti non si fa uso di sistemi di attivazione metabolica. Le linee cellulari stabilizzate ed i linfociti vengono esposti alla sostanza in esame sia in presenza che in assenza di un sistema appropriato di attivazione metabolica.

#### Procedimento

##### Preparazione delle colture

Le linee cellulari stabilizzate vengono generate da coltura stock (ad esempio per tripsinizzazione o mediante separazione per scuotimento), seminate in recipienti di coltura a densità appropriata ed incubate a 37 °C.

Colture a breve termine di epatociti di ratto vengono preparate dando modo a epatociti dissociati di fresco in un terreno appropriato di attaccarsi alla superficie di crescita. Le colture di linfociti umani vengono preparate secondo tecniche appropriate.

#### Trattamento delle colture con la sostanza in esame

##### Epatociti primari di ratto

Gli epatociti di ratto isolati di fresco vengono trattati con la sostanza in esame in un terreno contenente <sup>3</sup>H-TdR per una durata appropriata. Al termine del periodo di trattamento le cellule vanno tolte mediante filtraggio dal terreno, risciacquate, fissate ed essiccate. I vetrini vanno immersi in emulsione autoradiografica (alternativamente si possono usare pellicole adatte), esposti, sviluppati, colorati ed enumerati.

##### Linee cellulari stabilizzate e linfociti

**Tecniche autoradiografiche.** Le colture di cellule vengono esposte alla sostanza in esame per un periodo appropriato e successivamente trattate con <sup>3</sup>H-TdR. La durata sarà determinata dalla natura della sostanza, dall'attività del sistema metabolizzante e dal tipo delle cellule. Per rilevare il valore massimo di UDS, è opportuno aggiungere <sup>3</sup>H-TdR contemporaneamente alla sostanza all'esame, ovvero entro pochi minuti dall'esposizione alla sostanza stessa. La scelta fra i suddetti due procedimenti sarà fatta in relazione alla possibilità di interazioni fra la sostanza all'esame e <sup>3</sup>H-TdR.

Al fine di poter distinguere fra UDS e la replicazione semi conservativa di DNA si può inibire quest'ultima ad esempio facendo uso di un terreno deficiente di arginina, a basso contenuto di siero o con idrossiurea nel mezzo di coltura.

**Misure LSC di UDS.** Prima del trattamento con la sostanza in esame è opportuno bloccare nel modo che si è descritto sopra l'entrata delle cellule nella fase S. Le cellule vengono poi esposte alla sostanza in esame nel modo che si è descritto per l'autoradiografia. Al termine del periodo di incubazione si estrae il DNA dalle cellule e si determinano il contenuto totale di DNA e la misura della incorporazione di <sup>3</sup>H-TdR.

Occorre rilevare che quando si fa uso delle tecniche sopra descritte di linfociti umani, la soppressione della replicazione semi conservativa di DNA non è necessaria in colture non stimulate.

Esempi di controlli positivi per il test su epatociti di ratto sono il 7,12-DMBA (7,12-dimetilbenzotracene) e il 2-AAF (2-acetilaminofluorene). Nel caso delle linee cellulari stabilizzate un esempio di controllo positivo sia per le determinazioni autoradiografiche che per le determinazioni LSC effettuate senza attivazione metabolica è la 4-NQO (4-nitrochinolina-N-ossido); la N-dimetilnitrosamina è a sua volta un esempio di composto per controllo positivo quando sia fatto uso di sistemi di attivazione metabolica.

#### Concentrazioni

È opportuno fare uso di concentrazioni multiple della sostanza in esame in una gamma adeguata ai fini della determinazione della risposta. La concentrazione più elevata deve dar luogo a qualche effetto citotossico. I composti relativamente insolubili in acqua vanno saggiati fino al loro limite di solubilità. Per le sostanze non tossiche altamente solubili in acqua la concentrazione massima della sostanza in esame va determinata caso per caso.

#### Cellule

Per il mantenimento delle colture è opportuno fare uso di terreni di crescita, di concentrazioni di CO<sub>2</sub> e di condizioni di temperatura e di umidità appropriate. Le linee cellulari stabilizzate devono essere controllate periodicamente per escludere la presenza di contaminazione da micoplasma.

#### Attivazione metabolica

Con le colture primarie di epatociti non si fa uso di sistemi di attivazione metabolica. Le linee cellulari stabilizzate ed i linfociti vengono esposti alla sostanza in esame sia in presenza che in assenza di un sistema appropriato di attivazione metabolica.

#### Procedimento

##### Preparazione delle colture

Le linee cellulari stabilizzate vengono generate da coltura stock (ad esempio per tripsinizzazione o mediante separazione per scuotimento), seminate in recipienti di coltura a densità appropriata ed incubate a 37 °C.

Colture a breve termine di epatociti di ratto vengono preparate dando modo a epatociti dissociati di fresco in un terreno appropriato di attaccarsi alla superficie di crescita. Le colture di linfociti umani vengono preparate secondo tecniche appropriate.

#### Trattamento delle colture con la sostanza in esame

##### Epatociti primari di ratto

Gli epatociti di ratto isolati di fresco vengono trattati con la sostanza in esame in un terreno contenente <sup>3</sup>H-TdR per una durata appropriata. Al termine del periodo di trattamento le cellule vanno tolte mediante filtraggio dal terreno, risciacquate, fissate ed essiccate. I vetrini vanno immersi in emulsione autoradiografica (alternativamente si possono usare pellicole adatte), esposti, sviluppati, colorati ed enumerati.

##### Linee cellulari stabilizzate e linfociti

**Tecniche autoradiografiche:** Le colture di cellule vengono esposte alla sostanza in esame per una durata appropriata e successivamente trattate con <sup>3</sup>H-TdR. La durata sarà determinata dalla natura della sostanza, dall'attività del sistema metabolizzante e dal tipo delle cellule. Per rilevare il valore massimo di UDS, è opportuno aggiungere <sup>3</sup>H-TdR contemporaneamente alla sostanza all'esame, ovvero entro pochi minuti dall'esposizione alla sostanza stessa. La scelta fra i suddetti due procedimenti sarà fatta in relazione alla possibilità di interazioni fra la sostanza all'esame e <sup>3</sup>H-TdR.

Al fine di poter distinguere fra UDS e la replicazione semi-conservativa di DNA si può imbruire quest'ultima, ad esempio facendo uso di un terreno deficiente di arginina, a basso contenuto di siero o con idrossiurea nel mezzo di coltura.

**Misure LSC di UDS:** Prima del trattamento con la sostanza in esame è opportuno bloccare nel modo che si è descritto sopra l'entrata delle cellule nella fase S. Le cellule vengono poi esposte alla sostanza in esame nel modo che si è descritto per l'autoradiografia. Al termine del periodo di incubazione si estrae il DNA dalle cellule e si determinano il contenuto totale di DNA e la misura della incorporazione di <sup>3</sup>H-TdR.

Occorre rilevare che quando si fa uso delle tecniche sopra descritte di linfociti umani, la soppressione della replicazione semi-conservativa di DNA non è necessaria in colture non stimolate.

**Analisi****Determinazioni autoradiografiche**

Nella determinazione di UDS nelle cellule in coltura non si contano i nuclei in fase S. È opportuno contare almeno 50 cellule per concentrazione. Le lastre vanno codificate prima del conteggio. È opportuno contare su ciascuna piastrina diversi campi a caso interamente separati tra loro. Per la determinazione della quantità di incorporazione di  $^3\text{H}$ -TdR nel citoplasma è bene contare nel citoplasma di ciascuna cellula conteggiata tre aree delle dimensioni del nucleo.

**Determinazioni LSC**

Nelle determinazioni LSC UDS occorre fare uso di un numero adeguato di colture per ogni concentrazione e per i controlli.

Tutti i risultati dovrebbero essere confermati in un esperimento indipendente.

**2 DATI**

I dati devono essere presentati in forma di tabelle.

**2.1 Determinazioni autoradiografiche**

Della entità dell'incorporazione di  $^3\text{H}$ -TdR nel citoplasma e del numero dei granuli osservati nel nucleo delle cellule va presa nota separatamente.

Per descrivere la distribuzione dell'entità dell'incorporazione di  $^3\text{H}$ -TdR nel citoplasma e del numero dei granuli per nucleo può essere fatto riferimento alla media, alla mediana ed al modo.

**2.2 Determinazioni LSC**

Per le determinazioni LSC, l'incorporazione di  $^3\text{H}$ -TdR va indicata in termini di dpm/ $\mu\text{g}$  di DNA. Il valore medio di dpm/ $\mu\text{g}$  di DNA con la deviazione standard può essere usato per descrivere la distribuzione della incorporazione.

I dati devono essere valutati secondo metodi statistici appropriati.

**3 RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- cellule usate, densità e numero dei passaggi al momento del trattamento, numero delle colture di cellule,
- metodi usati per il mantenimento delle colture di cellule, con indicazione del terreno, della temperatura e della concentrazione di  $\text{CO}_2$ ,
- sostanza in esame, veicolo, concentrazioni e ragioni della scelta delle concentrazioni usate nella determinazione,
- dettagli riguardanti i sistemi di attivazione metabolica,
- programmi di trattamento,
- controlli positivi e negativi,

- tecnica autoradiografica usata,
- procedimenti usati per bloccare l'entrata delle cellule nella fase S,
- procedimenti usati per l'estrazione di DNA e per la determinazione del contenuto totale di DNA nelle determinazioni LSC,
- relazione dose-risposta se del caso,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati.

- 3.2      **Valutazione ed interpretazione**  
Vedi introduzione generale, parte B.

- 4         **RIFERIMENTI**  
Vedi introduzione generale, parte B

## B.19. SAGGIO DEGLI SCAMBI TRA CROMATIDI FRATELLI IN VITRO

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B

## 1.2 Definizioni

Vedi introduzione generale, parte B

## 1.3 Sostanze di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

Quello degli scambi tra cromatidi fratelli — Sister chromatid exchange (SEC) — è un test a breve termine per la rilevazione degli scambi reciproci di DNA fra due cromatidi fratelli di un cromosoma in duplicazione. Gli SCE rappresentano l'interscambio di prodotti della replicazione di DNA in corrispondenza di loci apparentemente omologhi. Il processo di scambio comporta presumibilmente la rottura e la riunione di DNA, ma sulla sua base molecolare non si conosce in realtà molto. La rilevazione degli SCE richiede qualche mezzo per marcare in modo differenziale i cromatidi fratelli, e questo può essere ottenuto mediante incorporazione di bromodeossiridina (BrdU) nel DNA cromosomico per due cicli cellulari.

Culture in vitro di cellule di mammiferi vengono esposte alla sostanza in esame con e senza un sistema esogeno di attivazione metabolica dei mammiferi, se appropriato, e poste in coltura per due cicli di replicazione in terreno contenente BrdU. Dopo un trattamento con un inibitore del fuso (ad esempio la colchicina) per accumulare cellule in uno stadio di mitosi di tipo metafase (c-metafase), le cellule vengono raccolte e si procede alle preparazioni cromosomiche.

## 1.5 Criteri qualitativi

Nessuno

## 1.6 Descrizione del metodo di saggio

*Preparazioni*

- Nel saggio si possono usare colture primarie (linfociti umani) o linee cellulari stabilizzate (ad esempio cellule di ovario di hamster cinese). Le linee cellulari devono essere controllate per escludere la presenza di contaminazione da Mycoplasma.
- Vanno usati terreni di coltura e condizioni di incubazione (temperatura, recipienti di coltura, concentrazione di CO<sub>2</sub> ed umidità) appropriati.
- Le sostanze in esame possono essere preparate in terreni di coltura ovvero disciolte o poste in sospensione in veicoli appropriati prima del trattamento delle cellule. La concentrazione finale dei veicoli nei sistemi di coltura non deve influire in maniera significativa sulla vitalità o sul tasso di crescita delle cellule, ed è parallelamente opportuno verificare la frequenza degli SCE per mezzo di un controllo con solvente.
- È opportuno esporre le cellule alla sostanza in esame sia in presenza che in assenza di un sistema esogeno di attivazione metabolica di mammiferi. Alternativamente, ove si faccia uso di tipi di cellule con attività metabolica endogena, l'intensità e la natura dell'attività devono essere appropriate per la classe chimica sottoposta all'esame.

*Condizioni sperimentali**Numero di colture*

Per ciascun punto sperimentale dovrebbero essere usate colture almeno in duplicato.

#### Uso di controlli positivi e negativi

È opportuno includere in ciascun esperimento dei controlli positivi, facendo uso sia di un composto ad azione diretta che di un composto richiedente attivazione metabolica, ed è opportuno anche effettuare un controllo del veicolo.

Quali esempi di sostanze che si prestano ad essere usate come controlli positivi si possono citare

- come composto ad azione diretta
  - l'etilmetansulfonato,
- come composto ad azione indiretta:
  - la ciclofosfamide

Se del caso, può essere incluso nell'esperimento un controllo positivo supplementare della medesima classe chimica della sostanza in esame.

#### Concentrazioni

È opportuno fare uso di almeno tre concentrazioni adeguatamente intervallate della sostanza in esame. La concentrazione più elevata deve dar luogo ad un effetto tossico significativo, ma deve ancora consentire il verificarsi di una replicazione adeguata delle cellule. Le sostanze relativamente insolubili in acqua vanno saggiate fino al loro limite di solubilità secondo procedimenti appropriati. Per le sostanze non tossiche altamente solubili in acqua la concentrazione massima della sostanza in esame va determinata caso per caso.

#### Procedimento

##### Preparazione delle colture

Linee cellulari stabilizzate vengono generate da colture stuck (ad esempio per tripsinizzazione o mediante distacco per scuotimento), seminate in recipienti di coltura a densità appropriata ed incubate a 37 °C. Nel caso di coltura monostrato, il numero delle cellule per ogni recipiente di coltura va regolato in modo che le colture non siano confluenti in misura molto maggiore del 50 % al momento della raccolta. Alternativamente, le cellule possono essere usate in forma di coltura in sospensione. Le colture di linfociti umani sono ottenute da sangue eparinizzato secondo tecniche appropriate ed incubate a 37 °C.

##### Trattamento

Vengono esposte alla sostanza in esame per una durata adeguata cellule in uno stadio di crescita esponenziale; nella maggior parte dei casi può essere efficace una durata da una a due ore, ma la durata del trattamento può in taluni casi essere prolungata fino a due cicli cellulari completi. Le cellule non aventi una sufficiente attività metabolica endogena vanno esposte alla sostanza in esame sia in presenza che in assenza di un sistema appropriato di attivazione metabolica. Al termine del periodo di esposizione le cellule vengono lavate da ogni traccia della sostanza in esame e coltivate per due cicli di replicazione in presenza di BrdU. In un procedimento alternativo si possono esporre le cellule contemporaneamente alla sostanza in esame e al BrdU per la durata completa di coltura di due cicli cellulari. Le colture di linfociti umani vengono trattate mentre si trovano in condizione semisincrona. Le cellule vengono analizzate alle loro seconda divisione dopo il trattamento, per assicurarsi che siano state esposte alla sostanza negli stadi più sensibili del ciclo cellulare. Tutte le colture alle quali si aggiunge BrdU, vanno manipolate nell'oscurità o in luce attenuata di lampade ad incandescenza fino al momento della raccolta delle cellule, allo scopo di ridurre per quanto possibile la fotolisi del DNA contenente BrdU.

##### Raccolta delle cellule

Le colture di cellule vengono trattate con un inibitore del fuso (ad esempio colchicina) da 1 a 4 ore prima della raccolta. Ciascuna coltura viene raccolta e trattata separatamente per la preparazione dei cromosomi.

##### Preparazione e colorazione dei cromosomi

I preparati di cromosomi vengono ottenuti secondo le tecniche citogenetiche correnti. La colorazione dei vetrini per l'evidenziazione degli SCE può essere effettuata secondo diverse tecniche (ad esempio con il metodo della fluorescenza più Giemsa).



**Analisi**

Il numero di cellule analizzate deve essere basato sulla frequenza spontanea di controllo degli SCE. Normalmente si analizzano per gli SCE almeno 25 metafasi ben spaziate per coltura. I vetrini vengono codificati prima dell'analisi. Nei linfociti umani si analizzano soltanto metafasi contenenti 46 centromeri. Nelle linee cellulari stabilizzate si analizzano a loro volta soltanto metafasi contenenti  $\pm 2$  centromeri del numero modale. È opportuno indicare se il salto di marcatura a livello del centromero viene o non viene conteggiato come SCE. I risultati dovrebbero essere confermati in un esperimento indipendente.

**2. DATI**

I dati devono essere presentati in forma di tabelle. Il numero degli SCE per metafase e il numero degli SCE per cromosoma vanno indicati separatamente per tutte le colture trattate e quelle di controllo. I dati devono essere definiti secondo metodi statistici appropriati.

**3. RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- cellule usate, metodi di mantenimento della coltura cellulare,
- condizioni sperimentali: composizione dei mezzi, concentrazione di  $\text{CO}_2$ , concentrazione della sostanza all'esame, veicolo usato, temperatura di incubazione, tempo di trattamento, inibitore del fuso usato, sua concentrazione e durata del trattamento connesso, tipo di sistema di attivazione di mammiferi usato, controlli positivi e negativi,
- numero di colture di cellule per punto sperimentale,
- dettagli della tecnica usata per la preparazione delle lastre,
- numero delle metafasi analizzate (indicazione separata dei dati per ciascuna coltura),
- numero medio di SCE per cellula e per cromosoma (indicazione separata dei dati per ciascuna coltura),
- criteri per il riscontro degli SCE,
- criteri di selezione delle dosi,
- relazione dose/risposta se del caso,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati.

**3.2 Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

**4. RIFERIMENTI**

Vedi introduzione generale, parte B.

## B.20. SAGGIO DEI LETALI RECESSIVI LEGATI AL SESSO: DROSOPHILA MELANOGASTER

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B.

## 1.2 Definizioni

Vedi introduzione generale, parte B.

## 1.3 Sostanze di riferimento

Nessuna.

## 1.4 Principi del metodo di saggio

Il saggio dei letali recessivi legati al sesso — sex-linked recessive lethal (SLRL) — nel quale è fatto uso della *Drosophila melanogaster*, permette di rilevare l'induzione sia di mutazioni puntiformi che di piccole delezioni nella linea germinale dell'insetto. Si tratta di un saggio capace di rivelare mutazioni in circa 800 loci sul cromosoma X; questa cifra rappresenta circa l'80 % di tutti i loci del cromosoma X; quest'ultimo rappresenta a sua volta circa un quinto dell'intero genoma aploide.

Le mutazioni nel cromosoma X nella *D. melanogaster* sono espresse fenotipicamente nei maschi portanti il gene mutante. Quando la mutazione è letale nella condizione emizigote, la sua presenza si desume dall'assenza di una delle due classi di discendenza maschile che sono normalmente prodotte da una femmina eterozigote. Il saggio SLRL si basa sulla disponibilità di cromosomi specificamente marcati.

## 1.5 Criteri qualitativi

Nessuno.

## 1.6 Descrizione del metodo di saggio

*Preparazioni**Ceppi*

Possono essere usati maschi di un ceppo ben definito di tipo selvatico e femmine del ceppo Muller-5. Possono altresì essere usati altri ceppi di femmine marcate in modo appropriato con cromosomi X multipli invertiti.

*Sostanza in esame*

Le sostanze in esame vanno disciolte in acqua. Le sostanze non solubili in acqua possono essere disciolte o poste in sospensione in solventi appropriati (ad esempio una miscela di etanolo e Tween-60 o 80), e successivamente diluite in acqua o in soluzione salina prima della somministrazione. È opportuno evitare quale solvente il dimetilsolfossido (DMSO).

*Numero di animali*

Il saggio va programmato con una sensibilità ed una potenza predeterminati. Sul numero di cromosomi trattati che devono essere analizzati influirà fortemente la frequenza delle mutazioni spontanee osservata nel controllo appropriato.

*Vie di somministrazione*

L'esposizione può essere orale, per iniezione o per esposizione a gas o a vapori. La somministrazione della sostanza in esame può essere fatta in forma di soluzione zuccherina. Se necessario, le sostanze possono essere disciolte in soluzione di NaCl allo 0,7 % ed iniettate nel torace o nell'addome.

*Uso di controlli negativi e positivi*

È opportuno includere nell'esperimento controlli negativi (del solvente) e positivi. Ove tuttavia siano disponibili appropriati dati storici di controllo del laboratorio, non sono necessari controlli concomitanti.

**Concentrazioni**

È opportuno fare uso di tre concentrazioni. Per una valutazione preliminare può essere fatto uso di una sola concentrazione della sostanza in esame, che può essere quella massima tollerata o quella che dà luogo ad una qualche indicazione di tossicità. Per le sostanze non tossiche è opportuno adottare l'esposizione alla concentrazione massima praticabile.

**Procedimento**

Maschi di tipo selvatico (di età da 3 a 5 giorni) vengono trattati con la sostanza in esame e accoppiati individualmente con un numero maggiore di femmine vergini dello stock Muller-5 o di altro stock marcato in maniera appropriata (con cromosomi X multipli invertiti). Le femmine vengono sostituite con vergini fresche ogni due, tre giorni così da coprire l'intero ciclo delle cellule germinali. Sulla prole di dette femmine viene effettuata l'analisi degli effetti letali corrispondenti agli effetti sullo sperma maturo, sugli spermatozoi di stadio medio o avanzato, sugli spermatozoi precoci, sugli spermatozoi e sugli spermatogoni al momento del trattamento.

Le femmine eterozigoti  $F_1$  degli incroci di cui sopra sono fatte accoppiare individualmente (ossia in ragione di una femmina per bottiglietta) con i loro fratelli. Nella generazione  $F_2$  si procede su ciascuna coltura all'analisi dell'assenza di maschi del tipo selvatico. Se da una femmina  $F_1$  appare essere derivata una coltura portante un letale nel cromosoma X dei genitori (ossia se non si osservano maschi con il cromosoma trattato) si devono mettere alla prova figlie di quella femmina con il medesimo genotipo per stabilire se la letalità si ripete nella generazione successiva.

2

**DATI**

I dati devono essere disposti in forma di tabelle con indicazione del numero dei cromosomi X saggiati, del numero dei maschi non fertili e del numero dei cromosomi letali per ciascuna concentrazione di esposizione e per ciascun periodo di accoppiamento per i singoli maschi trattati. Deve essere riportato per ciascun maschio il numero degli aggregati di differenti dimensioni. I risultati dei test devono essere confermati in un esperimento a parte.

Per la valutazione del saggio dei letali recessivi legati al sesso deve essere fatto uso di metodi statistici appropriati. L'agglomerazione di letali recessivi aventi origine da un medesimo maschio dev'essere considerata e valutata secondo criteri statistici appropriati.

3

**RELAZIONE**

3.1

**Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- stock, stock o ceppi di *Drosophila* usati, età degli insetti, numero dei maschi trattati, numero dei maschi sterili, numero di colture  $F_2$  costituite, numero di colture  $F_2$  senza prole, numero di cromosomi portanti un letale individuati per ciascuno stadio delle cellule germinali,
- criteri per la definizione delle dimensioni dei gruppi trattati,
- condizioni di effettuazione del saggio: descrizione dettagliata dei programmi di trattamento e di campionatura, livelli di esposizione, dati della tossicità, controlli negativi (del solvente) e positivi, se del caso,
- criteri per il riscontro delle mutazioni letali,
- relazione esposizione/effetto se del caso,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati.

3.2

**Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

4

**RIFERIMENTI**

Vedi introduzione generale, parte B.

## B.21. SAGGIO IN VITRO DI TRASFORMAZIONE DI CELLULE DI MAMMIFERO

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B

## 1.2 Definizioni

Vedi introduzione generale, parte B

## 1.3 Sostanze di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

Per la rilevazione di cambiamenti fenotipici in vitro indotti da sostanze chimiche associate con una trasformazione maligna in vivo può essere fatto uso di sistemi di coltura di cellule di mammiferi. Fra le cellule più largamente usate figurano le cellule C3H10T<sup>1/2</sup>, 3T3, SHE, le cellule di ratto Fisher; i saggi si fondano su cambiamenti della morfologia cellulare, sulla formazione di foci e sulla perdita della dipendenza da ancoraggio in agar semisolido. Esistono anche altri sistemi meno largamente usati i quali mettono in luce altri tipi di cambiamenti fisiologici o morfologici nelle cellule successivamente all'esposizione a sostanze chimiche carcinogene. Nessuno degli eventi finali dei test in vitro ha un legame meccanicistico accertato con il cancro. Alcuni fra i saggi sono in grado di evidenziare agenti promotori dei tumori. La citotossicità può essere determinata attraverso la misura dell'effetto della sostanza in esame sulla capacità di formazione di colonie (efficienza di clonaggio) o sul tasso di crescita delle colture. La misurazione della citotossicità ha lo scopo di stabilire se l'esposizione alla sostanza in esame abbia avuto carattere rilevante dal punto di vista tossicologico, ma non può essere usata per calcolare la frequenza della trasformazione in tutti i saggi poiché alcuni di essi possono comportare un'incubazione prolungata e/o un ripiastramento delle cellule.

## 1.5 Criteri qualitativi

Nessuno.

## 1.6 Descrizione del metodo di saggio

*Preparazioni**Cellule*

È disponibile tutta una varietà di linee cellulari o di cellule primarie, in relazione al saggio di trasformazione che si intende effettuare. Il ricercatore deve accertarsi che nel saggio che si sta effettuando le cellule presentino dopo esposizione a carcinogeni noti l'appropriato cambiamento fenotipico, e che il saggio nel suo laboratorio sia di provata e documentata validità e attendibilità.

*Terreni di coltura*

Devono essere usati terreni di coltura e condizioni sperimentali appropriati per il saggio di trasformazione che si effettua.

*Sostanza in esame*

Le sostanze in esame possono essere preparate in mezzi di coltura ovvero disciolte o poste in sospensione in veicoli appropriati, prima del trattamento delle cellule. La concentrazione finale del veicolo nel sistema di coltura non deve influire sulla vitalità o sul tasso di crescita delle cellule né sull'incidenza della trasformazione.

*Attivazione metabolica*

Le cellule vanno esposte alla sostanza in esame sia in presenza che in assenza di un sistema esogeno di attivazione metabolica dei mammiferi. Alternativamente, quando sia fatto uso di tipi di cellule che possiedono un'attività metabolica endogena deve essere accertato che la natura dell'attività stessa sia appropriata per la classe chimica sottoposta all'esame.

*Condizioni sperimentali***Uso di controlli positivi e negativi**

È opportuno includere in ciascun esperimento dei controlli positivi, con impiego sia di un composto ad azione diretta che di un composto richiedente attivazione metabolica, e altresì opportuno fare uso di un controllo negativo (del solvente)

Quali esempi di sostanze che si prestano ad essere usate come controlli positivi si possono citare

- sostanze ad azione diretta
  - etilmeransolfonato,
  - $\beta$ -propiolattone,
- composti richiedenti un'attivazione metabolica
  - 2-acetilaminofluorene,
  - 4-dimetilaminoazobenzene,
  - 7,12-dimetilbenzantracene

Se del caso, è opportuno includere un controllo positivo supplementare della medesima classe chimica del composto in esame

**Concentrazioni**

È opportuno usare varie concentrazioni della sostanza in esame. Dette concentrazioni devono dar luogo ad un *effetto tossico correlato con la concentrazione*, nel senso che la concentrazione più elevata produce un livello ridotto di sopravvivenza, mentre alla concentrazione più bassa la sopravvivenza è approssimativamente dello stesso ordine che nel controllo negativo. Le sostanze relativamente insolubili in acqua vanno saggiate fino al loro limite di solubilità secondo procedure appropriate. Per le sostanze non tossiche altamente solubili in acqua la concentrazione massima della sostanza va determinata caso per caso.

*Procedimento*

L'esposizione delle cellule deve avere una durata appropriata in relazione al sistema di saggio adottato, e questo, quando l'esposizione è prolungata, può comportare un ridosaggio con cambio del mezzo e, se necessario, con miscela di attivazione metabolica fresca. Le cellule non aventi un'attività metabolica endogena sufficiente vanno esposte alla sostanza in esame sia in presenza che in assenza di un sistema di attivazione metabolica appropriato. Al termine del periodo di esposizione le cellule vengono lavate da ogni traccia della sostanza in esame e coltivate in condizioni appropriate per la comparsa del fenotipo trasformato che si sta studiando, e viene infine determinata l'incidenza della trasformazione. Tutti i risultati devono essere confermati in un esperimento indipendente.

**2 DATI**

I dati vanno presentati in forma di tabella e possono assumere forme diverse a seconda del tipo di determinazione effettuato, ad esempio numero di foci o di colonie per piastre, piastre positive o numero delle cellule trasformate. La sopravvivenza va espressa quale percentuale dei livelli di controllo, e la frequenza della trasformazione sotto forma del numero di trasformanti in relazione al numero dei sopravvissuti. I dati devono essere valutati secondo metodi statistici appropriati.

**3 RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile

- tipo di cellule usato, numero delle colture cellulari, metodi di mantenimento delle colture,
- condizioni di effettuazione del saggio, concentrazione della sostanza in esame, veicolo usato, temperatura di incubazione, durata dell'incubazione, durata e frequenza del trattamento, densità delle cellule durante il trattamento, tipo di sistema di attivazione metabolica esogena usato, controlli positivi e negativi, specificazione del fenotipo studiato, sistema selettivo usato (se del caso), criteri per la scelta delle dosi,

- metodo seguito per l'enumerazione delle cellule vitali e delle cellule trasformate,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati

3.2 **Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

4 **RIFERIMENTI**

Vedi introduzione generale, parte B.

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## B.22. SAGGIO DEI LETALI DOMINANTI NEI RODITORI

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B

## 1.2 Definizioni

Vedi introduzione generale, parte B

## 1.3 Sostanze di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

Gli effetti dei letali dominanti provocano la morte dell'embrione o del feto. L'induzione di letali dominanti per effetto dell'esposizione ad una sostanza chimica indica che la sostanza in causa ha attaccato il tessuto germinale della specie all'esame. E' generalmente ammesso che i letali dominanti sono dovuti a un danno cromosomico (anomalie strutturali e numeriche). La morte dell'embrione in femmine trattate può altresì essere il risultato di effetti tossici.

Come criterio generale si espongono animali maschi al composto in esame e si accoppiano i medesimi con femmine vergini non trattate. I diversi stadi delle cellule germinali possono essere saggiati separatamente mediante l'osservanza di intervalli in successione negli accoppiamenti. L'aumento degli impianti morti per femmina nel gruppo trattato in confronto con gli impianti morti per femmina nel gruppo di controllo rispecchia la perdita successiva all'impianto. La perdita anteriore all'impianto può essere stimata sulla base di conteggi dei corpi lutei oppure attraverso il raffronto del totale degli impianti per femmina nel gruppo trattato e in quello di controllo. L'effetto letale dominante complessivo è rappresentato dalla somma della perdita anteriore e successiva all'impianto. Il calcolo dell'effetto letale dominante complessivo si basa sul raffronto fra gli impianti vivi per femmina nel gruppo trattato e gli impianti vivi per femmina nel gruppo di controllo. Una riduzione del numero di impianti a determinati intervalli può essere il risultato dell'uccisione di cellule (vale a dire, di spermatoцитi e/o di spermatogoni).

## 1.5 Criteri qualitativi

Nessuno.

## 1.6 Descrizione del metodo di saggio

*Preparazioni*

In tutti i casi in cui ciò sia possibile, le sostanze in esame vanno disciolte o poste in sospensione in soluzione salina isotonica. Le sostanze non solubili in acqua possono essere disciolte o sospese in solventi appropriati. Il solvente usato non deve interferire con la sostanza in esame né produrre effetti tossici. È opportuno fare uso di preparazioni fresche della sostanza in esame.

*Condizioni sperimentali**Vie di somministrazione*

Il composto in esame va in generale somministrato una sola volta. Sulla base di informazioni tossicologiche può essere adottato un programma di trattamento ripetuto. Le vie di somministrazione correnti sono l'intubazione orale e l'iniezione intraperitoneale. Possono altresì essere appropriate altre vie di somministrazione.

*Animali da esperimento*

Quali specie da sottoporre al saggio sono raccomandati i ratti o i topi. Animali sani nella piena maturità sessuale vengono randomizzati ed assegnati al gruppo per il trattamento e al gruppo di controllo.

#### Numero e sesso

Occorre fare uso di un numero adeguato di maschi trattati in modo da tener conto della variazione spontanea del carattere biologico di cui si effettua la valutazione. Il numero scelto deve essere basato sulla sensibilità di rilevazione e sul valore di significatività determinati in precedenza. Ad esempio, in un esperimento tipico, il numero dei maschi per ciascun gruppo/dose deve essere sufficiente per dare da 30 a 50 femmine gravide per ogni intervallo di accoppiamento.

#### Uso di controlli negativi e positivi

È opportuno in linea generale includere in ciascun esperimento dei controlli simultanei positivi e negativi (del veicolo). Quando siano disponibili risultati accettabili di controlli positivi relativi ad esperimenti effettuati di recente nel medesimo laboratorio, al posto di un controllo positivo simultaneo può essere fatto uso di detti risultati.

Le sostanze per i controlli positivi vanno usate a dosi opportunamente basse (ad esempio MMS, intraperitoneale, a 10 mg/kg) allo scopo di dimostrare la sensibilità del saggio.

#### Livelli delle dosi

Di norma va fatto uso di tre livelli di dosaggio. La dose più alta deve produrre segni di tossicità o di riduzione della fertilità negli animali trattati. In taluni casi può essere sufficiente un solo livello elevato di dosaggio.

#### Saggio del limite

Le sostanze non tossiche vanno saggiate a 5 g/kg con una sola somministrazione o a 1 g/kg/giorno con somministrazione ripetuta.

#### Procedimento

Sono possibili vari schemi di trattamento. Il tipo di trattamento più largamente usato è quello della somministrazione singola della sostanza in esame. Possono essere applicati anche altri schemi di trattamento.

I singoli maschi vengono accoppiati in successione con una o due femmine vergini non trattate ad intervalli appropriati dopo il trattamento. Le femmine vanno lasciate con i maschi almeno per la durata di un ciclo di estro o fino a che sia avvenuto l'accoppiamento, da determinare in base alla presenza di sperma nella vagina o di un tappo vaginale.

Il numero degli accoppiamenti successivi al trattamento è determinato in base al programma di trattamento e deve essere tale che vengano esaminati dopo il trattamento tutti gli stadi delle cellule germinali.

Le femmine vengono sacrificate nella seconda metà del periodo di gravidanza, e si procede all'esame del contenuto uterino per la determinazione del numero degli impianti morti e viventi. Si possono anche esaminare le ovaie per determinare il numero dei corpi lutei.

#### DATI

I dati devono essere disposti in forma di tabelle con indicazione del numero dei maschi, del numero delle femmine gravide e del numero delle femmine non gravide. I risultati di ciascun accoppiamento, con indicazione dell'identità dei singoli soggetti maschi e femmine, vanno riportati individualmente. Per ciascuna femmina va indicata la settimana di accoppiamento, e per i maschi il livello di dosaggio, nonché rispettivamente le frequenze degli impianti vivi e degli impianti morti. Il calcolo dell'effetto complessivo letale dominante si basa sul raffronto fra gli impianti vivi per femmina nel gruppo sottoposto al saggio e gli impianti vivi per femmina nel gruppo di controllo. Il rapporto fra gli impianti morti e quelli vivi del gruppo trattato posto a raffronto con il rapporto corrispondente del gruppo di controllo viene analizzato ai fini dell'indicazione della perdita successiva all'impianto.

Se i dati sono registrati come morti precoci e morti tardive, ciò deve risultare dalle tabelle. Se la perdita anteriore all'impiantazione è stimata, ne deve essere dato ragguaglio. La perdita anteriore all'impianto può essere calcolata come discrepanza fra il numero dei corpi lutei e il numero degli impianti, ovvero come riduzione del numero medio di impianti per utero in confronto con gli accoppiamenti di controllo. I dati vengono valutati secondo metodi statistici appropriati.



**3. RELAZIONE****3.1. Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- specie, ceppo, età e peso degli animali usati, numero degli animali dell'uno e dell'altro sesso nei gruppi sottoposti al saggio e nei gruppi di controllo,
- sostanza in esame, solvente, livelli di dosaggio saggiati e ragioni della scelta delle dosi, controlli negativi e positivi, dati della tossicità,
- via e durata dell'esposizione,
- ordine degli accoppiamenti,
- metodo usato per stabilire l'avvenuto accoppiamento,
- metodo del sacrificio,
- criteri per l'analisi dei letali dominanti,
- relazione dose/risposta, se del caso,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati

**3.2. Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

**4. RIFERIMENTI**

Vedi introduzione generale, parte B.

## B.23. ANALISI CITOGENETICA DELLE CELLULE GERMINALI. MAMMIFERI

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B

## 1.2 Definizioni

Vedi introduzione generale, parte B

## 1.3 Sostanze di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

Il saggio dell'analisi citogenetica in vivo qui considerato permette di rilevare aberrazioni strutturali dei cromosomi negli spermatogoni. Esso consiste in un'analisi delle mitosi degli spermatogoni per aberrazioni di tipo cromatidico e di tipo cromosomico.

Il saggio fa uso di preparati di testicoli di mammiferi esposti alle sostanze in esame per vie appropriate e sacrificati ad intervalli diversi. Prima di essere sacrificati gli animali sono altresì trattati con inibitori del fuso quali la colchicina in modo da far accumulare cellule ad uno stadio della mitosi di tipo metafase (c-metafase). Si producono preparati cromosomici essiccati all'aria, che vengono colorati ed analizzati al microscopio.

Utili informazioni supplementari possono essere fornite dall'analisi degli spermatociti allo stadio di diacinesi/metafase I per formazioni multivalenti da traslocazione dopo trattamento delle cellule staminali.

## 1.5 Criteri qualitativi

Nessuno.

## 1.6 Descrizione del metodo di saggio

*Preparazioni*

Le sostanze in esame vengono disciolte in soluzione salina isotonica. Le sostanze non solubili vengono disciolte o poste in sospensione in un solvente appropriato. Si devono usare soluzioni del composto in esame preparate di fresco. Se si fa uso di un solvente per facilitare il dosaggio, esso non deve interferire con la sostanza in esame né produrre effetti tossici.

*Vie di somministrazione*

I composti in esame vanno in genere somministrati una sola volta. Sulla base di informazioni tossicologiche può essere adottato un programma di trattamento ripetuto. Il trattamento ripetuto può tuttavia essere applicato soltanto se il composto in esame non presenta effetti citotossici nella differenziazione degli spermatogoni.

Le vie di somministrazione correnti sono la via orale e l'iniezione intraperitoneale. Possono altresì essere appropriate altre vie di somministrazione.

*Animali da esperimento*

E per lo più fatto uso di topi e di hamster cinesi. Può tuttavia essere impiegata qualsiasi altra specie di mammiferi.

Vengono utilizzati maschi sessualmente maturi, che sono assegnati a caso ai gruppi per il trattamento ed ai gruppi di controllo.

#### Numero degli animali

Si devono usare almeno 5 maschi per ciascun gruppo trattato e per ciascun gruppo di controllo

#### Uso di controlli negativi e positivi

In linea generale è opportuno includere in ciascun esperimento dei controlli simultanei positivi e negativi (del solvente)

Le sostanze per i controlli positivi vanno usate in dose opportunamente bassa (ad esempio la mitomicina C, intraperitoneale, a 0,3 mg/kg) in modo da dimostrare la sensibilità del saggio

#### Livelli di dose

Si fa uso di una sola dose del composto in esame, scegliendo a questo fine la dose massima tollerata ovvero quella che produce qualche indicazione di citotossicità. Se la dose iniziale uccide un gran numero di cellule, si deve usare una seconda dose più bassa che presenti citotossicità. Nei casi in cui è necessario stabilire una relazione dose/risposta, sono richieste almeno tre dosi (ad esempio per confermare una risposta positiva debole). Le sostanze non tossiche vanno saggiate alla dose praticabile più elevata sia per la somministrazione singola che per la somministrazione ripetuta

#### Procedimento

Gli animali vengono in generale trattati con il composto in esame un'unica volta. Per il gruppo con la dose più elevata sono usati tre intervalli di campionamento dopo il trattamento. L'intervallo per il campionamento centrale è di 24 ore. Poiché il composto in esame può influire sulla cinetica del ciclo cellulare, si applicano un primo intervallo per la campionatura ed uno successivo adeguatamente spaziatosi in un lasso di tempo da 6 a 48 ore. Per i livelli di dosaggio supplementari i campioni vanno presi all'intervallo specificamente sensibile ovvero, quando questo non sia noto, 24 ore dopo il trattamento

Nel caso di un programma di trattamento ripetuto, può essere fatto uso di dosaggi ripetuti, e in tal caso i campioni vanno presi da 6 a 24 ore dopo l'ultimo trattamento. Un singolo tempo di campionamento può essere usato se giustificato scientificamente

#### Preparazione del testicolo

Per l'analisi della mitosi degli spermatogoni si inietta agli animali per via intraperitoneale una dose adeguata di un inibitore del fuso come la colchicina. Gli animali vengono poi sacrificati ad un intervallo appropriato dopo il trattamento. Per i topi detto intervallo varia da 3 a 5 ore, mentre per gli hamster cinesi possono essere necessarie più di 5 ore

È fatto uso della tecnica di essiccazione all'aria. Per specie diverse possono rendersi necessarie modifiche del procedimento standard. Si ottengono sospensioni di cellule che vengono trattate con soluzione ipotonica e fissate. Le cellule vengono stese su vetrini e colorate. I vetrini vengono codificati prima dell'analisi microscopica

#### Analisi

Per la ricerca delle aberrazioni strutturali dei cromosomi si analizzano almeno 100 metafasi mitotiche largamente disperse con il numero completo di centromeri. In aggiunta a ciò si può determinare il rapporto fra le mitosi degli spermatogoni e la prima e la seconda metafase meiotica in un campione complessivo di 100 cellule in divisione per animale per mettere in luce un eventuale effetto citotossico

## 2

### DATI

I dati vengono presentati in forma di tabelle. Per ogni animale trattato e di controllo tutti i tipi di aberrazioni vengono elencati separatamente. È inclusa l'indicazione del numero totale di cellule analizzate e del numero totale di cellule aberranti per gruppo. Vengono date per tutti i parametri le medie e la deviazione standard. Si riporta infine in forma di tabelle il rapporto medio fra la mitosi degli spermatogoni e la prima e la seconda metafase meiotica per ciascun gruppo trattato e ciascun gruppo di controllo. I dati vengono valutati secondo metodi statistici appropriati

**3 RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- specie e ceppo di animali maschi, età e peso degli animali,
- numero di animali per ciascun gruppo trattato e ciascun gruppo di controllo,
- condizione di effettuazione del saggio, descrizione particolareggiata del trattamento, livelli di dosaggio, solventi, inibitore del fuso usato,
- numero delle cellule analizzate per animale in ciascun gruppo,
- tipi e numero di aberrazioni separatamente per ciascun animale trattato e ciascun animale di controllo,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati.

**3.2. Valutazione ed interpretazione**

Vedi introduzione generale, parte B

**4 RIFERIMENTI**

Vedi introduzione generale, parte B.

## B.24. SAGGIO DELLE MACCHIE (SPOT TEST) TOPI

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B.

## 1.2 Definizioni

Vedi introduzione generale, parte B

## 1.3 Sostanze di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

Quello qui considerato è un saggio in vivo nei topi, nel quale vengono esposti alle sostanze chimiche degli embrioni in corso di sviluppo. Le cellule bersaglio negli embrioni in corso di sviluppo sono i melanoblasti e i geni-bersaglio sono quelli che governano la pigmentazione del pelame dell'animale. Gli embrioni in corso di sviluppo sono eterozigoti per una serie di detti geni della colorazione del mantello. Una mutazione nell'allele dominante di un gene di questo tipo in un melanoblasto, o la sua perdita (tramite diversi eventi genetici) ha come risultato l'espressione del fenotipo recessivo nelle sue cellule discendenti, costituita da una macchia di colore cambiato nel mantello del topo risultante. Si riporta quindi il numero della prole con dette macchie o mutazioni, e se ne raffronta la frequenza con quella riscontrata nella prole risultante da embrioni trattati soltanto con il solvente. Il saggio delle macchie (Spot test) nei topi rivela presunte mutazioni somatiche nelle cellule fetali.

## 1.5 Criteri qualitativi

Nessuno

## 1.6 Descrizione del metodo di saggio

*Preparazioni*

Quando ciò è possibile, le sostanze in esame vengono disciolte o poste in sospensione in soluzione salina isotonica. Le sostanze non solubili in acqua vengono disciolte o poste in sospensione in solventi appropriati. Il solvente usato non deve interferire con la sostanza in esame né produrre effetti tossici. È opportuno usare preparazioni fresche della sostanza in esame.

*Animali da esperimento*

Si accoppiano topi del ceppo T (nonagouti, a/a, chinchilla, pink eye,  $c^{hp}/c^{hp}$ , brown, b/b, dilute, short ear, d se/d se, piebald spotting, s/s) con il ceppo HT (pallid, nonagouti, brachypody, pa a bp/pa a bp, leaden fuzzy, ln fz/ln fz, pearl pe/pe) o con C57 BL (nonagouti, a/a). Possono essere usati anche altri incroci appropriati, ad esempio fra NMRI (nonagouti, a/a, albino, c/c) e DBA (nonagouti, a/a, brown, b/b, dilute d/d), a condizione che producano prole nonagouti.

*Numero e sesso*

Viene trattato un numero di femmine gravide sufficiente per ottenere un numero appropriato di prole sopravvissuta per ciascun livello di dosaggio usato. Le dimensioni appropriate del campione sono determinate dal

numero delle macchie osservate nei topi trattati e dalla scala dei dati di controllo. Un risultato negativo è accettabile soltanto quando si siano riscontrati almeno 300 figli di femmine trattate con la dose più alta.

#### Controlli positivi e negativi

È opportuno che siano disponibili dati di controllo simultanei ottenuti su topi trattati soltanto con il solvente (controlli negativi). Eventuali dati storici di controllo del medesimo laboratorio possono essere messi insieme con i dati di controllo nuovi in modo da accrescere la sensibilità del saggio, a condizione che essi siano omogenei. Se non si rileva alcuna mutagenicità per la sostanza in esame, dovrebbero essere disponibili dati di controllo positivo ottenuti di recente nel medesimo laboratorio in seguito a trattamento con una sostanza della quale sono noti gli effetti di mutagenicità con questo saggio.

#### Vie di somministrazione

Le vie abituali di somministrazione sono l'intubazione orale e l'iniezione intraperitoneale delle femmine gravide. Nei casi in cui ciò possa essere appropriato, si fa uso anche del trattamento per inalazione o di altre vie di somministrazione.

#### Livelli di dose

Si fa uso di almeno due livelli di dose, con uno dei livelli che dà luogo a segni di tossicità o ad una riduzione delle proporzioni della figliata. Per le sostanze non tossiche è opportuno ricorrere all'esposizione alla dose massima praticabile.

#### Procedimento

Viene di norma praticato un unico trattamento nel giorno 8, 9 o 10 di gravidanza, contando come giorno 1 quello in cui si è osservato per la prima volta il tappo vaginale. Detti giorni corrispondono a 7,25, 8,25 e 9,25 giorni dopo il concepimento. Possono essere praticati trattamenti successivi nel corso di detti giorni.

#### Analisi

La prole viene codificata e nel periodo fra tre o quattro settimane dopo la nascita si effettua su di essa l'analisi delle macchie pigmentate. Si distinguono tre categorie di macchie.

- a) macchie bianche a distanza fino a 5 mm dalla linea ventrale mediana, che si presume derivino dall'uccisione di cellule (WMVS),
- b) macchie gialle di tipo aguti, associate con le mammelle, gli organi genitali, le zone della gola, delle ascelle e dell'inguine e la parte mediana della fronte, che si presume derivino da difettoso differenziamento (MDS),
- c) macchie pigmentate e bianche distribuite in disordine sul manto, che si presume derivino da mutazioni somatiche (RS).

Devono essere osservate tutte e tre le categorie, ma ha rilevanza genetica soltanto l'ultima, RS. Eventuali problemi per quel che riguarda la distinzione fra MDS e RS possono essere risolti mediante microscopia fluorescente di peli presi come campione.

Va presa nota di evidenti anomalie morfologiche grossolane della prole.

2

#### DATI

I dati vengono presentati sotto forma del numero totale dei discendenti esaminati e del numero dei discendenti che hanno una o più macchie da mutazione somatica presunta. I dati relativi ai trattamenti ed al controllo negativo vengono posti a raffronto secondo metodi statistici appropriati. I dati sono anche presentati su base per prole.

3

#### RELAZIONE

3.1

##### Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- ceppi usati nell'incrocio,
- numero di femmine gravide nei gruppi trattati e nei gruppi di controllo,
- dimensioni medie delle figliate nei gruppi trattati ed in quelli di controllo alla nascita ed allo svezzamento,
- livelli di dose della sostanza in esame,
- solvente usato.

- giorno di gravidanza al quale è stato praticato il trattamento,
- vie di somministrazione del trattamento,
- numero complessivo dei discendenti esaminati, e numero dei discendenti con WMVS, MDS e RS nei gruppi trattati e in quelli di controllo,
- anomalie morfologiche grossolane,
- relazione dose/risposte di RS quando ciò sia possibile,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati.

3 2      **Valutazione ed interpretazione**

Vedi introduzione generale, parte B

4            **RIFERIMENTI**

Vedi introduzione generale, parte B

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## B.25. TRASLOCAZIONI EREDITABILI: TOPO

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B.

## 1.2 Definizioni

Vedi introduzione generale, parte B.

## 1.3 Sostanze di riferimento

Nessuna.

## 1.4 Principi del metodo di saggio

Il saggio delle traslocazioni ereditabili nel topo rivela cambiamenti strutturali e numerici dei cromosomi nelle cellule germinali di mammiferi quali sono recuperate nella progenie della prima generazione. I tipi di mutazioni cromosomiche sono delle traslocazioni reciproche e, se è compresa progenie femminile, la perdita del cromosoma X. I portatori di traslocazione e le femmine XO presentano fertilità ridotta e di ciò è fatto uso per la selezione di progenie  $F_1$  per l'analisi citogenetica. Taluni tipi di traslocazioni (autosoma-X e tipo c-t) provocano sterilità completa. Le traslocazioni sono citogeneticamente osservabili in cellule meiotiche alla diacinesi della metafase I di individui di sesso maschile, che sono o maschi  $F_1$  o figli di femmine  $F_1$ . Le femmine XO sono identificate citogeneticamente dalla presenza di 39 cromosomi soltanto nelle mitosi del midollo osseo.

## 1.5 Criteri qualitativi

Nessuno.

## 1.6 Descrizione del metodo di saggio

*Preparazioni*

Le sostanze chimiche in esame vengono disciolte in soluzione salina isotonica. Se insolubili esse vengono disciolte o poste in sospensione in solventi appropriati. È fatto uso di soluzioni della sostanza in esame preparate di fresco.

Se si fa uso di un solvente per facilitare il dosaggio, esso non deve interferire con il composto in esame né dar luogo ad effetti tossici.

*Vie di somministrazione*

Le vie di somministrazione sono solitamente l'intubazione orale o l'iniezione intraperitoneale. Possono essere appropriate altre vie di somministrazione.

*Animali da esperimento*

Per la facilità della riproduzione e della verifica citologica, gli esperimenti in questione vengono effettuati sui topi. Non è necessario alcun ceppo di topi specifico. Tuttavia, nell'effettuazione di prove riguardanti la fertilità è opportuno che le dimensioni medie della figliata del ceppo usato siano di più di 8 neonati e siano inoltre relativamente costanti. Sono usati animali sani sessualmente maturi.

*Numero di animali*

Il numero degli animali occorrenti dipende dalla frequenza delle traslocazioni spontanee, e dal tasso minimo di induzione necessario per un risultato positivo. Il saggio si effettua normalmente mediante analisi della progenie maschile  $F_1$ . È opportuno esaminare almeno 500 capi di progenie maschile  $F_1$  per ciascun gruppo/dose. Se si include progenie femminile  $F_1$ , occorrono 300 maschi e 300 femmine.



#### Uso di controlli negativi e positivi

Dovrebbero essere disponibili dati adeguati di controllo, derivati da controlli simultanei o storici. Qualora siano disponibili dati accettabili di controllo positivo da esperimenti condotti di recente nello stesso laboratorio, questi risultati possono essere usati in luogo del controllo positivo simultaneo.

#### Livelli di dose

Si sperimenta un solo livello di dose, ossia solitamente la dose più alta associata con la produzione dei minimi effetti tossici, ma senza che sia influenzato il comportamento riproduttivo o la sopravvivenza. Per stabilire una relazione dose/risposta sono necessarie due dosi supplementari più basse. Per le sostanze non tossiche è opportuno adottare un'esposizione alla dose massima praticabile.

#### Procedimento

##### Trattamento e accoppiamento

Sono possibili due schemi di trattamento. Nello schema più largamente usato e praticato un'unica somministrazione della sostanza in esame. Si può tuttavia procedere anche all'applicazione della sostanza in esame 7 giorni per settimana per 35 giorni. Il numero degli accoppiamenti successivi al trattamento è determinato dal programma di trattamento adottato, e deve essere stabilito in modo che siano considerati tutti gli stadi delle cellule germinali trattate. Al termine del periodo di accoppiamento, le femmine vengono tenute in gabbie individuali. Quando le femmine partoriscono, si prende nota della data, del numero e del sesso della progenie. Tutta la progenie maschile viene svezata, mentre tutta la progenie femminile viene scartata, salvo nel caso che la si includa nell'esperimento.

#### Controllo della eterozigosi di traslocazione

È praticato l'uno o l'altro di due metodi possibili:

- analisi della fertilità della progenie  $F_1$  e successiva verifica degli eventuali portatori di traslocazione mediante analisi citogenetica,
- analisi citogenetica di tutta la progenie maschile  $F_1$  senza selezione preliminare mediante analisi della fertilità.

##### a) Analisi della fertilità

La diminuzione della fertilità di un individuo  $F_1$  può essere stabilita attraverso l'osservazione delle dimensioni della figliata e/o dell'analisi del contenuto uterino delle femmine accoppiate.

Devono essere stabiliti dei criteri specifici per la determinazione della fertilità normale e della fertilità diminuita nel ceppo di topi usato.

**Osservazione dell'entità delle figliate.** I maschi  $F_1$  da sottoporre al saggio vengono posti in gabbia individualmente con femmine del medesimo esperimento o della colonia. Le gabbie vengono ispezionate giornalmente a partire da 18 giorni dopo l'accoppiamento. Viene presa nota alla nascita dell'entità della figliata e del sesso dalla progenie  $F_2$  e le figliate vengono successivamente scartate. Se si sottopone al saggio la progenie femminile  $F_1$ , si tiene la progenie  $F_2$  di piccole figliate per un'ulteriore sperimentazione. Le portatrici femmine di traslocazioni sono verificate mediante analisi citogenetica di una traslocazione in uno qualsiasi dei loro discendenti maschi. Le femmine XO si riconoscono dal cambiamento del rapporto fra i sessi nella loro progenie (maschi/femmine da 1:1 a 1:2). In un procedimento in serie si escludono gli animali  $F_1$  normali da sperimentazioni ulteriori se la prima figliata  $F_2$  raggiunge o supera un valore normale predeterminato, altrimenti si osserva una seconda o una terza figliata  $F_2$ . Gli animali  $F_1$  che non possono essere classificati come normali dopo l'osservazione di un numero di figliate  $F_2$  fino a tre vengono saggiati ulteriormente mediante l'analisi del contenuto uterino delle femmine con essi accoppiate, oppure sono direttamente sottoposti all'analisi citogenetica.

**Analisi del contenuto uterino.** La diminuzione dell'entità delle figliate nei portatori di traslocazioni è dovuta a morte dell'embrione, e di conseguenza un numero elevato di impianti morti è indicativo della presenza di una traslocazione nell'animale all'esame. I maschi  $F_1$  da sottoporre al saggio vengono accoppiati con due, tre femmine ciascuno. Il concepimento viene determinato mediante ispezione giornaliera per l'osservazione di tappi vaginali fra le 8 e le 10 antimeridiane. Le femmine vengono uccise da 14 a 16 giorni dopo e viene presa nota degli impianti sia vivi che morti nei loro uteri.

##### b) Analisi citogenetica

Si allestiscono preparati di testicoli con la tecnica dell'essiccazione in aria. I portatori di traslocazioni sono identificati in base alla presenza di configurazioni multivalenti alla diacinesi di metafasi I degli spermatociti primari. L'osservazione di almeno due cellule con associazione multivalente costituisce la prova occorrente che l'animale sottoposto al saggio è un portatore di traslocazione.

Se non si è proceduto ad alcuna selezione nell'allevamento, sono esaminati citogeneticamente tutti i maschi  $F_1$ . Deve essere riscontrato al microscopio un minimo di 25 diacinesi metafasi I per maschio. Per i maschi  $F_1$  con testicoli piccoli e con degradazione meiotica prima della diacinesi e per le femmine  $F_1$  sospette di XO è necessario l'esame delle metafasi mitotiche, degli spermatogoni o del midollo osseo. La presenza di un cromosoma insolitamente lungo e/o corto in ognuna di 10 cellule è il segno di una traslocazione particolare sterile del maschio (tipo c-t). Talune traslocazioni di autosoma X che provocano la sterilità del maschio possono essere identificate soltanto raggruppando l'analisi dei cromosomi mitotici. La presenza di 39 cromosomi nella totalità di 10 mitosi è il segno di una condizione di XO in una femmina.

## 2 DATI

I dati sono presentati in forma di tabelle. Sono riportati l'entità media delle figliate e il rapporto fra i sessi dagli accoppiamenti dei genitori alla nascita e allo svezzamento per ciascun intervallo di accoppiamento.

Per la valutazione della fertilità degli animali  $F_1$  sono presentate le entità medie delle figliate di tutti gli accoppiamenti normali e le entità delle figliate singole dei portatori di traslocazioni  $F_1$ . Per l'analisi del contenuto uterino è dato ragguglio del numero medio degli impianti vivi e morti degli accoppiamenti normali e del numero individuale degli impianti vivi e morti per ciascun accoppiamento di portatori di traslocazione  $F_1$ .

Per l'analisi citogenetica della diacinesi metafase I sono elencati per ciascun portatore di traslocazione il numero di tipi di configurazioni multivalenti ed il numero totale delle cellule.

Per gli individui  $F_1$  sterili sono riportati il numero totale degli accoppiamenti e la durata del periodo di accoppiamento. Sono forniti i pesi dei testicoli e dettagli delle analisi citogenetiche.

Per le femmine XO sono riportati l'entità media delle figliate, il rapporto fra i sessi della progenie  $F_2$  e i risultati dell'analisi citogenetica.

Se possibile i portatori di traslocazioni vengono preselezionati per mezzo di analisi della fertilità; le tabelle devono in tal caso recare l'indicazione del numero di soggetti così selezionati che sono risultati eterozigoti di traslocazione confermati.

Sono parimenti riportati i dati dei controlli negativi e degli esperimenti di controllo positivo.

## 3 RELAZIONE

### 3.1 Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- ceppo dei topi, età degli animali, pesi degli animali trattati,
- numero di animali genitori dell'uno e dell'altro sesso nei gruppi sottoposti al saggio e nei gruppi di controllo,
- condizioni di effettuazione del saggio, descrizione particolareggiata del trattamento, livelli di dosaggio, solventi, programmi di accoppiamento,
- numero e sesso dei piccoli nati per femmina, numero e sesso dei piccoli allevati per l'analisi della traslocazione,
- tempo e criteri dell'analisi della traslocazione,
- numero e descrizione particolareggiata dei portatori di traslocazioni ivi compresi i dati riguardanti la procreazione e i dati sul contenuto uterino, se del caso,
- procedimenti citogenetici e dettagli delle analisi microscopiche, di preferenza con illustrazioni,
- valutazione statistica,
- discussione dei risultati,
- interpretazione dei risultati.

### 3.2 Valutazione ed interpretazione

Vedi introduzione generale, parte B.

## 4 RIFERIMENTI

Vedi introduzione generale, parte B

**8.26. SAGGIO DI TOSSICITÀ ORALE SUBCRONICA****SAGGIO CON SOMMINISTRAZIONE ORALE RIPETUTA DI DOSI PER 90 GIORNI USANDO SPECIE DI RODITORI****1. METODO****1.1. Introduzione**

Vedi introduzione generale, parte B.

**1.2. Definizioni**

Vedi introduzione generale, parte B.

**1.3. Sostanze di riferimento**

Nessuna.

**1.4. Principi del metodo di saggio**

La sostanza sperimentale viene somministrata giornalmente, per via orale, in dosi scalari a vari gruppi di animali da laboratorio, una dose per gruppo e per un periodo di 90 giorni. Durante il periodo di somministrazione, gli animali vengono giornalmente sottoposti ad osservazione per individuare segni di tossicità. Gli animali che muoiono durante la prova vengono sottoposti a necropsia; alla conclusione del saggio anche gli animali superstiti vengono sottoposti a necropsia.

**1.5. Criteri qualitativi**

Nessuno.

**1.6. Descrizione del metodo di saggio****Preparazioni**

Gli animali sono tenuti nelle condizioni sperimentali di alloggiamento e nutrizione sperimentali per almeno 5 giorni prima dell'inizio del saggio. Prima dell'esperimento, gli animali giovani e sani vengono mischiati con metodo casuale ed assegnati ai gruppi di trattamento e di controllo.

La sostanza in esame può essere somministrata nella dieta, con sonda, in capsule o in acqua potabile. Il dosaggio per tutti gli animali dovrebbe essere fatto con lo stesso metodo durante l'intero periodo dell'esperimento. Se un veicolo od altri additivi sono utilizzati per facilitare il dosaggio, essi non dovrebbero notoriamente produrre effetti tossici. Se del caso, si possono utilizzare i dati storici.

**Condizioni sperimentali****Animali da esperimento**

A meno che non vi siano controindicazioni, la specie preferita è il ratto. Si dovrebbero usare ceppi comunemente usati in laboratorio di giovani animali sani ed il dosaggio dovrebbe iniziare idealmente prima che i ratti abbiano raggiunto le sei settimane di età (comunque non più di 8 settimane). All'inizio dello studio, la variazione di peso degli animali usati non dovrebbe superare il  $\pm 20\%$  del valore medio. Quando uno studio subcronico orale venga intrapreso come preliminare ad uno studio a lungo termine, si dovrebbe usare la stessa specie e lo stesso ceppo in entrambi gli studi.

**Numero e sesso**

Per ciascun livello di dose si dovrebbero utilizzare almeno 20 animali (10 maschi e 10 femmine). Le femmine dovrebbero essere nullipare e non gravide. Qualora si preveda di sacrificare ad intervalli alcuni animali, il numero dovrebbe essere aumentato del numero di animali che si prevede di sacrificare prima del completamento dello studio. Inoltre, un gruppo satellite di 20 animali (10 animali per sesso) può essere trattato con livelli di dose elevati per 90 giorni e sottoposto ad osservazione per l'individuazione della reversibilità, della persistenza o dell'insorgenza ritardata di effetti tossici per 28 giorni dopo il trattamento.

#### *Livelli di dose*

Si dovrebbero usare almeno tre livelli di dose e un controllo. Eccezion fatta per il trattamento con la sostanza in esame, gli animali del gruppo di controllo dovrebbero essere tenuti in modo identico a quelli del gruppo trattato. Quando si utilizza un veicolo per facilitare il dosaggio, ai controlli si dovrebbe somministrare il veicolo, allo stesso modo dei gruppi trattati; gli animali di controllo dovrebbero ricevere la stessa quantità di veicolo di quella ricevuta dal gruppo trattato col livello di dose più elevato. Il livello di dose più elevato dovrebbe provocare effetti tossici ma produrre pochi o nessun decesso. Il livello di dose più basso non dovrebbe produrre effetti tossici. Quando esista una valutazione utile dell'esposizione umana, il livello più basso dovrebbe superare detto valore.

Idealmente, il livello di dose intermedio dovrebbe produrre effetti tossici osservabili minimi. Se viene usata più di una dose intermedia, i livelli di dose dovrebbero essere intervallati per produrre una graduazione degli effetti tossici.

Nei gruppi trattati con livelli di dose bassi e intermedi e nei controlli, l'incidenza degli eventi letali dovrebbe essere bassa e tale da permettere una valutazione significativa dei risultati.

Quando la sostanza in esame viene somministrata nella dieta, si possono utilizzare sia una concentrazione dietetica costante (ppm o mg/kg di alimento) oppure un livello di dose costante in termini di peso corporeo degli animali; l'alternativa usata deve essere specificata. Per una sostanza somministrata con sonda, la dose dovrebbe essere somministrata ogni giorno allo stesso orario. I livelli di dose dovrebbero essere adattati ad intervalli (settimanalmente o ogni due settimane) per mantenere un livello di dose costante in termini di peso corporeo dell'animale.

#### *Saggio limite*

Se uno studio di 90 giorni, condotto conformemente al metodo descritto sotto, ad un livello di dose di 1 000 mg/kg di peso corporeo/giorno o ad un livello di dose più elevato in relazione ad una possibile esposizione umana (quando questa sia nota) non produce evidenze di effetti tossici, ulteriori prove possono essere considerate non necessarie. Per le sostanze a bassa tossicità è importante assicurarsi che, quando somministrate nella dieta, le quantità e le altre proprietà della sostanza in esame di cui trattasi non interferiscano con le esigenze nutrizionali normali.

#### *Periodo di osservazione*

Tutti gli animali dovrebbero essere quotidianamente sottoposti ad osservazione e si dovrebbero registrare i segni di tossicità inclusi il tempo di insorgenza, il grado e la durata. Si dovrebbero annotare anche il tempo della morte e quello dell'insorgenza o della scomparsa dei sintomi di tossicità.

#### *Procedimento*

Gli animali vengono trattati con la sostanza in esame, idealmente sette giorni per settimana, per un periodo di 90 giorni. Gli animali appartenenti ad ogni gruppo satellite previsto per ulteriori osservazioni dovrebbero essere tenuti ancora 28 giorni senza trattamento per individuare la guarigione oppure la persistenza degli effetti tossici.

Le osservazioni cliniche includeranno i cambiamenti della cute e del pelo, degli occhi e delle mucose nonché del sistema nervoso centrale e periferico, di quello respiratorio, circolatorio, dell'attività somatomotoria e del quadro comportamentale. Si dovrebbe procedere settimanalmente alla misurazione del consumo alimentare (e del consumo dell'acqua quando la sostanza in esame sia somministrata in tale veicolo) ed al peso degli animali.

Un'osservazione regolare degli animali è necessaria onde evitare per quanto possibile perdite di animali dallo studio dovute a cause come cannibalismo, autolisi dei tessuti o errata collocazione. Alla fine del periodo di esposizione tutti gli animali sopravvissuti saranno sottoposti ad autopsia; gli animali moribondi dovranno essere rimossi e sottoposti ad autopsia.

I seguenti esami vengono effettuati abitualmente per tutti gli animali, compresi i controlli:

- l'esame oftalmoscopico, eseguito con un oftalmoscopio o attrezzatura analoga idonea, dovrebbe essere effettuato prima della somministrazione della sostanza in esame e della conclusione dello studio, preferibilmente su tutti gli animali o perlomeno su quelli a cui viene somministrato il dosaggio elevato e al gruppo di controllo. Se vengono individuati cambiamenti agli occhi, tutti gli animali dovrebbero essere esaminati;
- alla fine del periodo di saggio, si dovrebbero effettuare le seguenti analisi: ematologia, inclusi ematocrito, concentrazione di emoglobina, conteggio degli eritrociti, conteggio totale e differenziale dei leucociti, una misurazione del potenziale di coagulazione, quali il tempo di coagulazione, il tempo di protrombina, il tempo di tromboplastina o il conteggio delle piastrine;
- la determinazione di biochimica clinica sul sangue dovrebbe essere effettuata alla fine del periodo di saggio. Le aree di saggio, ritenute opportune per tutti gli studi sono: equilibrio degli elettroliti, metabolismo dei carboidrati, funzione epatica e renale. La selezione delle prove specifiche sarà determinata dalle osservazioni.

sul modo di azione della sostanza. Si suggeriscono le seguenti determinazioni: calcio, fosforo, cloruro, sodio, potassio, glucosio a digiuno (con un periodo di digiuno appropriato alla specie), glutammico piruvico transaminasi serica <sup>(1)</sup>, glutammico-ossalacetico transaminasi serica <sup>(2)</sup>, ornitina decarbossilasi, gamma glutammil transpeptidase, azoto ureico, albumina, creatinina nel sangue, bilirubina totale e misurazione delle proteine totali del siero. Altre determinazioni che possono rendersi necessarie per una valutazione tossicologica adeguata, includono analisi dei lipidi, ormoni, equilibrio acido/base, metaemoglobina, attività della colinesterasi. Determinazioni biochimiche supplementari possono essere usate, se del caso, per estendere la ricerca sugli effetti osservati.

- d) l'analisi delle urine non è richiesta routinariamente, ma solo quando vi siano indicazioni basate sulla tossicità prevista o osservata,

Se i dati storici di base sono insufficienti, prima di iniziare il dosaggio si dovrebbe prendere in considerazione la determinazione dei parametri di biochimica clinica.

#### Necropsia macroscopica

Tutti gli animali dovrebbero essere sottoposti a completa necropsia macroscopica che include l'esame della superficie esterna del corpo, di tutti gli orifizi e delle cavità craniche, toraciche e addominali e dei loro contenuti. Il fegato, i reni, le ghiandole surrenali e i testicoli dovrebbero essere pesati umidi, appena possibile dopo la dissezione, per evitare l'essiccamento. I seguenti organi e tessuti dovrebbero essere conservati in mezzo adatto per esami istopatologici futuri possibili: tutte le lesioni macroscopiche, cervello — comprese sezioni di midollo spinale/ponte, corteccia cerebellare e corteccia cerebrale, pituitaria, tiroide/paratiroide, qualsiasi tessuto timico, trachea e polmoni, cuore, aorta, (ghiandole salivari), milza, fegato, reni, ghiandole surrenali, pancreas, gonadi, utero, (organi genitali accessori), (pelle), esofago, stomaco, duodeno, digiuno, ileo, intestino cieco, colon, retto, vescica urinaria, linfonodi rappresentativi, (ghiandole mammarie femminili), (muscolatura della coscia), nervo periferico, sterno con midollo osseo, (occhi), (femore — compresa superficie articolare), (midollo spinale a tre livelli — cervicale, mediotoracico e lombare), e (ghiandole lacrimali esorbitali).

(I tessuti citati tra parentesi devono essere esaminati solo se presentano sintomi di tossicità o se vi siano indicazioni che sono l'organo-bersaglio coinvolto)

#### Esame istopatologico

- L'esame istopatologico completo dovrebbe essere effettuato sugli organi e sui tessuti degli animali nei gruppi trattati col dosaggio più elevato e nel gruppo di controllo,
- tutte le lesioni macroscopiche dovrebbero essere esaminate,
- esame degli organi-bersaglio in altri gruppi trattati con altre dosi,
- i polmoni degli animali nei gruppi trattati con dosaggi bassi ed intermedi dovrebbero essere sottoposti ad esame istopatologico per l'individuazione di infezioni, poiché ciò fornisce una valutazione appropriata dello stato di salute degli animali. Particolare attenzione dovrebbe inoltre essere dedicata in questi gruppi all'esame istopatologico del fegato e dei reni. Ulteriori esami istopatologici di routine possono non essere richiesti per gli animali di detti gruppi, ma devono sempre essere effettuati sugli organi che presentano lesioni, nel gruppo trattato con la dose elevata,
- quando si fa uso di un gruppo satellite, si dovrebbe eseguire l'esame istopatologico dei tessuti e degli organi che presentano lesioni nei gruppi trattati.

## 2. DATI

I dati dovrebbero essere riassunti sotto forma di tabelle, indicando per ogni gruppo di saggio il numero di animali all'inizio della prova, il numero degli animali che presentano lesioni e la percentuale degli animali che presentano ciascun tipo di lesioni. I risultati dovrebbero essere valutati con un metodo statistico idoneo. Qualsiasi metodo statistico riconosciuto può essere utilizzato.

## 3. RELAZIONE

### 3.1 Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- specie, ceppo, origine, condizioni ambientali, dieta,
- condizione sperimentali,
- livelli di dose (veicolo compreso, se utilizzato) e concentrazioni,
- dati sulla risposta tossica per sesso e per dose,

<sup>(1)</sup> Ora nota come alanina aminotransferasi serica

<sup>(2)</sup> Ora nota come aspartato aminotransferasi serica

- livello senza effetto, quando possibile,
- tempo della morte durante l'esperimento oppure specificare se gli animali erano sopravvissuti alla conclusione della prova,
- descrizione degli effetti tossici o di altri effetti,
- tempo di osservazione di ogni segno anomalo e successivo decorso,
- alimentazione e dati sul peso corporeo,
- risultati oftalmologici,
- analisi ematologiche usate e risultati completi,
- analisi di biochimica clinica usate e risultati completi (compresi i risultati di ogni analisi delle urine),
- risultati nella necropsia,
- descrizione particolareggiata di tutti i risultati istopatologici,
- elaborazione statistica dei risultati, quando possibile,
- discussione dei risultati,
- interpretazione dei risultati

**3.2. Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

**4 RIFERIMENTI**

Vedi introduzione generale, parte B

**8.27. SAGGIO DI TOSSICITÀ ORALE SUBCRONICA****SAGGIO CON SOMMINISTRAZIONE ORALE RIPETUTA DI DOSI PER 90 GIORNI USANDO SPECIE DI NON RODITORI****1. METODO****1.1. Introduzione**

Vedi introduzione generale, parte B.

**1.2. Definizioni**

Vedi introduzione generale, parte B.

**1.3. Sostanze di riferimento**

Nessuna.

**1.4. Principi del metodo di saggio**

La sostanza sperimentale viene somministrata ogni giorno, oralmente in dosi graduate, a diversi gruppi di animali da esperimento (non roditori), una dose per gruppo, per un periodo di 90 giorni. Durante il periodo di somministrazione, gli animali sono sottoposti giornalmente ad osservazione per individuare i segni di tossicità. Gli animali che muoiono durante la prova sono sottoposti a necropsopia; alla conclusione dell'esperimento anche gli animali superstiti vengono sottoposti a necropsopia.

**1.5. Criteri qualitativi**

Nessuno.

**1.6. Descrizione del metodo di saggio****Preparazioni**

Gli animali sono tenuti nelle condizioni di alloggiamento e di alimentazione per almeno cinque giorni prima del saggio. Prima della prova, gli animali giovani e sani sono mischiati con metodo casuale ed assegnati ai gruppi di trattamento e a quello di controllo.

La sostanza in esame può essere somministrata nella dieta oppure la somministrazione in capsule può essere ritenuta più comoda. Altri mezzi di somministrazione orale possono essere utilizzati. Durante l'intero periodo sperimentale, il dosaggio agli animali dovrà essere fatto con lo stesso metodo. Se per facilitare il dosaggio si utilizzano un veicolo o altri additivi, essi dovrebbero essere noti per non produrre effetti tossici. Se del caso, si possono utilizzare i dati storici.

**Condizioni sperimentali****Animali da esperimento**

La specie di non-roditori generalmente utilizzata è il cane, di razza preferibilmente definita. Altre specie di non-roditori possono essere utilizzate. Si dovrebbe usare esemplari giovani e sani, e, nel caso del cane, il dosaggio dovrebbe iniziare preferibilmente a 4-6 mesi e non più tardi di 9 mesi di età. Quando venga intrapreso uno studio di tossicità subcronica orale come preliminare ad uno studio a lungo termine, si dovrebbe usare la stessa specie e lo stesso ceppo in entrambi gli studi.

**Numero e sesso**

Per ciascun livello di dose si dovrebbero usare almeno 8 animali (4 maschi e 4 femmine). Alla conclusione dello studio, il numero di animali deve essere tale da garantire una valutazione significativa degli effetti tossici.

**Livelli di dose**

Si dovrebbero usare almeno tre livelli di dose e un controllo. Eccezion fatta per il trattamento con la sostanza in esame, gli animali nel gruppo di controllo dovrebbero essere trattati in modo identico ai soggetti dei gruppi trattati. Il livello di dose più elevato dovrebbe provocare effetti tossici ma non produrre decessi.

Il livello di dose più basso non dovrebbe produrre alcuna evidenza di effetti tossici. Quando esiste una valutazione utile della esposizione umana, il livello di dose più basso dovrebbe superare detto valore. Idealmente, il livello di dose medio dovrebbe produrre effetti tossici osservabili minimi. Se viene usata più di una dose intermedia, i livelli di dose dovrebbero essere intervallati per produrre una graduazione degli effetti tossici.

Nei gruppi a dosaggio basso ed intermedio e nei controlli non si dovrebbero verificare decessi.

Per sostanze a bassa tossicità è importante assicurarsi che, una volta somministrata nella dieta, le quantità della sostanza in esame non interferiscano con la nutrizione normale.

Quando la sostanza in esame viene somministrata nella dieta, si possono utilizzare sia una concentrazione dietetica costante (ppm o mg/kg di alimento) oppure un livello di dose costante in termini di peso corporeo degli animali; l'alternativa usata deve essere specificata. Quando somministrata direttamente, per esempio in capsule, la dose deve essere somministrata ogni giorno allo stesso orario ed adattata a seconda della necessità a intervalli settimanali per mantenere un livello di dose costante in termini di peso corporeo degli animali. Quando uno studio subcronico viene usato come premessa ad uno studio a lungo termine, in entrambi gli studi si dovrà usare una dieta analoga.

#### Saggio limite

Se uno studio di 90 giorni, condotto conformemente al metodo descritto sotto, ad un livello di dose di 1 000 mg/kg di peso corporeo/giorno o ad un livello di dose più elevato in relazione ad una possibile esposizione umana quando questa sia nota, non produce evidenze di effetti tossici, ulteriori prove possono essere considerate non necessarie. Per le sostanze a bassa tossicità è importante assicurarsi che, quando somministrate nella dieta, le quantità e le altre proprietà della sostanza in esame di cui trattasi non interferiscano con le esigenze nutrizionali normali.

#### Periodo di osservazione

Tutti gli animali dovrebbero essere osservati giornalmente e si dovrebbero registrare eventuali segni di tossicità, incluso il tempo di insorgenza, il grado e la durata. Si dovranno annotare anche il tempo della morte e quello dell'insorgenza o della scomparsa dei segni di tossicità.

#### Procedimento

Gli animali vengono trattati con la sostanza in esame, idealmente sette giorni per settimana, per un periodo di 90 giorni. Tuttavia, sulla base principalmente di considerazioni pratiche, quando la sostanza viene somministrata con modalità diverse da quella dell'aggiunta nella dieta, viene considerato accettabile che il dosaggio sia effettuato 5 giorni per settimana.

Le osservazioni dovrebbero includere, ma non essere limitate ai cambiamenti della cute e del pelo, degli occhi e delle mucose nonché del sistema nervoso centrale ed autonomo, di quello respiratorio e circolatorio, dell'attività somatomotoria e del quadro comportamentale. Si dovrebbe procedere settimanalmente alla misura del consumo alimentare (e del consumo dell'acqua quando la sostanza in esame è somministrata in tale veicolo) e alla pesatura degli animali.

Un accurato esame clinico degli animali dovrebbe essere eseguito quotidianamente con misure appropriate per minimizzare la perdita di animali del saggio. Alla fine del periodo di esposizione tutti gli animali sopravvissuti sono sottoposti a necropsia. Gli animali moribondi dovrebbero essere rimossi e sottoposti a necropsia quando notati.

I seguenti esami vengono effettuati abitualmente per tutti gli animali, compresi i controlli:

- a) l'esame oftalmoscopico, eseguito con un oftalmoscopio o idonea attrezzatura analoga, dovrebbe essere effettuato prima della somministrazione della sostanza in esame e alla conclusione dello studio, preferibilmente su tutti gli animali, o perlomeno su quelli trattati con il dosaggio più elevato e nel gruppo di controllo. Se vengono individuati cambiamenti agli occhi, tutti gli animali dovranno essere esaminati;
- b) all'inizio del saggio e, quindi, sia ad intervalli mensili o alla metà del periodo di saggio ed, infine, alla fine del saggio si dovrebbero effettuare le seguenti analisi: ematologia, incluso l'ematocrito, concentrazione di emoglobina, conteggio degli eritrociti, conteggio totale e differenziale dei leucociti, misura del potenziale coagulante, quali il tempo di coagulazione, il tempo di protrombina, il tempo di tromboplastina o conteggio delle piastrine;
- c) la determinazione della biochimica clinica sul sangue dovrebbe essere effettuata all'inizio del saggio e, quindi, sia ad intervalli mensili o alla metà del periodo di saggio ed, infine, alla fine del saggio. Gli aspetti di saggio ritenuti opportuni per tutti gli studi sono: equilibrio degli elettroliti, metabolismo dei carboidrati, funzione epatica e renale. La selezione delle prove specifiche sarà determinata dalle osservazioni sul modo di azione della sostanza. Si suggerisce di determinare: calcio, fosforo, cloruro, sodio, potassio, glucosio a digiuno (con periodo di digiuno appropriato alla specie/ceppo), glutammico-piruvico transaminasi serica <sup>(1)</sup>, glutammico-ossalacetico transaminasi serica <sup>(2)</sup>, ornitina decarbossilasi, gamma glutamil transpeptidasi, azoto

<sup>(1)</sup> Ora nota come alanina aminotransferasi serica.

<sup>(2)</sup> Ora nota come aspartato aminotransferasi serica.



ureico, albumina, creatinina nel sangue, bilirubina totale e misura delle proteine totali del siero. Altre determinazioni che possono rendersi necessarie per una valutazione tossicologica adeguata, includono analisi dei lipidi, ormoni, equilibrio acido/base, metacromoglobina, attività della colinesterasi. Determinazioni biochimiche supplementari possono essere usate, se del caso, per estendere la ricerca sugli effetti osservati. I non-roditori dovrebbero essere tenuti a digiuno per un periodo di tempo (non più di 24 ore) prima di prelevare i campioni di sangue.

- d) l'analisi delle urine non è richiesta routinariamente, ma solo quando vi sia una indicazione basata sulla tossicità prevista o osservata.

#### Necropsia macroscopica

Tutti gli animali dovrebbero essere sottoposti a necropsia macroscopica completa, che include l'esame della superficie esterna del corpo, di tutti gli orifizi e delle cavità cranica, toracica e addominale e dei loro contenuti. Il fegato, i reni, le ghiandole surrenali, la tiroide (e le paratiroidi) e i testicoli dovrebbero essere pesati umidi, appena possibile dopo la dissezione, per evitare l'essiccamento. I seguenti organi e tessuti dovrebbero essere conservati in un mezzo adatto per futuri possibili esami istopatologici: tutte le lesioni generali, cervello — comprese sezioni di midollo/ponte, corteccia cerebellare e corteccia cerebrale, pituitaria, tiroide/paratiroidi, qualsiasi tessuto timico, (trachea), polmoni, cuore, aorta, ghiandole salivari, milza, fegato, reni, ghiandole surrenali, pancreas, gonadi, utero, (organi genitali accessori), (pelle), cistifellea, esofago, stomaco, duodeno, digiuno, ileo, intestino cieco, colon, retto, vescica, urinaria, linfonodi rappresentativi, (ghiandole mammarie femminili), (muscolatura della coscia), nervo periferico (occhi), sterno con midollo osseo, (femore — compresa superficie articolare) e (midollo spinale a tre livelli — cervicale, emitoracico e lombare) (I tessuti citati tra parentesi devono essere esaminati solo se presentano sintomi di tossicità o se vi siano indicazioni che sono l'organo bersaglio coinvolto).

#### Esame istopatologico

Dovrebbe essere effettuato l'esame istopatologico completo degli organi e dei tessuti degli animali del gruppo trattato con la dose elevata e del gruppo di controllo. Un ulteriore esame istopatologico dovrebbe essere effettuato in gruppi trattati con altre dosi sugli organi che presentano lesioni nel gruppo trattato con la dose elevata o per le quali le osservazioni cliniche indichino tale esigenza.

## 2 DATI

I dati dovrebbero essere riassunti sotto forma di tabelle, indicando per ogni gruppo sperimentale il numero di animali all'inizio della prova, il numero degli animali che presentano lesioni, i tipi di lesione e la percentuale degli animali che presenta ciascun tipo di lesione. I risultati dovrebbero essere valutati con un metodo statistico idoneo. Qualsiasi metodo statistico riconosciuto può essere utilizzato.

## 3 RELAZIONE

### 3.1 Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- specie, ceppo, origine, condizioni ambientali, dieta, ecc.,
- condizione sperimentali,
- livelli di dose (veicolo compreso, se utilizzato) e concentrazioni,
- risposte tossiche per sesso e per dose,
- livello senza effetto, quando possibile,
- tempo della morte durante lo studio, oppure specificare se gli animali sono sopravvissuti fino alla conclusione del saggio,
- descrizione degli effetti tossici o di altri effetti (con particolare attenzione ai risultati clinici),
- tempo di osservazione di ogni segno anomalo e successivo decorso,
- dati di rimozione sul peso corporeo,
- risultati oftalmologici,

- analisi ematologiche usate e risultati completi,
- analisi di biochimica clinica usate e risultati completi (compresi i risultati di qualsiasi analisi delle urine),
- risultati della necropsia,
- una descrizione particolareggiata di tutti i risultati istopatologici,
- elaborazione statistica dei risultati, quando appropriata,
- discussione dei risultati,
- interpretazione dei risultati.

3.2 **Valutazione ed interpretazione**

Vedi introduzione generale, parte B

4 **RIFERIMENTI**

Vedi introduzione generale, parte B

**B.28. SAGGIO DI TOSSICITÀ CUTANEA SUBCRONICA****SAGGIO CON SOMMINISTRAZIONE CUTANEA RIPETUTA DI DOSI PER 90 GIORNI USANDO SPECIE DI RODITORI****1. METODO****1.1. Introduzione**

Vedi introduzione generale, parte B.

**1.2. Definizioni**

Vedi introduzione generale, parte B.

**1.3. Sostanze di riferimento**

Nessuna.

**1.4. Principi del metodo di saggio**

La sostanza sperimentale viene applicata quotidianamente alle cute in dosi scalari a vari gruppi di animali da esperimento, una dose per gruppo per un periodo di 90 giorni. Durante il periodo di somministrazione, gli animali vengono giornalmente sottoposti ad osservazione per individuare segni di tossicità. Gli animali che muoiono durante il saggio vengono sottoposti a necropsopia, ed alla conclusione della prova anche gli animali superstiti vengono sottoposti a necropsopia.

**1.5. Criteri qualitativi**

Nessuno.

**1.6. Descrizione del metodo di saggio***Preparazioni*

Gli animali sono tenuti nelle condizioni sperimentali di alloggiamento ed alimentazione per almeno 5 giorni prima dell'inizio del saggio. Prima dell'esperimento, gli animali giovani e sani vengono mischiati con metodo casuale ed assegnati ai gruppi di trattamento e di controllo. Poco prima dell'inizio dell'esperimento gli animali da trattare vengono tosati nella zona dorsale del tronco. Si può usare la rasatura, ma questa dovrebbe essere effettuata circa 24 ore prima del saggio. La tosatura o la rasatura usualmente deve essere ripetuta ad intervalli approssimativamente settimanali.

Durante la tosatura o la rasatura del pelo, occorre fare attenzione a non scorticare la pelle. La superficie corporea da trattare per l'applicazione della sostanza in esame non dovrebbe essere inferiore al 10 % del totale. Il peso dell'animale dovrebbe essere preso in considerazione quando si decidono le dimensioni delle superficie da liberare dal pelo e dalla copertura. Quando si saggiano solidi, che possono essere polverizzati se del caso, la sostanza in esame dovrebbe essere umidificata sufficientemente con l'acqua o, se necessario, con un veicolo adatto per assicurare un buon contatto con la pelle. Le sostanze in esame liquide sono in genere usate non diluite. L'applicazione quotidiana si estenderà da 5 a 7 giorni per settimana.

*Condizioni sperimentali***Animali da esperimento**

Si possono utilizzare esemplari adulti di ratto, coniglio o cavia. Altre specie possono essere utilizzate, ma il loro uso richiede una giustificazione. All'inizio del saggio, la gamma di variazione del peso dovrebbe essere  $\pm 20\%$  del peso medio. Quando uno studio di tossicità subcronica cutanea viene condotto come preliminare ad uno studio a lungo termine, in entrambi gli studi si dovrebbe usare la stessa specie e lo stesso ceppo.

**Numero e sesso**

Per ciascun livello di dose si dovrebbero utilizzare almeno 20 animali (10 maschi e 10 femmine) con pelle sana. Le femmine dovrebbero essere nullipare e non gravide. Se si prevede di sacrificare ad intervalli alcuni animali, il numero totale dovrebbe essere aumentato del numero di animali che si prevede di sacrificare prima del completamento dello studio. Inoltre, un gruppo satellite di 20 animali (10 animali per sesso) può essere trattato con il livello di dose elevato per 90 giorni e sottoposto ad osservazione per l'individuazione della reversibilità, della persistenza o dell'insorgenza ritardata di effetti tossici per 28 giorni dopo il trattamento.

### Livelli di dose

Almeno tre livelli di dose con un controllo o un controllo del veicolo, se si utilizza un veicolo, sono richiesti. Il periodo di esposizione dovrebbe essere di almeno 6 ore al giorno. L'applicazione della sostanza in esame dovrebbe essere eseguita ogni giorno alla stessa ora e la quantità di sostanza applicata dovrebbe essere aggiustata a intervalli (settimanali o bisettimanali) per mantenere un livello costante di dose in termini di peso corporeo dell'animale. Eccezion fatta per il trattamento con la sostanza in esame, gli animali nel gruppo di controllo dovrebbero essere trattati in modo identico ai soggetti dei gruppi trattati. Quando per facilitare il dosaggio si usa un veicolo, il gruppo di controllo del veicolo dovrebbe essere sottoposto a dosaggio come i gruppi trattati, e ricevere la stessa quantità che riceve il gruppo a livello di dose più elevata. Il livello di dose più elevato dovrebbe provocare effetti tossici ma produrre pochi o nessun decesso. Il livello di dose più basso non dovrebbe produrre effetti tossici. Quando esista una valutazione utile di esposizione umana, il livello più basso dovrebbe superare questo valore.

Idealmente, il livello di dose intermedio dovrebbe produrre effetti tossici osservabili minimi. Se viene usata più di una dose intermedia, i livelli di dose dovrebbero essere intervallati per produrre una graduazione degli effetti tossici. Nei gruppi trattati con livello di dose basso, intermedio e nei controlli, l'incidenza delle morti dovrà essere bassa e tale da permettere una valutazione significativa dei risultati.

Se l'applicazione della sostanza in esame produce irritazioni gravi della pelle, le concentrazioni dovrebbero essere ridotte e ciò può provocare una riduzione, o l'assenza, di altri effetti tossici al livello di dose elevato. Se la pelle è stata gravemente danneggiata, può rendersi necessaria l'interruzione dello studio. Si procederà quindi a un nuovo studio con concentrazione più basse.

### Saggio limite

Se uno studio preliminare con livello di dose di 1 000 mg/kg o un livello di dose più elevato in relazione a una possibile esposizione umana, quando questa sia nota, non produce effetti tossici, ulteriori prove possono non essere considerate necessarie.

### Periodo di osservazione

Gli animali da esperimento dovrebbero essere osservati quotidianamente per individuare eventuali segni di tossicità. Il tempo della morte e quello dell'insorgenza o della scomparsa dei segni di tossicità dovrebbero essere registrati.

### Procedimento

Gli animali dovrebbero essere ingabbiati individualmente e sottoposti a trattamento con la sostanza in esame, idealmente 7 giorni per settimana, per un periodo di 90 giorni.

Gli animali appartenenti a ciascun gruppo satellite previsto per ulteriori osservazioni dovrebbero essere mantenuti ancora per 28 giorni per individuare i sintomi di guarigione oppure di persistenza degli effetti tossici. Il tempo di esposizione dovrebbe essere 6 ore/giorno.

La sostanza in esame dovrebbe essere applicata uniformemente su un'area che è approssimativamente il 10 % della superficie corporea totale. Con sostanze molto tossiche, la superficie coperta può essere inferiore, ma deve comunque essere coperta da uno strato più uniforme e più sottile possibile.

Durante l'esposizione, la sostanza in esame viene tenuta a contatto con la pelle da una fascia porosa di garza e da un nastro non-irritante. La superficie cutanea su cui è applicata la sostanza dovrebbe essere coperta opportunamente in modo da trattenere la fascia e la sostanza in esame, per evitare un'eventuale ingestione da parte degli animali della sostanza in esame. Si può ricorrere a mezzi per limitare i movimenti dell'animale, ma l'immobilizzazione completa non è un metodo raccomandato.

Alla fine del periodo di esposizione, la sostanza in esame residua dovrebbe essere rimossa, ove possibile, con l'uso di acqua o con qualche altro metodo appropriato per pulire la pelle.

Tutti gli animali dovrebbero essere quotidianamente sottoposti a osservazione e si dovrebbe registrare i segni di tossicità, incluso il tempo d'insorgenza, l'intensità e la durata. Le osservazioni collaterali dovrebbero includere i cambiamenti della cute e del pelo, degli occhi e delle mucose, nonché del sistema nervoso centrale e autonomo, del sistema respiratorio e circolatorio, dell'attività somatomotoria e del quadro comportamentale. Si dovrebbe procedere settimanalmente alla misura del consumo alimentare e alla pesatura degli animali. L'osservazione regolare degli animali è necessaria per assicurarsi che gli stessi non siano persi a causa di cannibalismo, autolisi dei tessuti o smarrimento. Alla fine del periodo di studio tutti gli animali sopravvissuti dei gruppi di trattamento non satelliti sono sottoposti a necropsia. Gli animali moribondi dovrebbero essere rimossi e sottoposti a necropsia.

I seguenti esami vengono effettuati abitualmente per tutti gli animali, compresi i controlli:

- a) l'esame oftalmoscopico, eseguito con un oftalmoscopio o attrezzatura analoga, dovrebbe essere effettuato prima della somministrazione della sostanza sperimentale e alla conclusione dello studio, preferibilmente su tutti gli animali, o perlomeno su quelli a cui vengono somministrati il dosaggio elevato, e infine al gruppo di controllo. Se vengono individuati cambiamenti negli occhi, tutti gli animali dovrebbero essere esaminati;

- b) alla fine del periodo di saggio, si dovrebbero effettuare le seguenti analisi: ematologia, incluso ematocrito, concentrazione di emoglobina degli eritrociti, conteggio totale e differenziale dei leucociti, misurazione del potenziale di coagulazione, quale il tempo di coagulazione, il tempo di protrombina, il tempo di tromboplastina o il conteggio delle piastrine,
- c) la determinazione della biochimica clinica sul sangue dovrebbe essere effettuata alla fine del periodo di saggio. Le aree di studio, ritenute opportune per tutti gli studi sono: equilibrio degli elettroliti, metabolismo dei carboidrati, funzione epatica e renale. La selezione di prove specifiche sarà determinata dalle osservazioni sul modo di azione della sostanza. Si suggerisce di determinare: calcio, fosforo, cloruro, sodio, potassio, glucosio a digiuno (con periodo di digiuno appropriato alla specie), glutammico-piruvico transaminasi serica <sup>(1)</sup>, glutammico-ossalacetico transaminasi serica <sup>(2)</sup>, ornitina decarbossilasi, gamma glutamil transpeptidase, azoto ureico, albumina, creatinina ematica, bilirubina totale e proteine totali del siero. Altre determinazioni che possono rendersi necessarie per una valutazione tossicologica adeguata, includono: analisi dei lipidi, ormoni, equilibrio acido/base, metaemoglobina, attività della colinesterasi. Determinazioni biochimiche supplementari possono essere usate, se necessarie, per estendere la ricerca di effetti osservati,
- d) l'analisi delle urine non è richiesta routinariamente, ma solo quando vi sia una indicazione basata sulla tossicità prevista o osservata. Se i dati storici di base sono insufficienti, prima di iniziare il dosaggio si dovrebbe prendere in considerazione la determinazione dei parametri ematologici e di biochimica clinica.

#### Necropsia macroscopica

Tutti gli animali dovrebbero essere sottoposti a necropsia microscopica completa che include l'esame della superficie esterna del corpo, di tutti gli orifizi e delle cavità craniale, toracica e addominale e dei loro contenuti. Il fegato, i reni, le ghiandole surrenali e i testicoli devono essere pesati umidi, appena possibile dopo la dissezione, per evitare l'essiccamento. I seguenti organi e tessuti dovrebbero essere conservati in mezzo adatto per possibili esami istopatologici futuri: tutte le lesioni macroscopiche, cervello — comprese sezioni di midollo/ponte, corteccia cerebellare e corteccia cerebrale, pituitaria, tiroide/paratiroide, qualsiasi tessuto timico, (trachea), polmoni, cuore, aorta, ghiandole salivari, fegato, milza, reni, ghiandole surrenali, pancreas, gonadi, utero, organi genitali accessori, cistifellea (se esiste), esofago, stomaco, duodeno, digiuno, ileo, intestino cieco, colon, retto, vescica urinaria, linfonodi rappresentativi, (ghiandole mammarie femminili), (muscolatura della coscia), nervo periferico (occhi), (sterno con midollo osseo), (femore — compresa superficie articolare), (midollo spinale a tre livelli — cervicale, emitoracico e lombare) e (ghiandole lacrimali esorbitali) (I tessuti citati tra parentesi devono essere esaminati solo se presentano sintomi di tossicità o se vi siano indicazioni che sono l'organo bersaglio coinvolto).

#### Esame istopatologico

- a) L'esame istopatologico completo dovrebbe essere effettuato sugli cute normale e sugli cute trattati e sugli organi e tessuti degli animali nel gruppo trattato con dosaggio elevato e nel gruppo di controllo.
- b) tutte le lesioni macroscopiche dovrebbero essere esaminate,
- c) gli organi-bersaglio dovrebbero essere esaminati anche nei gruppi trattati con altre dosi,
- d) quando si usano i ratti, si dovrebbe eseguire l'esame istopatologico dei polmoni degli animali dei gruppi trattati con dosaggi bassi e intermedi per l'individuazione di infezioni poiché ciò fornisce una valutazione appropriata dello stato di salute degli animali. Ulteriori esami istopatologici di routine possono non essere richiesti per gli animali di questi gruppi, ma devono sempre essere effettuati sugli organi che presentano lesioni nel gruppo trattato con dosi elevate,
- e) quando si fa uso di un gruppo satellite, si dovrebbe eseguire l'esame istopatologico dei tessuti e degli organi che presentano lesioni in altri gruppi trattati.

#### DATI

I dati dovrebbero essere riassunti sotto forma di tabelle, indicando per ogni gruppo sperimentale il numero di animali all'inizio del saggio, il numero di animali che presentano lesioni, il tipo di lesioni e la percentuale degli animali che presentano ciascun tipo di lesione. I risultati dovrebbero essere valutati con un metodo statistico appropriato. Qualsiasi metodo statistico riconosciuto può essere utilizzato.

**RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- specie, ceppo, origine, condizioni ambientali, dieta,
- condizione sperimentali,
- livello di dose (veicolo compreso, se utilizzato) e concentrazioni,
- dati sulla risposta tossica per sesso e per dose,
- livello senza effetto, quando possibile,
- tempo della morte (durante l'esperimento) oppure specificare se gli animali sono sopravvissuti fino alla conclusione della prova,
- descrizione degli effetti tossici o di altri effetti,
- tempo di osservazione di ogni segno anormale e successivo decorso,
- dati di alimentazione e sul peso corporeo,
- risultati oftalmologici,
- analisi ematologiche usate e risultati completi,
- analisi di biochimica clinica usate e risultati completi (compresi i risultati dell'analisi delle urine),
- risultati della necropsia,
- descrizione particolareggiata di tutti di risultati istopatologici,
- elaborazione statistica dei risultati, quando possibile,
- discussione dei risultati,
- interpretazione dei risultati

**3.2 Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

**4 RIFERIMENTI**

Vedi introduzione generale, parte B.

**8.29. SAGGIO DI TOSSICITA SUBCRONICA INALATORIA****SAGGIO CON SOMMINISTRAZIONE INALATORIA RIPETUTA DI DOSI PER 90 GIORNI USANDO SPECIE DI RODITORI****1. METODO****1.1. Introduzione**

Vedi introduzione generale, parte B.

**1.2. Definizioni**

Vedi introduzione generale, parte B.

**1.3. Sostanze di riferimento**

Nessuna.

**1.4. Principi del metodo di saggio**

Diversi gruppi di animali da esperimento sono esposti quotidianamente per un periodo definito alla sostanza in esame in concentrazioni graduate, utilizzando una concentrazione per gruppo, per un periodo di 90 giorni. Quando si utilizza un veicolo per contribuire a generare una concentrazione appropriata della sostanza in esame nell'atmosfera, si dovrebbe utilizzare un gruppo di controllo per il veicolo. Durante il periodo di somministrazione, gli animali vengono giornalmente sottoposti ad osservazione per individuare segni di tossicità. Gli animali che muoiono durante il saggio sono sottoposti a necropsopia; alla conclusione del saggio anche gli animali superstiti vengono sottoposti a necropsopia.

**1.5. Criteri qualitativi**

Nessuno.

**1.6. Descrizione del metodo di saggio****Preparazioni**

Gli animali sono tenuti nelle condizioni di alloggiamento e di alimentazione sperimentali per almeno cinque giorni prima dell'inizio della prova. Prima del saggio, animali giovani e sani sono mischiati con metodo casuale ed assegnati ai gruppi di trattamento e di controllo.

Se necessario, un veicolo adatto può essere aggiunto alla sostanza in esame per contribuire a generare una concentrazione appropriata della sostanza nell'atmosfera. Se un veicolo o altri additivi vengono utilizzati per facilitare il dosaggio, essi dovrebbero essere noti per non produrre effetti tossici. Se del caso, i dati storici possono essere usati.

**Condizioni sperimentali****Animali sperimentali**

A meno che vi siano controindicazioni, la specie preferita è il ratto. Si dovrebbero usare animali sani giovani di ceppi comunemente usati in laboratorio. All'inizio dello studio la gamma di variazione del peso degli animali usati non dovrebbe essere superiore al  $\pm 20\%$  del peso medio. Quando venga intrapreso uno studio subcronico per inalazione come preliminare ad uno studio a lungo termine, in entrambi gli studi si dovrebbe usare la stessa specie e stesso ceppo.

**Numero e sesso**

Per ciascuna concentrazione di esposizione si dovrebbero utilizzare almeno 20 animali (10 femmine e 10 maschi). Le femmine dovrebbero essere nullipare e non gravide. Se si prevede di sacrificare ad intervalli alcuni animali il numero dovrebbe essere aumentato del numero di animali che si prevede di sacrificare prima del completamento dello studio. Inoltre, un gruppo satellite di 20 animali (10 animali per sesso) può essere trattato con il livello di dose elevato per 90 giorni e sottoposto ad osservazione per l'individuazione della reversibilità, della persistenza o dell'insorgenza ritardata di effetti tossici per 28 giorni dopo il trattamento.

#### Concentrazione di esposizione

Sono richieste almeno tre concentrazioni, con un controllo o un controllo del veicolo (che corrisponde alla concentrazione del veicolo al livello più elevato) se si utilizza un veicolo. Eccezion fatta per il trattamento con la sostanza in esame, gli animali nel gruppo di controllo dovrebbero essere trattati in modo identico agli animali dei gruppi. La concentrazione più elevata dovrebbe provocare effetti tossici ma nessuna o poche morti. Quando esista una valutazione utile dell'esposizione umana, la concentrazione più bassa dovrebbe superare detto valore. Idealmente la concentrazione media dovrebbe produrre effetti tossici osservabili minimi. Se viene usata più di una concentrazione intermedia le concentrazioni dovrebbero essere intervallate per produrre una graduazione di effetti tossici.

Nei gruppi trattati con concentrazioni basse ed intermedie e nei controlli, l'incidenza delle morti dovrebbe essere bassa per permettere una valutazione significativa dei risultati.

#### Tempo di esposizione

La durata dell'esposizione quotidiana dovrebbe essere di 6 ore, dopo la stabilizzazione delle concentrazioni delle camere di inalazione. Altri tempi di esposizione possono essere usati per esigenze specifiche.

#### Attrezzatura

Gli esperimenti sugli animali dovrebbero essere effettuati in apparecchiatura per inalazione progettata per sostenere una corrente dinamica d'aria con almeno 12 cambiamenti d'aria l'ora, per assicurare un tenore di ossigeno adeguato e un'atmosfera di esposizione a distribuzione uniforme. Quando si usano camere di inalazione la progettazione dovrebbe essere tale da evitare l'accumulo degli animali e di assicurare il massimo di loro esposizione per inalazione alla sostanza in esame. Di massima, per assicurare la stabilità dell'atmosfera della camera, il volume totale degli animali di saggio non dovrebbe superare il 5 % del volume della camera di prova. Si può usare il sistema di esposizione oro-nasale, della testa soltanto o del corpo intero. I primi due sistemi ridurranno al massimo l'assorbimento da altre vie.

#### Periodo di osservazione

Gli animali sperimentali dovrebbero quotidianamente essere sottoposti ad osservazione per individuare i segni di tossicità durante l'intero periodo di trattamento e di recupero. Si dovrebbe registrare anche il tempo della morte e quello dell'insorgenza o della scomparsa dei segni di tossicità.

#### Procedimento

Gli animali vengono esposti alla sostanza in esame 5-7 giorni per settimana, per un periodo di 90 giorni. Gli animali appartenenti ai gruppi satelliti previsti per ulteriori osservazioni dovrebbero essere tenuti ancora per 28 giorni senza trattamento per individuare la guarigione o la persistenza degli effetti tossici. La temperatura durante la prova dovrebbe essere mantenuta a 22 °C ( $\pm$  3 °C). Idealmente, l'umidità relativa dovrà essere mantenuta tra il 30 % ed il 70 %, ma in certi casi (ad esempio, saggi di aerosols) ciò potrebbe non essere possibile. Il cibo e l'acqua non dovrebbero essere somministrati durante l'esposizione.

Si dovrebbe usare un sistema dinamico con un idoneo sistema di controllo analitico della concentrazione. Per stabilire le opportune concentrazioni di esposizione si raccomanda di effettuare una prova. Il flusso d'aria dovrebbe essere regolato in modo da garantire che le condizioni nella camera d'esposizione siano omogenee. Il sistema dovrebbe garantire che condizioni stabili di esposizione siano realizzate il più rapidamente possibile.

Si dovrebbero misurare e controllare:

- a) la velocità della corrente d'aria (in continuo),
- b) la concentrazione reale della sostanza in esame misurata nella zona di respirazione. Durante il periodo di esposizione quotidiana, la concentrazione non dovrebbe subire variazioni più del  $\pm$  15 % del valore medio. Tuttavia, nel caso delle polveri e degli aerosols questo livello di controllo potrebbe non essere realizzabile e un più vasto intervallo sarebbe quindi accettabile. Durante tutto il periodo dello studio la concentrazione giornaliera dovrebbe essere tenuta costante nei limiti del possibile. Durante la messa a punto del sistema di generazione si dovrebbe eseguire l'analisi delle dimensioni e delle particelle per stabilire la stabilità delle concentrazioni di aerosol. Durante l'esposizione, le analisi dovrebbero essere effettuate con la necessaria frequenza per determinare l'uniformità di distribuzione delle dimensioni delle particelle,
- c) temperatura ed umidità,
- d) durante e dopo l'esposizione le osservazioni sono effettuate e registrate sistematicamente, per ogni animale si dovrebbero tenere registri individuali. Tutti gli animali dovrebbero essere osservati quotidianamente e si dovrebbero registrare i segni di tossicità, incluso il tempo di insorgenza, il grado e la durata. Le osservazioni collaterali dovrebbero includere i cambiamenti della cute e del pelo, degli occhi e delle mucose nonché del sistema nervoso centrale ed autonomo, di quello respiratorio e circolatorio, dell'attività somatomotoria e del quadro comportamentale. Si dovrebbe procedere settimanalmente alla misura del consumo alimentare ed alla pesatura degli animali. L'osservazione regolare degli animali è necessaria per assicurare che gli stessi non siano



persi per lo studio a causa di cannibalismo, autolisi dei tessuti o smarrimento. Alla fine del periodo di studio tutti gli animali sopravvissuti sono sottoposti a necropsia. Gli animali moribondi dovrebbero essere rimossi e sottoposti a necropsia, quando notati.

I seguenti esami vengono effettuati abitualmente per tutti gli animali, compresi i controlli.

- l'esame oftalmoscopico, eseguito con un oftalmoscopio o idonea attrezzatura analoga, dovrebbe essere effettuato prima dell'esposizione alla sostanza in esame e alla conclusione dello studio, preferibilmente su tutti gli animali o perlomeno su quelli cui viene somministrato il dosaggio elevato e al gruppo di controllo. Se vengono individuati cambiamenti agli occhi tutti gli animali dovrebbero essere esaminati,
- alla fine del periodo di saggio, si dovrebbero effettuare le seguenti analisi: ematologia, incluso ematocrito, concentrazione di emoglobina, conteggio degli eritrociti, conteggio totale e differenziale dei leucociti, misura del potenziale di coagulazione, quale il tempo di coagulazione, il tempo di protrombina, il tempo di tromboplastina o conteggio delle piastrine,
- la determinazione della biochimica clinica sul sangue dovrebbe essere effettuata alla fine del periodo di saggio. Le aree di saggio che sono considerate opportune per tutti gli studi sono: equilibrio degli elettroliti, metabolismo dei carboidrati, funzione epatica e renale. La selezione delle prove specifiche sarà determinata dalle osservazioni sul modo di azione della sostanza. Si suggerisce di determinare: calcio, fosforo, cloruro, sodio, potassio, glucosio a digiuno (con periodo di digiuno appropriato alla specie), glutammico piruvico transaminasi serica <sup>(1)</sup>, glutammico ossalacetico transaminasi serica <sup>(2)</sup>, ornitina decarbossilasi, gamma glutamil transpeptidase, azoto ureico, albumina, creatinina nel sangue, bilirubina totale e misurazione delle proteine totali del siero. Altre determinazioni che possono rendersi necessarie per una valutazione tossicologica adeguata, includono: analisi dei lipidi, ormoni, equilibrio acido/base, metaemoglobina, attività della colinesterasi. Determinazione biochimiche supplementari possono essere usate, se necessario, per estendere la ricerca sugli effetti osservati,
- l'analisi delle urine non è richiesta routinariamente, ma solo quando vi siano indicazioni basate sulla tossicità prevista o osservata.

Se i dati storici di base sono insufficienti, prima di iniziare il dosaggio si dovrebbe prendere in considerazione la determinazione dei parametri ematologici e di biochimica clinica.

#### Necropsia macroscopica

Tutti gli animali dovrebbero essere sottoposti a necropsia macroscopica completa, che include l'esame della superficie esterna del corpo, di tutti gli orifici e delle cavità cranica, toracica e addominale e dei loro contenuti. Il fegato, i reni, le ghiandole surrenali e i testicoli dovranno essere pesati umidi, appena possibile dopo la dissezione, per evitare l'essiccamento. I seguenti organi e tessuti dovrebbero essere conservati in mezzo adatto per possibili esami istopatologici futuri: tutte le lesioni generali, polmoni — che dovrebbero essere rimossi intatti, pesati e trattati con un fissativo adatto per garantire che la struttura polmonare rimanga intatta (la perfusione con fissativo è considerata un procedimento efficace), tessuti rinofaringei, cervello — comprese sezioni di midollo/ponte, corteccia cerebellare e corteccia cerebrale, pituitaria, tiroide/paratiroide, qualsiasi tessuto timico, trachea e polmoni, cuore, aorta, ghiandole salivari, milza, fegato, reni, ghiandole surrenali, pancreas, gonadi, utero (organi genitali accessori), (pelle), cistifellea (se presente), esofago, stomaco, duodeno, digiuno, ileo, intestino cieco, colon, retto, vescica urinaria, linfonodi rappresentativi, (ghiandole mammarie femminili), (muscolatura della coscia), nervo periferico (occhi), sterno con midollo osseo, (femore — compresa superficie articolare), (midollo spinale a tre livelli — cervicale, emitoracico e lombare), e (ghiandole lacrimali esorbitali). (I tessuti citati tra parentesi devono essere esaminati solo se presentano segni di tossicità o se vi siano indicazioni che sono l'organo-bersaglio coinvolto).

#### Esame istopatologico

- L'esame istopatologico completo dovrebbe essere effettuato sulle vie respiratorie e su altri organi e tessuti di tutti gli animali nel gruppo trattato con dosaggio elevato e nel gruppo di controllo,
- tutte le lesioni macroscopiche dovrebbero essere esaminate,
- gli organi-bersaglio in gruppi trattati con altre dosi dovrebbero essere esaminati,
- i polmoni degli animali nei gruppi trattati con dosaggio basso ed intermedio dovrebbero essere sottoposti ad esame istopatologico per l'individuazione di infezioni, poiché ciò fornisce una valutazione appropriata dello stato di salute degli animali. Ulteriori esami istopatologici di routine possono non essere richiesti per gli animali di questi gruppi, ma devono sempre essere effettuati sugli organi che presentano lesioni nel gruppo trattato con dose elevata,
- quando si fa uso di gruppo satellite, si dovrebbe eseguire l'esame istopatologico degli stessi tessuti e degli organi che presentano effetti in altri gruppi trattati.

<sup>(1)</sup> Ora nota come alanina aminotransferasi serica

<sup>(2)</sup> Ora nota come aspartato aminotransferasi serica

**2 DATI**

I dati dovrebbero essere riassunti sotto forma di tabelle, indicando per ogni gruppo di saggio il numero di animali all'inizio del saggio, il numero degli animali che presentano lesioni, i tipi di lesione e la percentuale degli animali che presenta ciascun tipo di lesioni. I risultati dovrebbero essere valutati con un metodo statistico idoneo. Qualsiasi metodo statistico riconosciuto può essere utilizzato.

**3 RELAZIONE****3.1 Relazione sul saggio.**

Nella relazione sul saggio devono figurare, se possibile:

— specie, ceppo, origine, condizioni ambientali, dieta;

— condizioni sperimentali:

descrizione dell'apparecchiatura di esposizione inclusi progettazione, tipo, dimensioni, generatore dell'aria, sistema di generazione delle particelle e degli aerosols, metodo di condizionamento dell'aria, trattamento dell'aria di scarico e metodo di alloggiamento degli animali in una camera di saggio, quando questa sia usata. L'attrezzatura per la misura della temperatura, dell'umidità e, se del caso, della stabilità delle concentrazioni di aerosol o delle dimensioni delle particelle dovrebbe essere descritta;

dati di esposizione: i dati dovrebbero essere tabulati presentati con valori medi e una misura della variabilità (per esempio deviazione standard) e dovrebbero includere:

- a) velocità del flusso dell'aria attraverso l'attrezzatura per l'inalazione;
- b) temperatura ed umidità dell'aria;
- c) concentrazioni nominali (quantità totale della sostanza in esame immessa nell'apparecchiatura per l'inalazione, divisa per il volume dell'aria);
- d) natura del veicolo, se usato;
- e) concentrazione reali nella zona di respirazione;
- f) dimensioni delle particelle mediane (se del caso).

— dati sulla risposta tossica per sesso e per concentrazione;

— livello senza effetto, quando possibile;

— tempo della morte (durante l'esperimento) oppure specificare se gli animali sono sopravvissuti fino alla conclusione della prova;

— descrizione degli effetti tossici o di altri effetti;

— tempo di osservazione di ogni segno anomalo e successivo decorso;

— dati di alimentazione sul peso corporeo;

— risultati oftalmologici;

— prove ematologiche usate e risultati completi;

— prove di biochimica clinica usate e risultati (compresi i risultati dell'analisi delle urine);

— risultati della necropsia;

— descrizione particolareggiata di tutti i risultati istopatologici;

— elaborazione statistica dei risultati, quando possibile;

— discussione dei risultati;

— interpretazione dei risultati.

**3.2. Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

**4 RIFERIMENTI**

Vedi introduzione generale, parte B.

## B.30. SAGGIO DI TOSSICITÀ CRONICA

## 1 METODO

## 1.1. Introduzione

Vedi introduzione generale, parte B

## 1.2. Definizioni

Vedi introduzione generale, parte B.

## 1.3. Sostanze di riferimento

Nessuna

## 1.4. Principio del metodo di saggio

La sostanza in esame è somministrata normalmente 7 giorni per settimana, per una via opportuna, a diversi gruppi di animali sperimentali, una dose per gruppo, per la maggior parte della loro durata di vita. Durante e dopo l'esposizione alla sostanza in esame, gli animali sperimentali sono sottoposti ad osservazione quotidianamente per individuare segni di tossicità.

## 1.5. Criteri qualitativi

Nessuno.

## 1.6. Descrizione del metodo di saggio

*Preparazioni:*

Gli animali sono tenuti nelle condizioni di alloggiamento e nutrizione sperimentali per almeno 5 giorni prima dell'inizio del saggio. Prima dell'esperimento, gli animali giovani e sani vengono mescolati con metodo casuale ed assegnati a gruppi di trattamento e di controllo.

*Condizioni di saggio**Animali da laboratorio*

La specie preferita è il ratto. Sulla base dei risultati di studi precedentemente effettuati, altre specie (roditori o non-roditori) possono essere utilizzate. Si dovrebbero usare i ceppi di laboratorio generalmente utilizzati di giovani animali sani ed il dosaggio dovrebbe iniziare non appena possibile dopo lo svezzamento.

All'inizio dello studio, la variazione di peso negli animali usati non dovrebbe superare il  $\pm 20\%$  del valore medio. Quando venga intrapreso uno studio di tossicità subcronica orale come preliminare ad uno studio a lungo termine, si dovrebbe usare la stessa specie e lo stesso ceppo in entrambi gli studi.

*Numero e sesso*

Per ciascun livello di dose si dovrebbero utilizzare, per i roditori, almeno 40 animali (20 maschi e 20 femmine) e un gruppo di controllo parallelo. Le femmine dovrebbero essere nullipare e non gravide. Se si prevede di sacrificare alcuni animali, il loro numero dovrà essere aumentato del numero di animali che si prevede di sacrificare prima del completamento dello studio.

Per i non-roditori un numero inferiore di animali, almeno 4 per sesso e per gruppo, è accettabile.

*Livelli di dose e frequenza dell'esposizione*

Si dovrebbero utilizzare almeno tre livelli di dose oltre al gruppo di controllo. Il livello di dose più elevato dovrebbe provocare sintomi precisi di tossicità senza causare eccessiva mortalità. Il livello di dose più basso non dovrebbe produrre alcuna evidenza di tossicità.

Le dosi (le dosi) intermedia(e) dovrebbe(ro) essere fissat(e) in un intervallo intermedio tra le dosi elevate e quelle basse.

Nella scelta dei livelli di dose si dovrebbe tener conto dei dati ottenuti da precedenti saggi e studi di tossicità.

Normalmente, la frequenza dell'esposizione è quotidiana. Se la sostanza chimica viene somministrata in acqua potabile o mescolata nella dieta, essa dovrebbe essere continuamente disponibile.

#### Controlli

Si dovrebbe usare un gruppo di controllo parallelo identico sotto tutti i punti di vista ai gruppi esposti, eccezion fatta per l'esposizione alla sostanza in esame.

In circostanze specifiche, come in studi di inalazione che richiedono l'uso di aerosol o di un emulsionante ad attività biologica non caratterizzata in studi orali, si dovrebbe usare anche un gruppo di controllo negativo parallelo. In gruppo di controllo negativo riceve lo stesso trattamento degli altri gruppi di animali sperimentali, eccettuato il fatto che gli animali non sono esposti alla sostanza sperimentale né ad alcun veicolo.

#### Vie di somministrazione

Le due vie principali di somministrazione sono quella orale e quella inalatoria. La scelta della via di somministrazione dipende dalle caratteristiche fisiche e chimiche della sostanza in esame e della via probabile di esposizione dell'uomo.

L'uso della via cutanea presenta considerevoli problemi pratici. La tossicità sistemica cronica derivante dall'assorbimento percutaneo può essere arguita normalmente dai risultati dell'altra prova orale e dalla conoscenza dell'entità dell'assorbimento percutaneo derivata dalle prove di tossicità percutanea.

#### Studi orali

Ove la sostanza in esame sia assorbita dal tratto gastro-intestinale, e se la via orale è una via di esposizione degli esseri umani, la via orale di somministrazione è quella preferita, a meno che non vi siano controindicazioni. Gli animali possono ricevere la sostanza in esame nella loro dieta, sciolta in acqua potabile, o in capsula. Idealmente, dovrebbe essere usato un dosaggio giornaliero, sette giorni per settimana, perché un dosaggio di cinque giorni/settimana potrebbe provocare un recupero o una tossicità da privazione nel periodo di mancato dosaggio, influenzando così il risultato e la valutazione successiva. Tuttavia, sulla base principalmente di considerazioni pratiche, il dosaggio su una base di cinque giorni/settimana è considerato accettabile.

#### Studi di inalazione

Poiché gli studi sull'inalazione offrono problemi tecnici di maggior complessità delle altre vie di somministrazione, vengono qui fornite indicazioni più particolareggiate su questo modo di somministrazione. Dovrebbe essere notato che l'installazione endotracheale può costituire un'alternativa valida in situazioni specifiche.

Le esposizioni a lungo termine sono di solito modellate sulla esposizione umana prevista, che prevede per gli animali un'esposizione quotidiana di 6 ore dopo equilibratura delle concentrazioni nella camera, per 5 giorni/settimana (esposizione intermittente), o su un'esposizione ambientale possibile, con 22-24 ore di esposizione/giorno, 7 giorni/settimana (esposizione continua), con circa un'ora/giorno per nutrire gli animali allo stesso orario e per la manutenzione della camera.

In entrambi i casi, gli animali sono di solito esposti a concentrazioni fisse delle sostanze in esame. Una differenza importante da considerare tra l'esposizione intermittente e quella continua è che, con la prima, vi è un periodo di 17-18 ore in cui gli animali possono riprendersi dagli effetti di ogni esposizione quotidiana, e un periodo di recupero ancora più lungo durante i fine settimana.

La scelta dell'esposizione intermittente o continua dipende dagli obiettivi dello studio e dall'esposizione umana che deve essere simulata. Tuttavia, certe difficoltà tecniche devono essere considerate. Per esempio, i vantaggi dell'esposizione continua per simulare le condizioni ambientali possono essere controbilanciati dalla necessità di nutrire e abbeverare gli animali durante l'esposizione, o di disporre di aerosol di tipo più complicato (e affidabile) e di sistemi di generazione di vapore e di controllo.

#### Camere di esposizione

Gli animali dovrebbero essere sottoposti a sperimentazione in camere di inalazione progettate per sostenere un flusso dinamico con almeno 12 cambiamenti d'aria/ora, per assicurare un tenore di ossigeno adeguato e un'atmosfera di esposizione uniforme. Le camere di esposizione e di controllo dovrebbero essere identiche nella costruzione e nella progettazione, per poter assicurare condizioni di esposizione comparabili sotto tutti gli aspetti, eccezion fatta per l'esposizione alle sostanze in esame. Nella camera viene generalmente mantenuta una leggera depressione per impedire la fuoriuscita delle sostanze in esame nella zona circostante. Nelle camere si dovrebbe ridurre al minimo l'affollamento degli animali. Come regola generale, al fine di assicurare la stabilità dell'atmosfera della camera, il «volume» totale degli animali di saggio non dovrebbe superare il 5% del volume della camera.

Si dovrebbero eseguire le misure o i controlli sottoelencati

- i) Flusso dell'aria: la velocità del flusso d'aria attraverso la camera dovrebbe essere controllata preferibilmente in modo continuo
- ii) Concentrazione: durante il periodo di esposizione quotidiana, la concentrazione della sostanza in esame non dovrebbe variare di più o meno il 15 % del valore medio
- iii) Temperatura ed umidità: per i roditori la temperatura dovrebbe essere mantenuta sui 22 °C ( $\pm 2$  °C), e l'umidità all'interno della camera al 30-70 %, eccetto quando l'acqua è usata per mantenere in sospensione la sostanza di prova nell'atmosfera della camera. Preferibilmente entrambe dovrebbero essere controllate in continuo
- iv) Misura delle dimensioni delle particelle: la distribuzione delle dimensioni delle particelle dovrebbe essere determinata sulle atmosfere di camere che contengano aerosol liquidi o solidi. Le particelle contenute negli aerosol dovrebbero avere dimensioni tali da essere inalabili dall'animale da laboratorio usato. I campioni di atmosfera dovrebbero essere prelevati a livello della zona di respirazione degli animali. Il campione d'aria dovrebbe essere rappresentativo della distribuzione delle particelle a cui gli animali sono esposti e dovrebbe rappresentare, su una base gravimetrica, tutto l'aerosol sospeso anche quando gran parte di esso non è respirabile. Le analisi della grandezza delle particelle dovrebbero essere effettuate spesso durante la messa a punto del sistema di generazione per assicurare la stabilità dell'aerosol e, in seguito, quando si ritenga necessario, durante le esposizioni, per determinare in modo adeguato l'uniformità della distribuzione delle particelle a cui gli animali sono stati esposti

#### Durata dello studio

La durata del periodo di somministrazione dovrebbe essere di almeno 12 mesi

#### Procedimento

##### Osservazioni

Un accurato esame clinico dovrebbe essere eseguito almeno quotidianamente. Oltre alle osservazioni supplementari, si dovrebbero adottare le misure appropriate per ridurre al massimo la perdita di animali, ad esempio necropsia o refrigerazione degli animali trovati morti e isolamento o sacrificio degli animali deboli o moribondi. Si dovrebbero eseguire accurate osservazioni per individuare l'insorgere e la progressione di tutti gli effetti tossici e per ridurre al massimo le perdite dovute a malattia, ad autolisi, o a cannibalismo

I segni clinici, comprese le alterazioni oculari e neurologiche nonché la mortalità, dovrebbero essere registrati per tutti gli animali. Si dovrebbero registrare il tempo di insorgenza e la progressione delle condizioni tossiche, compresi i tumori sospetti

Una registrazione individuale del peso corporeo di tutti gli animali dovrebbe essere effettuata una volta per settimana, durante le prime 13 settimane del periodo di saggio ed almeno una volta ogni 4 settimane in seguito. La quantità di cibo ingerita dovrebbe essere determinata settimanalmente durante le prime 13 settimane dello studio, e poi a intervalli di circa tre mesi, a meno che lo stato di salute o le variazioni del peso corporeo non impongano altre soluzioni

#### Esame ematologico

L'esame ematologico (ad esempio contenuto di emoglobina, volume delle cellule ammassate, eritrociti totali, leucociti totali, piastrine, o altre misure di potenziale di coagulazione) dovrebbe essere eseguito dopo 3 mesi, 6 mesi e quindi a intervalli di circa 6 mesi, ed alla conclusione dello studio, su campioni di sangue raccolti da tutti i non-roditori e da 10 ratti per sesso di tutti i gruppi. Se possibile, questi prelievi dovrebbero essere effettuati ogni volta sugli stessi ratti. Inoltre, si dovrebbe raccogliere un campione prima dell'esperimento dai non-roditori

Se le osservazioni cliniche indicano un deterioramento nella salute degli animali durante lo studio, si dovrebbe eseguire un conteggio differenziale ematico dei suddetti animali

Un conteggio differenziale ematico viene eseguito sui campioni provenienti dagli animali del gruppo a dosaggio più elevato e dai controlli. I conteggi differenziali ematici sono eseguiti per il gruppo seguente (o i gruppi seguenti) trattato con dosaggio inferiore, soltanto se vi sono discordanze importanti tra il gruppo trattato con dosaggio più elevato ed i controlli, o se vi sono indicazioni derivanti dai risultati dall'esame patologico

#### Analisi delle urine

Per l'analisi si dovrebbero prelevare campioni di urina da tutti i non-roditori e da 10 ratti per sesso di tutti i gruppi, se possibile dagli stessi ratti ed agli stessi intervalli dell'esame ematologico. Le seguenti determinazioni dovrebbero essere effettuate o sui singoli animali o su una miscela dei campioni per sesso e per gruppo di roditori

— aspetto: volume e densità per i singoli animali,

- proteine, glucosio, chetoni, sangue occulto (semiquantitativamente),
- microscopia del sedimento (semiquantitativamente)

#### Chimica clinica

Approssimativamente a intervalli di 6 mesi, ed alla conclusione del saggio, si prelevano campioni di sangue per le determinazioni di chimica clinica da tutti i non-roditori e da 10 ratti/sexo di tutti i gruppi, se possibile dagli stessi ratti a ogni intervallo. Inoltre si dovrebbe prelevare un campione prima dell'esperimento dai non-roditori. Da questi campioni viene preparato il plasma e vengono eseguite le seguenti analisi:

- concentrazione delle proteine totali;
- concentrazione dell'albumina,
- saggio di funzionalità epatica (quali attività fosfatasi alcalina, glutammico piruvico transaminasi <sup>(1)</sup> e transaminasi glutammico-ossalacetica <sup>(2)</sup>, glutammil transpeptidasi, ornitina decarbossilasi),
- metabolismo dei carboidrati, quali glucosio ematico a digiuno,
- saggi di funzionalità renale, quali azoto ureico ematico

#### Necropsia macroscopica

È necessario un esame necropsico completo di tutti gli animali, compresi quelli morti durante l'esperimento o uccisi perché moribondi. Prima del sacrificio da tutti gli animali si dovrebbero prelevare campioni di sangue per i conteggi differenziali ematici. Tutte le lesioni macroscopiche visibili, i tumori o le lesioni sospette quali tumori dovrebbero essere conservate. Si dovrebbe cercare di correlare le osservazioni macroscopiche con i risultati degli esami microscopici.

Tutti gli organi e i tessuti dovrebbero essere conservati per l'esame istopatologico. Questo di solito riguarda i seguenti organi e tessuti: cervello <sup>(3)</sup> (midollo/ponte, corteccia cerebellare, corteccia cerebrale), pituitaria, tiroide (compresa paratiroide), timo, polmoni (trachea compresa), cuore, aorta, ghiandole salivari, fegato <sup>(3)</sup>, milza, rene <sup>(3)</sup>, ghiandole surrenali <sup>(3)</sup>, esofago, stomaco, duodeno, digiuno, ileo, intestino cieco, colon, retto, utero, vescica urinaria, linfonodi, pancreas, gonadi <sup>(3)</sup>, organi genitali accessori, ghiandole mammarie femminili, pelle, muscolatura, nervo periferico, midollo spinale (cervicale, toracico, lombare), sterno con midollo osseo e femore (articolazione compresa) e occhi. L'insufflazione dei polmoni e della vescica urinaria con un fissativo e il modo ottimale di conservare questi tessuti; l'insufflazione dei polmoni negli studi di inalazione è essenziale per eseguire un esame istopatologico appropriato. Negli studi speciali, quali quelli di inalazione, si studieranno l'intero tratto respiratorio compreso naso, faringe e laringe.

Se si eseguono altri esami clinici, le informazioni ottenute da questi dovranno essere disponibili prima dell'esame microscopico, perché esse possono fornire indicazioni significative al patologo.

#### Istopatologia

Tutte le alterazioni visibili, in particolare i tumori ed altre lesioni che si verificano in qualsiasi organo, dovrebbero essere esaminati microscopicamente. Inoltre si raccomandano le seguenti procedure:

- a) esame microscopico di tutti gli organi e tessuti conservati, con descrizione completa di tutte le lesioni riscontrate in:
  - 1 tutti gli animali che sono morti durante lo studio, e
  - 2 tutti quelli dei gruppi trattati con la dose elevata e controlli. Questi organi, prelevati da 10 animali per sesso e per gruppo per i roditori e da tutti i non roditori, più tiroide (con paratiroide) per tutti i non-roditori, dovrebbero essere pesati,
- b) gli organi o i tessuti che mostrano anomalie causate, o possibilmente causate dalla sostanza in esame, vengono esaminati anche negli animali appartenenti ai gruppi trattati con le dosi più basse,
- c) se il risultato dell'esperimento evidenzia una riduzione sostanziale della longevità normale degli animali o induzione di effetti in grado di influire sulla risposta tossica, gli animali del gruppo trattato con livello di dose immediatamente inferiore dovrebbero essere esaminati come sopra descritto,
- d) informazioni sull'incidenza di lesioni normalmente riscontrate nel ceppo degli animali usati, nelle stesse condizioni di laboratorio ossia i dati storici dei controlli sono indispensabili per valutare correttamente l'importanza dei mutamenti osservati negli animali trattati.

<sup>(1)</sup> Ora nota come alanino-amminotransferasi serica

<sup>(2)</sup> Ora nota come aspartato-amminotransferasi serica

<sup>(3)</sup> Questi organi, prelevati da 10 animali per sesso e per gruppo per i roditori e da tutti i non roditori, più tiroide (con paratiroidi) per tutti i non roditori, dovrebbero essere pesati.

**2 DATI**

I dati dovrebbero essere riassunti sotto forma di tabelle, indicando per ogni gruppo di saggio il numero di animali all'inizio del saggio, il numero degli animali che presenta lesioni e la percentuale degli animali che presenta ciascun tipo di lesione. I risultati dovrebbero essere valutati con un metodo statistico idoneo. Qualsiasi metodo statistico riconosciuto può essere utilizzato.

**3 RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile

- specie, ceppo, origine, condizioni ambientali, dieta
- condizioni sperimentali

descrizione dell'apparecchiatura per l'esposizione, inclusi: progettazione, tipo, dimensioni, fonte dell'aria, sistema per generare particelle e aerosol, metodo di condizionamento dell'aria, trattamento dell'aria di scarico e metodo di alloggiamento degli animali in una camera di saggio, quando questa è utilizzata. L'attrezzatura per misurare la temperatura, l'umidità e, se del caso, la stabilità di concentrazione degli aerosol o la dimensione delle particelle dovrebbe essere descritta,

dati di esposizione dovrebbero essere presentati in forma tabulare con i valori medi e la misura della variabilità (per esempio deviazione standard) e dovrebbero includere

- a) portate dell'aria attraverso l'attrezzatura di inalazione,
- b) temperatura ed umidità dell'aria,
- c) concentrazioni nominali (quantità totale della sostanza in esame immessa nell'attrezzatura di inalazione divisa per il volume dell'aria),
- d) natura del veicolo, se usato,
- e) concentrazioni reali nella zona sperimentale di respirazione,
- f) dimensioni delle particelle medianti (se del caso),
- livelli di dose (incluso il veicolo, se usato) e le concentrazioni,
- dati relativi agli effetti tossici per sesso e dose,
- livello senza effetti,
- tempo di eventi letali durante lo studio o se gli animali erano vivi al completamento del saggio,
- descrizione degli effetti tossici e di altri effetti,
- registrazione della data di osservazione di ogni sintomo anomalo e successivo decorso,
- dati di alimentazione e di peso corporeo,
- risultati oftalmologici,
- prove ematologiche usate e risultati completi,
- saggi di biochimica clinica usati e risultati completi (compresi i risultati dell'analisi delle urine),
- risultati della necropsia;
- descrizione particolareggiata di tutti i risultati istopatologici,
- elaborazione statistica dei risultati, quando possibile,
- discussione dei risultati,
- interpretazione dei risultati.

**3.2 Valutazione ed interpretazione**

Vedi introduzione generale, parte B

**4 RIFERIMENTI**

Vedi introduzione generale, parte B

**B.31 SAGGIO DI TERATOGENESI: RODITORI E NON-RODITORI****1 METODO****1.1. Introduzione**

Vedi introduzione generale, parte B.

**1.2 Definizioni**

Vedi introduzione generale, parte B

**1.3 Sostanze di riferimento**

Nessuna

**1.4 Principi del metodo di saggio**

La sostanza sperimentale viene somministrata in dosi o concentrazioni graduate, per almeno quella parte della gravidanza che copre il periodo dell'organogenesi, a diversi gruppi di animali sperimentali gravidi, una dose per gruppo. Poco prima della data prevista del parto l'animale viene ucciso, l'utero tolto ed il contenuto esaminato. Questo metodo sperimentale copre la embriotossicità e la fetotossicità.

**1.5 Criteri qualitativi**

Nessuno

**1.6 Descrizione del metodo di saggio****Preparazioni**

Le giovani femmine vergini adulte in buona salute, di età e dimensioni comparabili, vengono acclimatate in condizioni di laboratorio per almeno 5 giorni prima dello studio; vengono poi accoppiate con maschi di comprovata fertilità. Le femmine inseminate vengono randomizzate ed assegnate ai gruppi di trattamento. L'accoppiamento può avvenire naturalmente o tramite inseminazione artificiale. La sostanza da saggiare viene somministrata ogni giorno alle femmine, immediatamente dopo l'impianto e durante l'intero periodo dell'organogenesi. Un giorno prima del termine, i feti vengono asportati con isterectomia ed esaminati per determinare eventuali anomalie viscerali o scheletriche, includenti ossificazione ritardata, ritardo della crescita ed emorragie intestinali.

**Condizioni sperimentali****Animali da laboratorio**

Le specie generalmente usate sono il ratto, il topo, il criceto ed il coniglio. Le specie preferite sono il ratto ed il coniglio. Sarà opportuno usare ceppi generalmente utilizzati in laboratorio. Il ceppo non dovrà essere a bassa fecondità e dovrà essere caratterizzato per la sua risposta ai teratogeni. Gli animali dovranno essere ingabbiati individualmente.

**Numero e sesso**

Per ogni livello di dose si richiedono almeno 20 femmine di ratto, di topo o di criceto gravide, oppure 12 coniglie. L'obiettivo è di assicurare un numero sufficiente di parti per permettere una valutazione del potenziale teratogeno della sostanza.

**Livelli di dose**

Si richiedono almeno 3 gruppi di dosaggio e un gruppo di controllo. Quando la sostanza da saggiare è somministrata in un veicolo, si richiede anche un gruppo di controllo del veicolo. Se si utilizza un veicolo, le sue proprietà tossicologiche dovranno essere note, esso non dovrà essere teratogeno né avere effetti sulla riproduzione. Ad eccezione del trattamento con la sostanza da saggiare, gli animali nel gruppo di controllo dovranno essere



trattati in modo identico agli animali del gruppo trattato. A meno che non sia limitato dalla natura fisico/chimica o dalle proprietà biologiche della sostanza, il livello più elevato di dose dovrà idealmente indurre una certa tossicità materna evidente, quale una leggera perdita del peso, ma non più del 10 % di morti. Il livello basso di dose non dovrà indurre effetti osservabili attribuibili alla sostanza da saggiare. La dose intermedia dovrà essere intervallata geometricamente tra i livelli di dose elevati e quelli bassi.

#### Prova limite

Nel caso di sostanza a bassa tossicità, se un livello di dose di almeno 1 000 mg/kg non produce sintomi di embriotossicità o di teratogenicità, prove con altri livelli di dose possono essere considerate superflue.

#### Tempo di esposizione

Il giorno 0 nella prova è il giorno in cui sono osservati (se possibile) il tappo vaginale e/o lo sperma. Il periodo in cui si somministra la dose dovrebbe riguardare il periodo principale dell'organogenesi. Per il ratto ed il topo, questo può essere compreso fra il 6° e il 15° giorno; tra il 6° e il 14° per il criceto, e per il coniglio tra il 6° e il 18°. Se il giorno 0 è quello in cui si è osservato l'accoppiamento o l'inseminazione artificiale, ai tempi di cui sopra si dovrà aggiungere 1 giorno. Alternativamente, il periodo del dosaggio può essere esteso approssimativamente di 1 giorno prima della data prevista per il parto.

#### Periodo di osservazione

Un accurato esame clinico dovrà essere fatto almeno una volta al giorno. Osservazioni supplementari dovranno avvenire quotidianamente, con azioni appropriate prese per minimizzare la perdita di animali durante l'esperimento.

#### Procedimento

La sostanza da saggiare è somministrata oralmente, con sonda.

La sostanza da saggiare dovrà essere somministrata approssimativamente ogni giorno alla stessa ora.

Agli animali la laboratorio di sesso femminile viene somministrata ogni giorno la sostanza da saggiare, durante il periodo prescritto. La dose può essere basata sul peso delle femmine all'inizio della somministrazione della sostanza, o, alternativamente, in vista del rapido aumento di peso che ha luogo durante la gravidanza, gli animali possono essere pesati periodicamente, ed il dosaggio basato sulla determinazione più recente del peso. I sintomi di tossicità dovranno essere registrati al momento dell'osservazione, insieme con la data di inizio, il grado e la durata. Le femmine che minacciano l'aborto o il parto prematuro dovranno essere sacrificate e sottoposte ad esame macroscopico accurato. Il periodo di osservazione post-trattamento dovrà continuare fino a circa un giorno prima del termine; l'obiettivo è di coprire la maggior parte del periodo di gravidanza, ma di evitare eventuali complicazioni di interpretazione dei risultati che potrebbero sorgere in seguito alle nascite naturali. Le osservazioni parallele includeranno, ma non si limiteranno a: modificazione della cute e del pelo, degli occhi e delle mucose, nonché del sistema nervoso centrale ed autonomo, di quello respiratorio e circolatorio, dell'attività somatomotoria e del modello comportamentale. Si dovrebbe procedere settimanalmente alla misura del consumo alimentare e alla pesatura degli animali.

#### Necropsia macroscopica

Alla morte, durante, o alla fine dello studio, l'animale dovrà essere sottoposto ad esame macroscopico per identificare tutte le anomalie strutturali o le modificazioni patologiche che hanno potuto influenzare la gravidanza. Immediatamente dopo la morte, l'utero dovrà essere tolto ed il contenuto esaminato per eventuale constatazione di morte dell'embrione o del feto e del numero di feti vivi. In genere, è possibile stimare la data di morte nell'utero, quando questa si è verificata. Nei ratti e nei conigli è possibile determinare il numero dei corpi lutei.

Si determinerà il sesso dei feti, si eseguirà la relativa pesatura individuale con registrazione e derivazione del peso fetale medio. Dopo la rimozione ogni feto dovrà essere esaminato esternamente. Per i ratti, i topi e i criceti, la metà di ogni figliata dovrà essere preparata per l'osservazione di anomalie scheletriche, e la parte rimanente di ogni figliata verrà preparata per l'osservazione di anomalie o sintomi di eventuale disfacimento tissulare usando metodi appropriati. Per i conigli, ogni feto verrà esaminato con accurata dissezione per il riscontro di anomalie viscerali e di anomalie scheletriche.

## 2.

### DATI

I dati devono essere riassunti sotto forma di tabelle, indicando per ogni gruppo sperimentale il numero di animali all'inizio della prova, il numero di quelli divenuti gravidi, il numero e le percentuali dei feti vivi e dei feti che presentano anomalie scheletriche o disfacimento tissulare nonché la loro relazione con figliate specifiche. I risultati devono essere valutati con un metodo statistico idoneo. Qualsiasi metodo statistico riconosciuto può essere utilizzato.

**3. RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- specie, ceppo, origine, condizioni ambientali, dieta, ecc.,
- condizioni sperimentali,
- livelli di dose (veicolo compreso, se utilizzato) e concentrazioni,
- dati sulla risposta tossica per dose,
- livello senza effetto (quando possibile),
- registrazione della data della morte durante lo studio oppure specificare se gli animali sono sopravvissuti fino alla conclusione della prova,
- descrizione degli effetti tossici o di altri effetti,
- registrazione della data di osservazione di ogni sintomo anomalo e successivo decorso,
- dati sulla alimentazione e sul peso corporeo,
- durata della gravidanza e dati sulle figliate (inclusi dati storici),
- dati fetali (vivi/morti, sesso, anomalie dei tessuti molli e anomalie scheletriche),
- dati sulla figliata (vivi/morti, sesso, anomalie dei tessuti molli e anomalie scheletriche),
- elaborazione statistica dei risultati quando possibile,
- discussione dei risultati,
- interpretazione dei risultati

**3.2. Valutazione ed interpretazione**

Vedi introduzione generale, parte B.

**4. RIFERIMENTI**

Vedi introduzione generale, parte B.

## B.32. SAGGIO DI CANCEROGENESI

## 1. METODO

## 1.1. Introduzione

Vedi introduzione generale, parte B.

## 1.2. Definizioni

Vedi introduzione generale, parte B.

## 1.3. Sostanze di riferimento

Nessuna.

## 1.4. Principio del metodo di saggio

La sostanza da saggiare è somministrata normalmente 7 giorni per settimana, tramite via appropriata, a diversi gruppi di animali sperimentali, una dose per gruppo, per la maggior parte della loro durata di vita. Durante e dopo l'esposizione alla sostanza, gli animali verranno sottoposti giornalmente ad osservazione per individuare i sintomi della tossicità, in particolare lo sviluppo dei tumori.

## 1.5. Criteri qualitativi

Nessuno.

## 1.6. Descrizione del metodo di saggio

*Preparazioni*

Gli animali sono tenuti nell'alloggio sperimentale e nutriti per almeno 5 giorni prima dell'inizio della prova. Prima dell'esperimento, gli animali giovani e sani vengono randomizzati ed assegnati a gruppi stabiliti.

*Animali da laboratorio*

La specie preferita è il ratto. Sulla base dei risultati di studi precedentemente intrapresi, altre specie (roditori o non-roditori) possono essere utilizzate. Sarà opportuno usare ceppi di giovani animali sani generalmente utilizzati in laboratorio e il dosaggio dovrà iniziare non appena possibile dopo lo svezzamento. All'inizio dello studio, la variazione di peso degli animali usati non dovrà superare più o meno 20 % del valore medio. Quando vengano intrapresi studi di subcronicità orale come preliminari ad uno studio a lungo termine, si dovranno usare le stesse specie in entrambi gli studi.

*Numero e sesso*

Si utilizzeranno animali di entrambi i sessi.

La somministrazione del dosaggio ai roditori dovrà cominciare non appena possibile dopo lo svezzamento.

Nel caso di roditori si utilizzeranno almeno 100 animali (50 maschi e 50 femmine) per ogni livello di dose e gruppo di controllo parallelo. Le femmine devono essere nullipare e non gravide. Se si prevede di sacrificare ad intervalli alcuni animali, il numero dovrà essere aumentato del numero di animali che si prevede di sacrificare prima del completamento dello studio.

*Livelli di dose e frequenza dell'esposizione*

Si dovranno usare almeno tre livelli di dose oltre a un gruppo di controllo parallelo. Il livello di dose più elevato dovrà essere tale da provocare sintomi di tossicità minimi, quali una leggera diminuzione dell'aumento del peso corporeo (meno di 10 %), senza alterare sostanzialmente la durata normale di vita per effetti diversi da quelli dei tumori.

La dose più bassa non dovrà interferire con la crescita, lo sviluppo, e la longevità normali dell'animale né produrre sintomi di tossicità. In generale, essa non dovrà essere inferiore al 10 % della dose più elevata.

La (le) dose(i) intermedia(e) dovrà essere stabilita mediamente tra le dosi elevate e quelle basse.

La scelta dei livelli di dose dovrà prendere in considerazione i dati delle prove e degli studi precedenti di tossicità.

Se il prodotto chimico è somministrato in acqua potabile o mescolato nella dieta, esso dovrà essere continuamente disponibile.

#### Controlli

Si userà il gruppo di controllo parallelo, che è identico sotto ogni aspetto ai gruppi esposti eccezion fatta per l'esposizione alla sostanza in esame.

In circostanze specifiche, quali ad esempio gli studi di inalazione comportanti impiego di aerosol o gli studi sulla tossicità orale che contemplano l'uso di un emulsionante ad attività biologica atipica, si utilizzerà un gruppo di controllo supplementare non esposto al veicolo.

#### Vie di somministrazione

Le tre vie principali di somministrazione sono: orale, cutanea e per inalazione. La scelta della via di somministrazione dipende dalle caratteristiche fisiche e chimiche della sostanza da saggiare e dalla via che caratterizza l'esposizione degli esseri umani.

##### Saggio per via orale

Se la sostanza da saggiare è assorbita dal tratto gastrointestinale, e se la via orale è una via di esposizione degli esseri umani, verrà preferita la via orale di somministrazione, a meno che non vi siano controindicazioni. Gli animali dovranno ricevere la sostanza da saggiare nella loro dieta, sciolta in acqua potabile, o in capsula.

Il dosaggio ideale dovrebbe essere un dosaggio quotidiano sulla base di sette giorni/settimana, perché il dosaggio di cinque giorni/settimana permette il recupero o la perdita di tossicità nel periodo di mancato dosaggio, influenzando così i risultati e la valutazione successiva. Tuttavia, principalmente sulla base di considerazioni pratiche, il dosaggio di cinque giorni/settimana è considerato accettabile.

##### Saggio per via cutanea

L'esposizione cutanea per spennellamento della pelle può essere scelta per simulare una via principale di esposizione umana e come sistema modello per induzione di lesioni cutanee.

##### Saggio per via inalatoria

Poiché gli esperimenti di inalazione presentano problemi tecnici di maggior complessità delle altre vie di somministrazione, si forniscono in questa sede indicazioni particolareggiate su questo modo di somministrazione. Da notare inoltre che l'installazione endotracheale può costituire un'alternativa valida in situazioni specifiche.

Le esposizioni a lungo termine sono di solito modellate sui tipi di esposizione umana e sottopongono gli animali ad un'esposizione quotidiana di 6 ore dopo livellamento delle concentrazioni della camera, per 5 giorni/settimana (esposizione intermittente) o, per un'esposizione ambientale possibile, con 22-24 ore di esposizione/giorno, 7 giorni/settimana (esposizione continua), con circa un'ora per nutrire gli animali in orari simili ogni giorno e per il mantenimento delle camere. In entrambi i casi, gli animali di solito sono esposti ad una concentrazione fissa di sostanza da saggiare. Una differenza notevole da considerare tra l'esposizione intermittente e quella continua è costituita dal fatto che con la prima vi è un periodo di 17-18 ore in cui gli animali possono riprendersi dagli effetti di ogni esposizione, e un periodo ancora più lungo di recupero a fine settimana.

La scelta dell'esposizione intermittente o continua dipende dagli obiettivi dello studio e dall'esposizione umana da simulare. Tuttavia, occorrerà considerare alcune difficoltà tecniche. Per esempio, i vantaggi dell'esposizione continua per la simulazione delle condizioni ambientali possono essere compensati dalla necessità di abbeverare o nutrire gli animali durante l'esposizione, e dall'esigenza di usare aerosol più complicati (e affidabili), di generare il vapore e di usare tecniche di controllo.

#### Camere di esposizione

Gli animali dovranno essere sottoposti a prove in camere di inalazione progettate per sostenere un flusso dinamico di almeno 12 cambiamenti d'aria/ora, per assicurare un tenore di ossigeno adeguato e un'atmosfera ugualmente distribuita. Le camere di esposizione e di controllo dovranno avere costruzioni e progettazioni identiche per assicurare condizioni di esposizione comparabili sotto tutti gli aspetti, eccezion fatta per le esposizioni alle sostanze

da saggiare. Una leggera pressione negativa dentro la camera viene generalmente mantenuta per impedire perdite della sostanza sperimentale nella zona circostante. Nelle camere si dovrà ridurre al massimo l'affollamento degli animali sperimentali. Come regola generale per assicurare la stabilità dell'atmosfera della camera, il «volume» totale degli animali sperimentali non dovrà superare il 5 % del volume della camera.

Si effettueranno le seguenti misurazioni o controlli:

- i) Corrente d'aria: la portata d'aria attraverso la camera dovrà essere controllata preferibilmente in continuo.
- ii) Concentrazione: durante il periodo di esposizione quotidiana, la concentrazione non dovrà variare di più del  $\pm 15\%$  dal valore medio. Per la durata totale dello studio, le concentrazioni giornaliere dovranno essere tenute costanti nella misura del possibile.
- iii) Temperatura ed umidità: per i roditori, la temperatura dovrà essere mantenuta a  $22\text{ }^{\circ}\text{C}$  ( $\pm 2\text{ }^{\circ}\text{C}$ ) e l'umidità all'interno della camera al 30-70 %, eccetto quando l'acqua è usata per mantenere in sospensione la sostanza sperimentale nell'atmosfera della camera. Entrambe dovranno essere controllate preferibilmente in continuo.
- iv) Misurazioni delle dimensioni delle particelle: occorrerà effettuare una determinazione della distribuzione dimensionale delle particelle nell'atmosfera delle camere in cui si usino aerosol liquidi o solidi. Le particelle degli aerosol dovranno essere di dimensioni respirabili per gli animali sperimentali usati. I campioni delle atmosfere della camera saranno prelevati nell'area di respirazione degli animali. Il campione dell'aria sarà rappresentativo della distribuzione delle particelle a cui gli animali sono esposti e dovrà rappresentare, su una base gravimetrica, tutto l'aerosol sospeso anche quando gran parte dello stesso non è respirabile. Le analisi granulometriche dovranno essere effettuate di frequente durante la messa a punto del sistema di generazione per assicurare la stabilità dell'aerosol e, in seguito, durante le esposizioni, solo quando necessario, a seconda dei bisogni, per determinare l'uniformità di distribuzione delle particelle a cui gli animali sono stati esposti.

#### Durata dello studio

La durata di un test di cancerogenesi copre la parte principale della durata normale di vita degli animali sperimentali. La conclusione dello studio sarà dopo 18 mesi per i topi ed i criceti, e dopo 24 mesi per i ratti; tuttavia, per certi ceppi di animali con maggior longevità e tasso poco elevato di tumori spontanei, la conclusione dovrebbe essere dopo 24 mesi per i topi ed i criceti e dopo 30 mesi per i ratti. Alternativamente, la conclusione di un tale studio esteso è accettabile quando la percentuale di superstiti nel gruppo a livello di dose più basso o nel gruppo di controllo raggiunge il 25 %. Allo scopo di terminare lo studio in cui si manifesti una differenza evidente nella risposta, determinata dal sesso, ciascun sesso dovrà essere considerato come un esperimento distinto. Quando solo il gruppo a dose elevata muore prematuramente per ovvie ragioni di tossicità, questa ragione non deve determinare la conclusione dell'esperimento a meno che le manifestazioni tossiche non causino problemi negli altri gruppi. Perché un risultato sperimentale negativo sia accettabile, non più del 10 % di animali di qualsiasi gruppo deve essere perso a causa di autolisi, cannibalismo o altri problemi, e il tasso di sopravvivenza di tutti i gruppi non deve essere inferiore al 50 % a 18 mesi per i topi ed i criceti e a 24 mesi per i ratti.

#### Procedimento

##### Osservazioni

Le osservazioni parallele includeranno modificazioni della cute e del pelo, degli occhi e delle mucose nonché del sistema nervoso centrale ed autonomo, di quello respiratorio e circolatorio, dell'attività somatomotoria e del modello comportamentale.

L'osservazione regolare degli animali è necessaria per assicurarsi che gli stessi siano conservati il più possibile per lo studio e non persi a causa di cannibalismo, autolisi dei tessuti o smarrimento. Gli animali moribondi verranno rimossi e sottoposti a necropsia.

Per tutti gli animali si annoteranno i sintomi clinici e la mortalità. Si dedicherà speciale attenzione all'insorgenza dei tumori, si registrerà la data di inizio, la posizione, le dimensioni, l'aspetto e la progressione di ogni tumore grossolanamente visibile o palpabile.

Si procederà settimanalmente alla misurazione del consumo alimentare (e del consumo dell'acqua quando la sostanza sperimentale è somministrata in acqua potibile) durante le prime 13 settimane dello studio e successivamente a intervalli di circa tre mesi a meno che i cambiamenti dello stato di salute o del peso corporeo non impongano altre soluzioni.

Il peso corporeo dovrà essere registrato individualmente per tutti gli animali una volta per settimana durante le prime 13 settimane del periodo di prova ed almeno una volta ogni 4 settimane in seguito.

*Esami clinici***Ematologia**

Se le osservazioni parallele evidenziano un deterioramento nella salute degli animali durante lo studio, si eseguirà un conteggio differenziale del sangue degli animali colpiti.

Dopo 12 mesi, 18 mesi e prima del sacrificio, si farà uno striscio del sangue di tutti gli animali. Un conteggio differenziale del sangue sarà eseguito sui campioni ottenuti dagli animali nel gruppo a dosaggio più elevato e nei controlli. Se i suddetti dati, e in particolare quelli ottenuti prima del sacrificio, o i dati dall'esame patologico ne indicano l'esigenza, si eseguirà il conteggio differenziale del sangue anche per il gruppo(i) trattato con dosaggio immediatamente inferiore.

**Esame autoptico di base**

L'esame autoptico di base completo dovrà essere eseguito su tutti gli animali, compresi quelli che sono morti durante l'esperimento e quelli moribondi. Si conserveranno tutti i tumori o le lesioni visibili o sospette.

I seguenti organi e tessuti dovranno essere conservati in mezzo adatto per esami istopatologici futuri possibili: tutte le lesioni generali, cervello — comprese sezioni di midollo/ponte, corteccia cerebellare e corteccia cerebrale, pituitaria, tiroide/paratiroide, qualsiasi tessuto timico, trachea e polmoni, cuore, aorta, ghiandole salivari, milza, fegato, reni, ghiandole surrenali, pancreas, gonadi, utero, organi genitali accessori, pelle, esofago, stomaco, duodeno, digiuno, ileo, intestino cieco, colon, retto, vescica urinaria, linfonodi rappresentativi, ghiandole mammarie femminili, muscolatura della coscia, nervo periferico, sterno con midollo osseo, femore — compresa superficie articolare, midollo spinale a tre livelli — cervicale, mediotoracico e lombare, occhi e ghiandole lacrimali esorbitali.

Sebbene l'insufflazione dei polmoni e della vescica urinaria con un fissativo sia il modo ottimale di conservare questi tessuti, l'insufflazione dei polmoni negli studi di inalazione è un requisito necessario per l'esecuzione dell'esame istopatologico appropriato. Negli studi di inalazione, si conserverà tutto il tratto respiratorio, comprese le cavità nasali, le faringi e le laringi.

**Esame istopatologico**

- a) Esame istopatologico completo degli organi e dei tessuti di tutti gli animali che muoiono o vengono sacrificati durante la prova e di tutti gli animali nei gruppi trattati con dose elevata e nei controlli.
- b) Esame dei tumori o lesioni grossolane visibili o sospette in tutti i gruppi.
- c) Se nei gruppi trattati con dosaggio elevato e nei gruppi di controllo si riscontra una differenza significativa nell'incidenza di lesioni neoplastiche, si eseguirà l'esame istopatologico di quell'organo o tessuto specifico negli altri gruppi.
- d) Se il tasso di sopravvivenza nel gruppo trattato con dosi elevate è significativamente inferiore a quello del gruppo di controllo, il gruppo trattato con dosaggio immediatamente inferiore dovrà essere sottoposto ad esame completo.
- e) Se nel gruppo trattato con dosi elevate si riscontra induzione di tossicità o altri effetti che potrebbero influire sulla risposta neoplastica, si effettuerà un esame completo del gruppo trattato con il dosaggio immediatamente inferiore.

2

**DATI**

I dati dovranno essere riassunti sotto forma di tabella, indicando per ogni gruppo sperimentale il numero di animali all'inizio della prova, il numero di animali che presentano tumori scoperti durante l'esperimento, la data di individuazione ed il numero di animali in cui si sono riscontrati tumori dopo l'uccisione. I risultati debbono essere valutati con un metodo statistico idoneo. Qualsiasi metodo statistico riconosciuto può essere utilizzato.

3

**RELAZIONE**

3.1

**Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- specie, ceppo, origine, condizioni ambientali, dieta, ecc.,

- condizioni sperimentali
  - descrizione dell'apparecchiatura di esposizione, includente progettazione, tipo, dimensioni, fonte di aria, sistema per generare particelle ed aerosol, metodo di condizionamento dell'aria, trattamento dell'aria di scarico, metodo di alloggiamento degli animali in una camera sperimentale quando questo sistema venga utilizzato. Descrizione del dispositivo per misurare la temperatura, l'umidità e, se del caso, la stabilità delle concentrazioni di aerosol o le dimensioni delle particelle.
  - Dati di esposizione: questi dovranno essere presentati in forma di tabelle con indicazione dei valori medi e una misura della variabilità (ad esempio: deviazione standard) e includeranno
    - a) portata dell'aria attraverso l'attrezzatura di inalazione,
    - b) temperatura ed umidità dell'aria,
    - c) concentrazioni nominali (quantità totale della sostanza sperimentale immessa nell'attrezzatura di inalazione divisa per il volume dell'aria),
    - d) natura del veicolo, se usato,
    - e) concentrazioni reali nella zona sperimentale di respirazione,
    - f) dimensioni delle particelle mediante (se del caso)
- livelli di dose (veicolo compreso, se utilizzato) e concentrazioni,
- dati di incidenza del tumore secondo il sesso, la dose e il tipo di tumore,
- registrazione della data della morte (durante l'esperimento) oppure specificare se gli animali sono sopravvissuti fino alla conclusione della prova,
- dati sulla risposta tossica per sesso e per dose,
- descrizione degli effetti tossici o di altri effetti,
- registrazione della data di osservazione di ogni sintomo anomalo e del decorso successivo,
- alimentazione e dati sul peso corporeo,
- risultati dell'esame ematologico;
- risultati dell'autopsia,
- descrizione particolareggiata di tutti i risultati istopatologici,
- elaborazione statistica dei risultati con descrizione dei metodi impiegati,
- discussione dei risultati,
- interpretazione dei risultati

### 3.2 Valutazione ed interpretazione

Vedi introduzione generale, parte B

### 4 RIFERIMENTI

Vedi introduzione generale, parte B

## B.33. SAGGIO COMBINATO DI TOSSICITÀ CRONICA / CANCEROGENESI

## 1. METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B.

## 1.2 Definizioni

Vedi introduzione generale, parte B.

## 1.3 Sostanze di riferimento

Nessuna.

## 1.4 Principio del metodo di saggio

L'obiettivo di un saggio combinato di tossicità cronica / cancerogenesi è quello di determinare gli effetti cronici e cancerogeni di una sostanza di una specie di mammifero in seguito a esposizione prolungata.

Per questo scopo, uno studio di cancerogenesi è integrato con almeno un gruppo satellite trattato e un gruppo satellite di controllo. La dose usata per il gruppo satellite a dose elevata può essere più alta di quella usata per il gruppo a dose elevata nello studio di cancerogenesi. Nello studio di cancerogenesi, gli animali sono esaminati per la tossicità in generale come pure per la risposta cancerogena. Gli animali nel gruppo satellite trattato sono esaminati per la tossicità in generale.

La sostanza in esame è somministrata normalmente 7 giorni per settimana, per una via di somministrazione appropriata, a diversi gruppi di animali da esperimento, una dose per gruppo, per la maggior parte della loro vita. Durante e dopo l'esposizione alla sostanza in esame, gli animali da esperimento vengono osservati ogni giorno per individuare i segni di tossicità e lo sviluppo di tumori.

## 1.5 Criteri qualitativi

Nessuno.

## 1.6 Descrizione del metodo di saggio

Gli animali sono tenuti nelle condizioni di alloggio e di alimentazione del saggio per almeno 5 giorni prima dell'inizio della prova. Prima dell'esperimento, gli animali giovani e sani vengono mescolati con metodo casuale ed assegnati a gruppi.

## Animali da esperimento

La specie preferita è il ratto. Sulla base dei risultati di studi precedentemente svolti, altre specie (roditori o non-roditori) possono essere utilizzate. Si dovrebbero usare i ceppi di animali giovani sani generalmente usati in laboratorio e il dosaggio dovrebbe cominciare non appena possibile dopo lo svezzamento.

All'inizio dello studio, la variazione del peso degli animali usati non dovrebbe superare il  $\pm 20\%$  del valore medio. Quando venga intrapreso uno studio subcronico orale come preliminare ad uno studio a lungo termine, si dovrebbe usare la stessa specie e lo stesso ceppo in entrambi gli studi.

## Numero e sesso

Per i roditori si dovrebbero usare almeno 100 animali (50 maschi e 50 femmine) per ciascun livello di dose e un gruppo di controllo parallelo. Le femmine dovranno essere nullipare e non gravide. Se si prevedono sacrifici intermedi, il numero dovrebbe essere aumentato del numero di animali che si prevede di sacrificare prima del completamento dello studio.

Il(1) gruppo(1) satellite(1) trattato(1) per la valutazione di patologie diverse dai tumori dovrebbe essere composto da 20 animali di ciascun sesso, mentre il gruppo di controllo satellite dovrà contenere 10 animali di ciascun sesso.



#### Livelli di dose e frequenza di esposizione

Per gli scopi delle prove di cancerogenesi si dovrebbero usare almeno tre livelli di dose oltre ad un gruppo di controllo parallelo. Il livello di dose più elevato dovrebbe produrre sintomi minimi di tossicità, quale un leggero calo dell'aumento del peso corporeo (meno del 10%), senza alterare sostanzialmente la durata normale di vita a causa di effetti diversi dai tumori.

Il livello di dose più basso non dovrebbe interferire con la crescita normale, lo sviluppo e la longevità dell'animale, né produrre alcuna indicazione di tossicità. Questa dose, in genere, non dovrebbe essere inferiore al 10% della dose elevata. La(e) dose(i) intermedia(e) dovrebbe(ro) essere fissata(e) in un intervallo medio compreso fra la dose elevata e quella bassa. La selezione dei livelli di dose dovrebbe tener conto dei dati derivati dai saggi e dagli studi di tossicità precedenti. Per le finalità del saggio di tossicità cronica, nel saggio vengono inclusi gruppi trattati aggiuntivi e un gruppo di controllo satellite parallelo. La dose elevata per il trattamento degli animali del gruppo satellite dovrà essere tale da produrre evidenti segni di tossicità.

La frequenza dell'esposizione è normalmente quotidiana. Se la sostanza chimica è somministrata nell'acqua da bere o mescolata nella dieta, queste dovrebbero essere continuamente disponibili.

#### Controlli

Si dovrebbe usare un gruppo parallelo, identico sotto tutti gli aspetti ai gruppi trattati, fatta eccezione per l'esposizione alla sostanza in esame.

In circostanze speciali, quali gli studi di inalazione comportanti l'uso di aerosol o di un emulsionante con attività biologica non caratterizzata mediante studi di tossicità orale, si dovrebbe utilizzare un gruppo di controllo complementare non esposto al veicolo.

#### Vie di somministrazione

Le tre vie principali di somministrazione sono: orale, cutanea e per inalazione. La scelta della via di somministrazione e funzione delle caratteristiche chimico-fisiche della sostanza in esame e della più probabile via di esposizione degli esseri umani.

#### Saggi per via orale

Quando la sostanza in esame è assorbita dal tratto gastrointestinale e l'ingestione è una via di esposizione per gli esseri umani, si preferisce la via orale di somministrazione a meno che vi siano controindicazioni. Gli animali possono ricevere la sostanza in esame nella loro dieta, sciolta nell'acqua potabile, o somministrata in capsula.

Idealmente, si dovrebbe usare un dosaggio quotidiano sulla base di sette giorni per settimana, perché il dosaggio di cinque giorni per settimana potrebbe permettere il recupero o una tossicità da privazione nel periodo di mancato dosaggio influenzando così i risultati e la valutazione successiva. Tuttavia, principalmente sulla base di considerazioni pratiche, un dosaggio sulla base di cinque giorni per settimana è considerato accettabile.

#### Saggi per via cutanea

L'esposizione cutanea con spennellatura della pelle può essere scelta per simulare una principale via di esposizione umana e come sistema modello per induzione di lesioni cutanee.

#### Saggi per via inalatoria

Poiché i saggi inalatori presentano problemi tecnici di maggior complessità delle altre vie di somministrazione, si forniscono in questa sede indicazioni più particolareggiate su questo modo di somministrazione. Da notare inoltre che l'instillazione endotracheale può costituire un'alternativa valida in situazioni specifiche.

Le esposizioni a lungo termine sono di solito modellate su esposizione umana prevista sottoponendo gli animali ad un'esposizione quotidiana di 6 ore dopo equilibratura delle concentrazioni della camera, per 5 giorni/settimana (esposizione intermittente) o ad un'esposizione ambientale possibile, con 22-24 ore di esposizione/giorno, 7 giorni per settimana (esposizione continua), con circa un'ora per nutrire gli animali allo stesso orario e per la manutenzione della camera. In entrambi i casi, gli animali di solito sono esposti a concentrazioni fisse delle sostanze in esame. Una differenza notevole da considerare tra l'esposizione intermittente e quella continua è costituita dal fatto che con la prima vi è un periodo di 17-18 ore in cui gli animali possono riprendersi dagli effetti di ogni esposizione quotidiana, e un periodo ancora più lungo di recupero durante i fine settimana.

La scelta dell'esposizione intermittente o continua dipende dagli obiettivi dello studio e dall'esposizione umana da simulare. Tuttavia, occorrerà considerare alcune difficoltà tecniche. Per esempio, i vantaggi dell'esposizione continua per la simulazione delle condizioni ambientali possono essere controbilanciati dalla necessità di abbeverare o nutrire gli animali durante l'esposizione, e dall'esigenza di usare aerosol più complicati (e affidabili) e di sistemi di generazione del vapore e di controllo.

#### Camere di esposizione

Gli animali dovrebbero essere sottoposti a sperimentazione in camere di inalazione progettate per sostenere un flusso dinamico di almeno 12 cambiamenti d'aria/ora, per assicurare un tenore di ossigeno adeguato e un'atmosfera di esposizione uniforme. Le camere di esposizione e di controllo dovrebbero essere identiche nella costruzione e progettazione per assicurare condizioni di esposizione comparabili sotto tutti gli aspetti, eccezion fatta per le esposizioni alle sostanze in esame. Una leggera depressione viene generalmente mantenuta dentro la camera per impedire perdite della sostanza in esame nella zona circostante. Nelle camere si dovrebbe ridurre al massimo l'affollamento degli animali di saggio. Come regola generale per assicurare la stabilità dell'atmosfera della camera, il «volume» totale degli animali di saggio non dovrebbe superare il 5 % del volume della camera.

Si dovrebbero effettuare le seguenti misurazioni o controlli:

- i) Flusso dell'aria: la velocità del flusso dell'aria attraverso la camera dovrebbe essere controllata preferibilmente in modo continuo.
- ii) Concentrazione: durante il periodo di esposizione quotidiana, la concentrazione non dovrebbe variare più del  $\pm 15\%$  dal valore medio. Per la durata totale dello studio, le concentrazioni giornaliere dovranno essere tenute costanti nella misura del possibile.
- iii) Temperatura ed umidità: per i roditori, la temperatura dovrà essere mantenuta a  $22^\circ\text{C}$  ( $\pm 2^\circ\text{C}$ ) e l'umidità all'interno della camera al 30-70 %, eccetto quando l'acqua è usata per mantenere in sospensione la sostanza sperimentale nell'atmosfera della camera. Entrambe dovrebbero essere controllate preferibilmente in continuo.
- iv) Misura delle dimensioni delle particelle: la distribuzione delle dimensioni delle particelle dovrebbe essere determinata sulle atmosfere di camere che contengono aerosol liquidi o solidi. Le particelle contenute negli aerosol dovrebbero avere dimensioni tali da essere inalabili dall'animale da laboratorio usato. I campioni di atmosfera dovrebbero essere prelevati a livello della zona di respirazione degli animali. Il campione d'aria dovrebbe essere rappresentativo della distribuzione delle particelle a cui gli animali sono esposti e dovrebbe rappresentare, su una base gravimetrica, tutto l'aerosol sospeso anche quando gran parte di esso non è respirabile. Le analisi della grandezza delle particelle dovrebbero essere effettuate spesso durante la messa a punto del sistema di generazione per assicurare la stabilità dell'aerosol e, in seguito, quando si ritenga necessario, durante le esposizioni, per determinare in modo adeguato l'uniformità della distribuzione delle particelle a cui gli animali sono stati esposti.

#### Durata dello studio

La durata della parte del saggio relativa alla cancerogenesi comprende la maggior parte della vita normale degli animali di saggio. La conclusione del saggio dovrebbe essere a 18 mesi per i topi ed i criceti e dopo 24 mesi per i ratti; tuttavia, per certi ceppi di animali con maggior longevità e/o tasso poco elevato di tumori spontanei, la conclusione dovrebbe essere dopo 24 mesi per i topi ed i criceti e dopo 30 mesi per i ratti. Alternativamente, la conclusione di un tale studio esteso è accettabile quando la percentuale di superstiti nel gruppo a livello di dose più basso o nel gruppo di controllo raggiunge il 25 %. Quando si conclude uno studio in cui si manifesti una differenza evidente nella risposta determinata del sesso, ciascun sesso dovrebbe essere considerato separatamente. Quando solo il gruppo a dose elevata muore prematuramente per ovvie ragioni di tossicità, ciò non deve necessariamente determinare la conclusione dell'esperimento purché le manifestazioni tossiche non causino problemi negli altri gruppi. Perché un risultato sperimentale negativo sia accettabile, non più del 10 % di animali di qualsiasi gruppo può essere perso nell'esperimento a causa di autolisi, cannibalismo o altri problemi, e il tasso di sopravvivenza di tutti i gruppi non deve essere inferiore al 50 % a 18 mesi per i topi ed i criceti e a 24 mesi per i ratti.

I gruppi satelliti di 20 animali (per sesso) sottoposti a dosaggio e 10 animali (per sesso) di controllo associati, usati per la prova di tossicità cronica, dovrebbero essere mantenuti ai fini dello studio per almeno 12 mesi. Questi animali dovrebbero essere destinati al sacrificio ai fini di un esame della patologia connessa con la sostanza sperimentale non complicata da mutamenti geriatrici.

#### Procedimento

##### Osservazioni

Quotidianamente si dovrebbero effettuare osservazioni cliniche che includeranno i mutamenti della cute e del pelo, degli occhi e delle membrane mucose nonché del sistema nervoso centrale ed autonomo, di quello respiratorio e circolatorio, dell'attività somatomotoria e del modello comportamentale.

Un esame clinico dovrebbe essere effettuato a intervalli appropriati sugli animali del(dei) gruppo(i) satellite(i) trattato(i).

Osservazioni regolari degli animali sono necessarie per assicurarsi, per quanto possibile, che gli stessi non siano persi dallo studio a cause quali cannibalismo, autolisi dei tessuti o smarrimento. Gli animali moribondi dovrebbero essere rimossi e sottoposti a necropsia.

Per tutti gli animali si dovrebbero registrare i segni clinici, inclusi i mutamenti neurologici ed oculari nonché la mortalità. Si deve dedicare particolare attenzione allo sviluppo dei tumori, il momento di insorgenza e la progressione delle condizioni tossiche dovrebbero essere registrati.

Si dovrebbe procedere settimanalmente alla misurazione del consumo alimentare (e del consumo dell'acqua quando la sostanza in esame è somministrata in tale veicolo) durante le prime 13 settimane dello studio e poi a intervalli di circa tre mesi a meno che i mutamenti dello stato di salute o del peso corporeo non impongano altre soluzioni.

Il peso corporeo dovrebbe essere registrato individualmente per tutti gli animali una volta per settimana durante le prime 13 settimane del periodo di saggio ed almeno una volta ogni 4 settimane in seguito.

#### *Esami clinici*

##### *Ematologia*

L'esame ematologico (ad esempio contenuto dell'emoglobina, volume delle cellule impaccate, globuli rossi totali, globuli bianchi totali, piastrine o altre misure del potenziale di coagulazione) dovrebbe essere eseguito dopo 3 mesi, 6 mesi ed approssimativamente a intervalli successivi di 6 mesi ed alla conclusione, sui campioni di sangue raccolti da 10 ratti per sesso di tutti i gruppi. Se possibile, i campioni dovrebbero essere prelevati dagli stessi ratti a ogni intervallo.

Se le osservazioni cliniche suggeriscono un peggioramento nella salute degli animali durante lo studio, si dovrebbe eseguire un conteggio differenziale ematico degli animali colpiti.

Un conteggio differenziale ematico viene eseguito sui campioni provenienti dagli animali appartenenti al gruppo a più elevato dosaggio e nei controlli. I conteggi differenziali del sangue sono eseguiti sul gruppo(i) a dosaggio inferiore immediatamente successivo soltanto se si riscontra una discrepanza notevole tra il gruppo a dosaggio più elevato ed i controlli, o se i risultati dell'esame patologico ne indicano l'esigenza.

##### *Analisi delle urine*

Si dovrebbero raccogliere per analisi i campioni di urina di 10 ratti per sesso per tutti i gruppi, se possibile agli stessi intervalli dell'esame ematologico. Le seguenti determinazioni dovrebbero essere fatte o a partire dai diversi animali o su un campione miscelato sesso/gruppo per i roditori:

- aspetto: volume e densità per i singoli animali,
- proteina, glucosio, chetoni, sangue occulto (semiquantitativamente),
- microscopia del deposito (semiquantitativamente)

##### *Chimica clinica*

Approssimativamente a intervalli di 6 mesi, ed alla conclusione, si prelevano i campioni di sangue per le misure di chimica clinica da tutti i non-roditori e da 10 ratti per sesso di tutti i gruppi, se possibile dagli stessi ratti a ogni intervallo. Inoltre, si dovrebbe prelevare un campione prima del saggio dai non roditori. Il plasma viene preparato da questi campioni e vengono fatte le seguenti determinazioni:

- concentrazione proteina totale,
- concentrazione dell'albumina,
- saggi di funzionalità epatica (come attività fosfatasi alcalina, glutammico piruvico transaminasi <sup>(1)</sup>, glutammico-ossalacetico transaminasi <sup>(2)</sup>) gamma-glutamyl transpeptidasi, ornitina decarbossilasi,
- metabolismo dei carboidrati, come glucosio ematico a digiuno,
- saggi di funzionalità renale come azoto ureico

<sup>(1)</sup> Ora noto come alanina aminotransferasi serica

<sup>(2)</sup> Ora nota come aspartato aminotransferasi serica

**Necropsia macroscopica**

Tutti gli animali dovrebbero essere sottoposti ad esame necroscopico completo, compresi quelli che sono morti durante l'esperimento a quelli sacrificati perché moribondi. Prima del sacrificio si dovrebbero prelevare campioni di sangue da tutti gli animali per i conteggi differenziali ematici. Si dovrebbero conservare tutte le lesioni e i tumori grossolanamente visibili o sospetti. Si dovrebbe cercare di correlare le osservazioni macroscopiche con i risultati microscopici.

Tutti gli organi e i tessuti dovrebbero essere conservati per l'esame istopatologico. Questo di solito riguarda i seguenti organi e tessuti: cervello <sup>(1)</sup> (midollo/ponte, corteccia cerebellare, corteccia cerebrale), pituitaria, tiroide (compresa paratiroide), timo, polmoni (trachea compresa), cuore, aorta, ghiandole salivari, fegato <sup>(1)</sup>, milza, reni <sup>(1)</sup>, ghiandole surrenali <sup>(1)</sup>, esofago, stomaco, duodeno, digiuno, ileo, intestino cieco, colon, retto, utero, vescica urinaria, linfonodi, pancreas, gonadi <sup>(1)</sup>, organi genitali accessori, ghiandole mammarie femminili, pelle, muscolatura, nervo periferico, midollo spinale (cervicale, toracico, lombare), sterno con midollo osseo e femore (articolazione compresa) e occhi. Sebbene l'insufflazione dei polmoni e della vescica urinaria con un fissativo sia il modo ottimale di conservare questi tessuti, l'insufflazione dei polmoni negli studi di inalazione è un requisito essenziale per l'esame istopatologico appropriato. In studi speciali come quelli dell'inalazione, si dovrebbero studiare tutte le vie respiratorie, compreso naso, faringe e laringe.

Se si eseguono altri esami clinici, le informazioni ottenute con queste procedure dovrebbero essere rese disponibili prima dell'esame microscopico, perché possono fornire indicazioni significative al patologo.

**Istopatologia**

Per la parte di saggio riguardante la tossicità cronica

Esame particolareggiato da effettuarsi su tutti gli organi conservati di tutti gli animali appartenenti al gruppo satellite trattato con dose elevata e al gruppo di controllo. Quando si riscontra una patologia correlata con la sostanza in esame nel gruppo satellite trattato con dose elevata, gli organi-bersaglio di tutti gli altri animali in un qualsiasi altro gruppo satellite trattato dovrebbero essere sottoposti ad esame istologico completo e particolareggiato insieme con quelli dei gruppi trattati nella parte di cancerogenesi dello studio alla sua conclusione.

Per la parte di saggio riguardante la cancerogenesi

- a) L'esame istopatologico completo dovrebbe essere effettuato sugli organi e tessuti di tutti gli animali che muoiono o che vengono uccisi durante la prova e di tutti gli animali dei gruppi trattati con dose elevata e del gruppo di controllo;
- b) tutti i tumori visibili macroscopicamente o le lesioni sospette di essere di origine tumorale, che si riscontrano in qualsiasi organo di tutti i gruppi di animali dovrebbero essere esaminati microscopicamente;
- c) se si riscontra una differenza significativa nell'incidenza delle lesioni neoplastiche nei gruppi di controllo e in quello trattato con dose elevata, si dovrebbe effettuare l'esame istopatologico su quel particolare organo o tessuto, negli altri gruppi;
- d) se la sopravvivenza nel gruppo trattato con dose elevata è significativamente inferiore a quella del gruppo di controllo, si dovrebbe effettuare un esame completo del gruppo trattato con il dosaggio immediatamente inferiore;
- e) quando si riscontra un'evidenza nel gruppo a dosaggio elevato di induzione di effetti tossici o altri effetti che potrebbero influire su una risposta neoplastica, si dovrebbe procedere ad un esame completo del gruppo trattato con il dosaggio immediatamente inferiore.

## 2. DATI

I dati dovrebbero essere riassunti sotto forma di tabella, indicando per ogni gruppo di saggio il numero di animali all'inizio della prova, il numero di animali che presentano tumori o effetti tossici riscontrati durante il saggio, il tempo di individuazione ed il numero di animali in cui sono stati individuati tumori dopo il sacrificio. I risultati dovrebbero essere valutati con un metodo statistico appropriato. Qualsiasi metodo statistico riconosciuto può essere utilizzato.

## 3. RELAZIONE

### 3.1. Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- specie, ceppo, origine, condizioni ambientali, dieta, ecc.;

<sup>(1)</sup> Questi organi, provenienti da 10 animali per sesso e per gruppo (per i roditori) dovrebbero essere pesati.

- condizioni sperimentali:
  - descrizione dell'apparecchiatura di esposizione, includente:
    - progettazione, tipo, dimensioni, sorgente d'aria, sistema per generare particelle ed aerosol, metodo di condizionamento dell'aria, trattamento dell'aria di scarico, metodo di alloggiamento degli animali in una camera di saggio quando questa venga utilizzata. Il dispositivo per misurare la temperatura, l'umidità e, se del caso, la stabilità delle concentrazioni di aerosol o le dimensioni delle particelle.
  - dati di esposizione:
    - questi dovranno essere presentati in forma tabulare con indicazione dei valori medi e una misura della variabilità (ad esempio: deviazione standard) ed includere:
      - a) velocità dei flussi dell'aria attraverso l'attrezzatura di inalazione,
      - b) temperature ed umidità dell'aria,
      - c) concentrazioni nominali (quantità totale della sostanza di saggio immessa nell'attrezzatura di inalazione divisa per il volume dell'aria),
      - d) natura di veicolo, se usato,
      - e) concentrazioni reali nella zona sperimentale di respirazione,
      - f) dimensioni mediane delle particelle (se del caso);
- livelli di dose (veicolo compreso, se utilizzato) e concentrazioni,
- dati di incidenza dei tumori secondo il sesso, la dose e il tipo di tumore,
- registrazione del tempo degli eventi letali (durante l'esperimento) oppure specificare se gli animali siano sopravvissuti fino alla conclusione del saggio, incluso gruppo satellite;
- dati sulla risposta tossica per sesso e per dose;
- descrizione degli effetti tossici o di altri effetti;
- registrazione della data di osservazione di ogni sintomo anomalo e del decorso successivo,
- risultati oftalmologici;
- dati su alimentazione e peso corporeo,
- risultati dell'esame ematologico;
- risultati degli esami di biochimica clinica (inclusa qualsiasi analisi delle urine),
- risultati dell'esame necroscopico;
- descrizione particolareggiata di tutti i risultati istopatologici,
- elaborazione statistica dei risultati con descrizione dei metodi impiegati,
- discussione dei risultati;
- interpretazione dei risultati.

### 3.2. Valutazione ed interpretazione

Vedi introduzione generale, parte B.

## 4. RIFERIMENTI

Vedi introduzione generale, parte B

## B.34. SAGGIO DI TOSSICITÀ SULLA RIPRODUZIONE UNA GENERAZIONE

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B

## 1.2 Definizioni

Vedi introduzione generale, parte B

## 1.3 Sostanza di riferimento

Nessuna

## 1.4 Principi del metodo di saggio

La sostanza sperimentale è somministrata in dosi graduate a diversi gruppi di animali maschi e femmine. I maschi dovrebbero essere sottoposti a dosaggio durante la crescita e per almeno un ciclo spermatogenico completo (approssimativamente 56 giorni per il topo e 70 giorni per il ratto) per provocare qualsiasi tipo di effetto avverso da parte della sostanza di saggio sulla spermatogenesi.

Le femmine della generazione P dovrebbero essere sottoposte a dosaggio per almeno due cicli estrali completi per suscitare qualsiasi tipo di effetto contrario della sostanza in esame sull'estro. Gli animali sono poi accoppiati. La sostanza in esame viene somministrata ad entrambi i sessi durante il periodo di accoppiamento ed in seguito soltanto alle femmine durante la gravidanza e per la durata del periodo di allattamento. Per la somministrazione della sostanza in esame per via inalatoria, il metodo richiederebbe modifiche.

## 1.5 Criteri qualitativi

Nessuno.

## 1.6 Descrizione del metodo di saggio

*Preparazioni*

Prima del saggio gli animali giovani e sani sono mescolati con metodo casuale ed assegnati ai gruppi trattati e di controllo. Gli animali sono tenuti nelle condizioni sperimentali di alloggiamento e nutrizione per almeno 5 giorni prima dell'inizio della prova. Si raccomanda di somministrare la sostanza in esame nella dieta o nell'acqua da bere. Sono accettabili anche altre vie di somministrazione. Il dosaggio per tutti gli animali dovrebbe essere fatto con lo stesso metodo durante l'appropriato periodo dell'esperimento. Se un veicolo od altri additivi sono utilizzati per facilitare il dosaggio, essi non dovranno notoriamente produrre effetti tossici. Il dosaggio dovrà essere fatto su una base di sette giorni per settimana.

*Animali da esperimento**Scelta della specie*

Il ratto o il topo sono le specie preferite. Si dovrebbero utilizzare animali sani, non sottoposti in precedenza a esperimenti. Non si dovrebbero utilizzare ceppi a bassa fecondità. Gli animali di saggio dovrebbero essere caratterizzati quanto alle specie, al ceppo, al sesso, al peso e all'età.

Per una valutazione adeguata della fertilità, si dovrebbero studiare sia i maschi sia le femmine. Tutti gli animali per il saggio e i controlli dovrebbero essere svezzati prima dell'inizio del dosaggio.

*Numero e sesso*

Ogni gruppo trattato e di controllo dovrebbe contenere un numero sufficiente di animali per avere circa 20 femmine incinte prossime a partorire o quasi al termine della gravidanza.

L'obiettivo è di avere sufficienti gravidanze e figliate per assicurare una valutazione significativa del potenziale della sostanza di influire negativamente sulla fertilità, sulla gravidanza e sul comportamento materno negli animali della generazione P, e sul lattante, sulla crescita e sullo sviluppo della figliata F<sub>1</sub> dal concepimento allo svezzamento.

#### Condizioni di saggio

Il cibo e l'acqua dovrebbero essere forniti *ad libitum*. Nell'imminenza del parto, le femmine incinte dovrebbero essere messe in gabbie separate o in gabbie apposite per il parto e possono essere rifornite di materiale per la costruzione della tana.

#### Livelli di dose

Si dovrebbero usare almeno tre gruppi di trattamento e un gruppo di controllo. Se si usa un veicolo per la somministrazione della sostanza in esame, il gruppo di controllo dovrebbe ricevere il veicolo al livello di dose più alto usato. Se una sostanza in esame provoca una riduzione dell'ingestione o dell'utilizzazione della dieta, si potrebbe considerare necessario l'uso di un gruppo di controllo parallelo. Idealmente, a meno che non sia limitato dalla natura fisico/chimica o dagli effetti biologici della sostanza in esame, il livello di dose più elevato dovrebbe indurre effetti tossici, ma non mortalità nei genitori P. La(e) dose(i) intermedia(e) dovrebbe indurre effetti tossici minimi attribuibili alla sostanza in esame e la dose più bassa non dovrebbe indurre alcun effetto osservabile sui genitori o sulla prole. Quando somministrato con sonda o in capsula, il dosaggio di ogni animale dovrebbe essere basato sul peso corporeo del singolo animale e regolato settimanalmente per tener conto dei cambiamenti del peso corporeo. Per le femmine gravide, i dosaggi possono essere basati sul peso corporeo nel giorno 0 o al 6° giorno di gravidanza.

#### Saggio limite

Nel caso di sostanze a bassa tossicità, se un livello di dose di almeno 1 000 mg/kg non produce evidenza di interferenza con la funzione riproduttiva, studi con altri livelli di dose possono essere considerati non necessari. Se uno studio preliminare con un livello di dose elevato, con evidenza precisa di tossicità materna, non evidenzia effetti avversi sulla fertilità, studi con altri livelli di dose possono essere considerati non necessari.

#### Svolgimento del saggio

##### Programmi sperimentali

Il dosaggio giornaliero dei genitori maschi P dovrebbe cominciare a circa cinque-nove settimane di età, dopo svezamento e acclimatazione per almeno 5 giorni. Nei ratti, il dosaggio viene continuato per dieci settimane prima del periodo di accoppiamento (per i topi, otto settimane). I maschi dovrebbero essere sacrificati ed esaminati sia alla fine del periodo di accoppiamento oppure, alternativamente, essi possono essere mantenuti con la dieta sperimentale per la possibile produzione di una seconda figliata e dovrebbero essere sacrificati un po' prima della fine dello studio. Per le femmine genitrici P il dosaggio dovrebbe cominciare dopo almeno 5 giorni di acclimatazione e continuare per almeno due settimane prima dell'accoppiamento. Il dosaggio giornaliero delle femmine P dovrebbe continuare durante il periodo di accoppiamento di tre settimane, la gravidanza e fino allo svezamento della prole F<sub>1</sub>. Si dovrebbe dare attenzione a modifiche del programma di dosaggio sulla base di altre informazioni disponibili sulla sostanza in esame, quali l'induzione del suo metabolismo o bioaccumulazione.

##### Procedura di accoppiamento

Negli studi degli effetti tossici sulla riproduzione si possono usare i seguenti sistemi di accoppiamento: 1:1 (un maschio e una femmina), oppure 1:2 (un maschio e due femmine).

Usando il sistema di accoppiamento 1:1 si dovrebbe mettere una femmina con lo stesso maschio finché la femmina non rimanga gravida o finché non siano trascorse tre settimane. Ogni mattina le femmine dovrebbero essere esaminate per la presenza di sperma o di tappi vaginali. Il giorno 0 di gravidanza è definito come il giorno in cui si trova un tappo vaginale oppure lo sperma.

Le coppie che non riescono ad accoppiarsi dovrebbero essere studiate per determinare la causa della sterilità apparente. Questo può comportare procedure quali, ad esempio, quella di fornire opportunità supplementari di accoppiamento con altri maschi o femmine provati, esame microscopico degli organi riproduttori, e esame del ciclo estrale o della spermatogenesi.

##### Dimensioni della figliata

Gli animali sottoposti a dosaggio durante lo studio di fertilità vengono lasciati partorire normalmente ed allevare liberamente la prole fino alla fase di svezamento.

Se si effettua una standardizzazione si suggerisce la seguente procedura. Tra il 1° ed il 4° giorno dopo la nascita, la dimensione di ogni figliata può essere regolata eliminando i piccoli in più, in modo da avere, nella misura del possibile, quattro maschi e quattro femmine per figliata.

Ogni volta che il numero di maschi o di femmine non permette di avere quattro animali di ogni sesso per figliata, è accettabile una regolazione parziale (per esempio, cinque maschi e tre femmine). La standardizzazione non è applicabile alle figliate di meno di otto piccoli.

#### Osservazioni

Durante tutto il periodo di saggio, ogni animale dovrebbe essere sottoposto ad osservazione almeno una volta al giorno. Si dovrebbero registrare tutte le variazioni comportamentali pertinenti, i segni di parto difficile o prolungato, e tutti i sintomi di tossicità, compresa la mortalità. Nei periodi precedenti e durante l'accoppiamento, il consumo alimentare può essere misurato quotidianamente. Dopo il parto e durante l'allattamento, le misurazioni del consumo di alimento (e del consumo dell'acqua quando la sostanza sperimentale è somministrata in acqua potabile) dovrebbero essere effettuate nello stesso giorno della pesatura delle figliate. I maschi e le femmine P dovrebbero essere pesati nel primo giorno del dosaggio e in seguito settimanalmente. Queste osservazioni dovrebbero essere registrate individualmente per ogni animale adulto.

La durata della gestazione dovrebbe essere calcolata dal giorno 0 di gravidanza. Ogni figliata dovrebbe essere esaminata non appena possibile dopo il parto per stabilire il numero ed il sesso del piccolo, dei nati morti, dei nati vivi e la presenza di grosse anomalie.

I piccolo morti e quelli sacrificati al 4° giorno dovrebbero essere conservati e studiati per la constatazione di possibili difetti.

I piccoli vivi dovrebbero essere contati e le figliate pesate al mattino dopo la nascita, al 4° giorno e al 7° e settimanalmente fino alla conclusione dello studio, quando gli animali dovrebbero essere pesati individualmente. Le anomalie fisiche o comportamentali osservate nei ceppi o nella prole dovrebbero essere registrate.

#### Patologia

##### Necropsia

Al momento del sacrificio o della morte durante lo studio, gli animali della generazione P dovrebbero essere esaminati macroscopicamente per l'individuazione di tutte le anomalie strutturali o mutamenti patologici, prestando particolare attenzione agli organi del sistema riproduttivo. I piccolo morti o moribondi dovrebbero essere esaminati per individuare eventuali difetti.

##### Istopatologia

Le ovaie, l'utero, il collo dell'utero, la vagina, i testicoli, l'epididimo, le vescichette seminali, la prostata, la ghiandola della coagulazione, la ghiandola pituitaria e l'organo(i)-bersaglio di tutti gli animali P dovrebbero essere conservati per l'esame microscopico. Nel caso in cui questi organi non siano stati esaminati in altri studi con dosi multiple, essi dovrebbero essere esaminati microscopicamente in tutti gli animali dei gruppi trattati con dose elevata e di controllo e negli animali che muoiono durante l'esperimento, quando fattibile.

Gli organi di questi animali che mostrano anomalie dovrebbero quindi essere esaminati in tutti gli altri animali P. In questi casi, si dovrebbe eseguire l'esame microscopico di tutti i tessuti che mostrano alterazioni patologiche macroscopiche. Come suggerito per le procedure di accoppiamento, gli organi riproduttivi degli animali sospetti di sterilità possono essere sottoposti all'esame microscopico.

## 2. DATI

I dati possono essere riassunti sotto forma di tabella, indicando per ogni gruppo sperimentale il numero di animali all'inizio del saggio, il numero di maschi fertili, il numero di femmine incinte, i tipi di cambiamenti e la percentuale degli animali che mostrano ciascun tipo di cambiamento. Quando possibile, i risultati numerici dovrebbero essere valutati con un metodo statistico idoneo. Qualsiasi metodo statistico generalmente riconosciuto può essere utilizzato.

## 3. RELAZIONE

### 3.1 Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- specie/ceppo usato,
- dati sulla risposta tossica per sesso e per dose, compresa la fertilità, la gestazione normale e la vitalità,



- tempo di morte durante lo studio o, se gli animali sono sopravvissuti fino al tempo previsto per il sacrificio, alla conclusione dello studio,
- tabella indicante i pesi di ogni figliata, il peso medio dei piccoli ed i pesi individuali dei piccoli a termine,
- effetti tossici o altri effetti sulla riproduzione, sulla prole, sulla crescita postnatale,
- data di osservazione di ogni segno anormale e decorso successivo,
- dati sul peso corporeo degli animali P,
- risultati della microscopia,
- descrizione particolareggiata di tutti i risultati degli esami microscopici,
- elaborazione statistica dei risultati, quando appropriata,
- discussione dei risultati,
- interpretazione dei risultati

3.2 Valutazione ed interpretazione

Vedi introduzione generale, parte B

4 RIFERIMENTI

Vedi introduzione generale, parte B

**B.35. SAGGIO DI TOSSICITÀ SULLA RIPRODUZIONE: DUE GENERAZIONI****METODO****1.1 Introduzione**

Vedi introduzione generale, parte B

**1.2 Definizioni**

Vedi introduzione generale, parte B

**1.3 Sostanze di riferimento**

Nessuna.

**1.4 Principi del metodo di saggio**

La sostanza in esame è somministrata in dosi graduate a diversi gruppi di animali maschi e femmine. I maschi della generazione P dovrebbero essere sottoposti a dosaggio durante la crescita per almeno un ciclo spermatogenico completo (approssimativamente 56 giorni nel topo e 70 giorni nel ratto) affinché la sostanza in esame provochi ogni effetto contrario sulla spermatogenesi.

Le femmine della generazione P dovrebbero essere dosate per almeno due cicli estrali completi perché la sostanza in esame provochi ogni effetto contrario sull'estro. Allo svezzamento, la somministrazione della sostanza viene continuata sulla prole F<sub>1</sub> durante la crescita fino all'età adulta, durante l'accoppiamento e la produzione di una generazione F<sub>2</sub>, e finché la generazione F<sub>2</sub> sia svezzata. Per la somministrazione per inalazione della sostanza sperimentale, il metodo richiederà modifiche.

**1.5 Criteri qualitativi**

Nessuno

**1.6 Descrizione del metodo di saggio****Preparazioni**

Prima della prova, gli animali sani sono mescolati con metodo casuale ed assegnati ai gruppi trattati e di controllo. Gli animali genitori P sono tenuti nelle condizioni sperimentali di alloggiamento e nutrizione per almeno 5 giorni prima della prova. Si raccomanda di somministrare la sostanza in esame nella dieta o nell'acqua da bere. Sono accettabili anche altre vie di somministrazione. Tutti gli animali dovrebbero essere dosati con lo stesso metodo durante l'intero periodo sperimentale. Se un veicolo od altri additivi sono utilizzati per facilitare il dosaggio, essi non dovrebbero notoriamente produrre effetti tossici. Il dosaggio dovrebbe essere effettuato su una base di sette giorni per settimana.

**Animali da esperimento: scelta della specie**

Il ratto o il topo sono le specie preferite. Si dovrebbero usare animali sani P, non sottoposti a esperimenti in precedenza. Non si dovrebbero usare ceppi a bassa fecondità. Gli animali da laboratorio dovrebbero essere caratterizzati quanto alla specie, al ceppo, al sesso, al peso e/o all'età.

Per un'adeguata valutazione della fertilità, si dovrebbero studiare sia i maschi che le femmine. Tutti gli animali del gruppo di saggio e di quello di controllo dovrebbero essere svezzati prima dell'inizio del dosaggio.

**Numero e sesso**

Ogni gruppo di saggio e di controllo dovrebbe contenere un numero sufficiente di animali perché vi siano circa 20 femmine incinte o al termine della gravidanza. L'obiettivo è di avere sufficienti gravidanze e prole per assicurare una valutazione significativa del potenziale della sostanza di influire negativamente sulla fertilità, sulla gravidanza.

sul comportamento materno e sul lattante, sulla crescita e sullo sviluppo della prole  $F_1$ , dal concepimento alla maturità, e lo sviluppo della loro prole  $F_2$  fino allo svezzamento

#### *Condizioni sperimentali*

Il cibo e l'acqua dovrebbero essere forniti ad libitum. Nell'imminenza del parto, le femmine incinte dovrebbero essere messe in gabbie separate o in gabbie apposite per il parto e possono essere rifornite di materiale per la costruzione della tana.

#### *Livelli di dose*

Si dovrebbero usare almeno tre gruppi di trattamento e un gruppo di controllo. Se si usa un veicolo per la somministrazione della sostanza in esame, il gruppo di controllo dovrebbe ricevere il veicolo al livello di dose più elevato usato. Se una sostanza in esame produce una riduzione dell'ingestione o dell'utilizzazione della dieta, si potrebbe considerare necessario l'uso di un gruppo di controllo parallelo. Idealmente, a meno che non sia limitato dalla natura fisico/chimica o dagli effetti biologici della sostanza in esame, il livello di dose più elevato dovrebbe indurre effetti tossici, ma non mortalità nei genitori P. La dose(i) intermedia(e) dovrebbe(ero) indurre effetti tossici minimi attribuibili alla sostanza di saggio e la dose più bassa non dovrebbe indurre effetti contrari osservabili sui genitori o sulla prole. Quando somministrato con sonda o in capsula, il dosaggio di ogni animale dovrebbe essere basato sul peso corporeo del singolo animale e regolato settimanalmente per tener conto dei cambiamenti del peso corporeo. Per le femmine gravide, i dosaggi possono essere basati sul peso corporeo al giorno 0 o al 6° giorno di gravidanza, se lo si desidera.

#### *Saggio limite*

Nel caso di sostanze a bassa tossicità, se un livello di dose di almeno 1 000 mg/kg non produce sintomi di interferenza con la funzione riproduttiva, studi con altri livelli di dose possono essere considerati non necessari. Se uno studio preliminare con un livello di dose elevato, con evidenza precisa di tossicità materna, non evidenzia effetti avversi sulla fertilità, studi con altri livelli di dose possono essere considerati non necessari.

#### *Svolgimento del saggio*

##### *Programmi sperimentali*

Il dosaggio giornaliero dei genitori maschi P dovrebbe cominciare a circa cinque-nove settimane di età, dopo svezzamento e acclimatazione per almeno 5 giorni. Nei ratti, il dosaggio viene continuato per dieci settimane prima del periodo di accoppiamento (per i topi, otto settimane). I maschi dovrebbero essere sacrificati ed esaminati sia alla fine del periodo di accoppiamento oppure, alternativamente, essi possono essere mantenuti con la dieta sperimentale per la possibile produzione di una seconda figliata e dovrebbero essere sacrificati ed esaminati un po' prima della fine dello studio. Per le femmine genitrici P il dosaggio dovrebbe cominciare dopo almeno 5 giorni di acclimatazione e continuare per almeno due settimane prima dell'accoppiamento. Il dosaggio giornaliero delle femmine P dovrebbe continuare durante il periodo di accoppiamento di tre settimane, la gravidanza e fino allo svezzamento della prole  $F_1$ . Si dovrebbe porre attenzione a modifiche del programma di dosaggio sulla base di altre informazioni disponibili sulla sostanza in esame, quali l'induzione del suo metabolismo o bioaccumulazione.

Il dosaggio degli animali  $F_1$  comincia allo svezzamento e termina quando essi vengono sacrificati.

#### *Procedura di accoppiamento*

Negli studi degli effetti tossici sulla riproduzione si possono usare i seguenti sistemi di accoppiamento: 1:1 (un maschio e una femmina), oppure 1:2 (un maschio e due femmine).

Usando il sistema di accoppiamento 1:1 si dovrebbe mettere una femmina con lo stesso maschio finché la femmina non rimanga gravida o finché non siano trascorse tre settimane. Ogni mattina le femmine dovrebbero essere esaminate per la presenza di sperma o di tappi vaginali. Il giorno 0 di gravidanza è definito come il giorno in cui si trova un tappo vaginale oppure lo sperma.

Tenendo conto della spermatogenesi, la prole  $F_1$  non dovrebbe essere accoppiata fino all'età di almeno 11 settimane per i topi, e di 13 settimane per i ratti. Per l'accoppiamento della prole  $F_1$ , un maschio ed una femmina sono scelti con metodo casuale tra ogni figliata per accoppiamento incrociato con un animale di un'altra figliata dello stesso gruppo di dosaggio, per produrre la generazione  $F_2$ . I maschi e le femmine  $F_1$  non scelti per l'accoppiamento sono sacrificati allo svezzamento.

Le coppie che non riescono ad accoppiarsi dovrebbero essere studiate per determinare la causa della sterilità apparente. Questo può comportare procedure quali, ad esempio, quella di fornire opportunità supplementari di accoppiamento con altri maschi o femmine provati, esame microscopico degli organi riproduttivi, e esame del ciclo estrale o della spermatogenesi.

#### Dimensioni della figliata

Gli animali sottoposti a dosaggio durante lo studio di fertilità vengono lasciati partorire normalmente ed allevare liberamente la prole fino alla fase di svezzamento.

Se si effettua una standardizzazione, si suggerisce la seguente procedura. Tra il 1° ed il 4° giorno dopo la nascita, la dimensione di ogni figliata può essere regolata eliminando i piccoli in più, in modo da avere, nella misura del possibile quattro maschi e quattro femmine per figliata.

Ogni volta che il numero di maschi o di femmine non permette di avere quattro animali di ogni sesso per figliata, è accettabile una regolazione parziale (per esempio, cinque maschi e tre femmine). La normalizzazione non è applicabile alle figliate di meno di otto piccoli. La standardizzazione delle figliate  $F_2$  è condotta nello stesso modo.

#### Osservazioni

Durante tutto il periodo di saggio, ogni animale dovrebbe essere sottoposto ad osservazione almeno una volta al giorno. Si dovrebbero registrare tutte le variazioni comportamentali pertinenti, i segni di parto difficile o prolungato, e tutti i sintomi di tossicità, compresa la mortalità. Nei periodi precedenti e durante l'accoppiamento, il consumo alimentare può essere misurato settimanalmente. A scelta, il consumo alimentare durante la gravidanza potrà essere misurato ogni giorno. Dopo il parto e durante la lattazione, le misurazioni del consumo di alimento dovrebbero essere effettuate nello stesso giorno della pesatura delle figliate. Gli animali genitori (P ed  $F_1$ ) dovrebbero essere pesati nel primo giorno del dosaggio e in seguito settimanalmente. Queste osservazioni dovrebbero essere registrate individualmente per ogni animale adulto.

La durata della gestazione dovrebbe essere calcolata dal giorno 0 di gravidanza. Ogni figliata dovrebbe essere esaminata non appena possibile dopo il parto per stabilire il numero ed il sesso dei piccoli, dei nati morti, dei nati vivi e la presenza di grosse anomalie. I piccoli morti e quelli sacrificati al 4° giorno dovrebbe essere conservati per la constatazione di possibili difetti.

Si dovrebbero contare i nati vivi e procedere alla pesatura delle figliate il mattino dopo la nascita, poi il 4° e il 7° giorno e quindi settimanalmente fino al termine dell'esperimento quando gli animali dovrebbero essere pesati individualmente. Si dovrebbero registrare le anomalie comportamentali delle genitrici e della prole.

#### Patologia

##### Necropsia

Tutti gli animali adulti P ed  $F_1$  dovrebbero essere sacrificati quando non più necessari per valutare gli effetti riproduttivi. La prole  $F_1$  non selezionata per l'accoppiamento e tutta la prole  $F_2$  dovrebbe essere sacrificata una volta svezzata.

Al momento del sacrificio o della morte durante lo studio, tutti gli animali genitori (P ed  $F_1$ ) dovrebbero essere esaminati microscopicamente per l'individuazione di tutte le anomalie strutturali o le mutazioni patologiche, dedicando particolare attenzione agli organi del sistema riproduttivo. I piccoli morti o moribondi dovrebbero essere esaminati per individuare eventuali anomalie.

#### Istopatologia

Le ovaie, l'utero, il collo dell'utero, la vagina, i testicoli, l'epididimo, le vescichette seminali, la prostata, la ghiandola della coagulazione, la ghiandola pituitaria e l'organo(i)-bersaglio di tutti gli animali P dovrebbero essere conservati per l'esame microscopico. Nel caso in cui questi organi non siano stati esaminati in altri studi con dosi multiple, essi dovrebbero essere esaminati microscopicamente in tutti gli animali dei gruppi trattati con dose elevata e di controllo e negli animali che muoiono durante l'esperimento, quando fattibile. Gli organi che mostrano anomalie in questi animali dovrebbero quindi essere esaminati in tutti gli altri gruppi di dose. In questi casi, si dovrebbe eseguire l'esame microscopico di tutti i tessuti che mostrano alterazioni patologiche macroscopiche. Come suggerito per le procedure di accoppiamento, gli organi riproduttivi degli animali sospetti di sterilità possono essere sottoposti all'esame microscopico.

## 2. DATI

### *Elaborazione dei risultati*

I dati possono essere riassunti sotto forma di tabella, indicando per ogni gruppo sperimentale il numero di animali all'inizio del saggio, il numero di animali gravidi, i tipi di cambiamenti e la percentuale degli animali che mostrano ciascun tipo di cambiamento.

Quando possibile, i risultati numerici dovrebbero essere valutati con un metodo statistico idoneo. Qualsiasi metodo statistico generalmente accettato può essere utilizzato.

## 3. RELAZIONE

### 3.1. Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- specie/ceppo usato,
- dati sulla risposta tossica per sesso e per dose, inclusi gli indici di fertilità, gestazione e vitalità,
- tempo di morte durante lo studio o se gli animali sono sopravvissuti fino alla conclusione dello studio,
- tabella indicante i pesi di ogni figliata, il peso medio dei piccoli ed i pesi individuali dei piccoli a termine,
- effetti tossici o altri effetti sulla riproduzione, sulla prole, sulla crescita postnatale,
- data di osservazione di ogni segno anormale e decorso successivo,
- dati sul peso corporeo degli animali P e F<sub>1</sub>,
- risultati della microscopia,
- descrizione particolareggiata di tutti i risultati degli esami microscopici,
- elaborazione statistica dei risultati, quando appropriata,
- discussione dei risultati,
- interpretazione dei risultati.

### 3.2. Valutazione ed interpretazione

Vedi introduzione generale, parte B.

## 4. RIFERIMENTI

Vedi introduzione generale, parte B.

## B.36. TOSSICOCINETICA

## 1 METODO

## 1.1 Introduzione

Vedi introduzione generale, parte B.

## 1.2 Definizioni

Vedi introduzione generale, parte B.

## 1.3 Sostanze di riferimento

Nessuna.

## 1.4 Principi del metodo di saggio

Si somministra la sostanza in esame per una via appropriata. In relazione agli obiettivi dello studio, la sostanza può essere somministrata, in dose singola o in dosi ripetute nel corso di periodi di tempo definiti, a uno o più gruppi di animali da esperimento. Successivamente, in relazione al tipo di studio effettuato, si determinano la sostanza e/o i suoi metaboliti nei fluidi corporei e nei tessuti e/o negli escreti.

Gli studi possono essere effettuati con forme «non marcate» o «marcate» delle sostanze in esame. Quando è fatto uso di un marcatore, è opportuno che esso sia collocato nella sostanza in maniera tale da fornire la maggior quantità possibile di informazioni sul destino del composto.

## 1.5 Criteri qualitativi

Nessuno.

## 1.6 Descrizione del metodo di saggio

*Preparazioni*

Si acclimatano alle condizioni del laboratorio per almeno cinque giorni prima del saggio animali adulti sani e giovani. Prima del saggio gli animali vengono mischiati con metodo casuale ed assegnati ai gruppi destinati ai trattamenti. In situazioni speciali possono essere usati animali molto giovani, femmine gravide o pretrattati.

*Condizioni sperimentali**Animali da esperimento*

Gli studi tossicocinetici possono essere effettuati su una o più specie animali appropriate, e dovrebbero tenere conto delle specie usate o che si pensa di usare per altri studi tossicologici sulla medesima sostanza in esame. Quando in un saggio si fa uso di ratti, la variazione del peso corporeo non dovrebbe essere maggiore del  $\pm 20\%$  del peso medio.

*Numero e sesso*

Per gli studi di assorbimento e di escrezione sarebbe opportuno che in ciascun gruppo di dose vi siano inizialmente quattro animali. Una preferenza per l'uno o l'altro sesso non è imperativa, ma in determinate circostanze può essere necessario studiare entrambi i sessi. Se vi sono differenze di risposta secondo i sessi, quattro individui per sesso dovrebbero essere sottoposti al saggio. Nel caso di studi su animali diversi dai roditori può essere usato un numero minore di individui.

Quando si studia la distribuzione nei tessuti, la grandezza del gruppo iniziale dovrebbe tenere conto sia del numero degli animali da sacrificare in ciascuna fase che del numero delle fasi da considerare.

Negli studi del metabolismo le dimensioni del gruppo sono in relazione con le esigenze specifiche dello studio. Per gli studi con dosi multiple e in fasi multiple, le dimensioni del gruppo dovrebbero tenere conto del numero sia delle fasi che dei sacrifici in programma, e in ogni caso il gruppo non deve comprendere meno di due animali. Le dimensioni del gruppo dovrebbero essere sufficienti per fornire una caratterizzazione accettabile dell'assorbimento, del plateau e della deplezione (a seconda del caso considerato) della sostanza in esame e/o dei suoi metaboliti.

#### Livelli di dosaggio

Nel caso della somministrazione in un'unica dose almeno due livelli di dosaggio dovrebbero essere usati. Vi dovrebbero essere una dose bassa, alla quale non si osservano effetti tossici, e una dose elevata, alla quale vi possono essere cambiamenti dei parametri tossicocinetici o si manifestano effetti tossici.

Nel caso della somministrazione di dosi ripetute la dose bassa è normalmente sufficiente, ma in determinate circostanze può essere necessaria anche una dose alta.

#### Vie di somministrazione

Gli studi tossicocinetici dovrebbero essere effettuati facendo uso della stessa via e, se del caso, dello stesso veicolo usato, o che si pensa di usare negli altri studi di tossicità. La sostanza in esame è normalmente somministrata per via orale mediante sonda gastrica o nella dieta, o è applicata alla cute, o somministrata per inalazione per periodi di tempo definiti a gruppi di animali da esperimento. Per la determinazione dell'assorbimento relativo per altre vie può essere utile la somministrazione della sostanza in esame per via endovenosa. Entro breve tempo della somministrazione endovenosa di una sostanza è inoltre possibile ottenere utili informazioni sul suo profilo di distribuzione.

Si dovrebbe tener presente la possibilità di un'interferenza fra il veicolo e la sostanza in esame. Si dovrebbe fare attenzione alle differenze di assorbimento fra la somministrazione della sostanza in esame per sonda gastrica e rispettivamente nell'alimentazione, ed all'esigenza di una determinazione precisa della dose, specialmente quando la sostanza in esame viene somministrata con la dieta.

#### Periodo di osservazione

Tutti gli animali dovrebbero essere osservati quotidianamente, e dovrebbe essere presa nota di tutti i segni di tossicità e degli altri elementi clinici rilevanti, ivi compresi il momento dell'insorgenza, il grado e la durata.

#### Procedimento

Dopo la pesatura degli animali di saggio si somministra per una via appropriata la sostanza in esame. Se lo si considera importante, gli animali possono essere tenuti a digiuno prima della somministrazione della sostanza in esame:

#### Assorbimento

La velocità e l'entità dell'assorbimento della sostanza somministrata possono essere valutate secondo diversi metodi, con o senza gruppi di riferimento<sup>(1)</sup>, ad esempio:

- attraverso la determinazione della quantità della sostanza in esame e/o dei suoi metaboliti negli escreti, quali l'urina, la bile, le feci e l'aria inspirata, e della quantità che rimane nella carcassa;
- attraverso il raffronto della risposta biologica (ad esempio negli studi della tossicità acuta) fra i gruppi sottoposti al saggio e i gruppi di controllo e/o di riferimento;
- attraverso il raffronto della quantità di sostanza e/o di metabolita escreta per via renale nei gruppi sottoposti al saggio e in gruppi di riferimento;
- attraverso la determinazione dell'area al di sotto della curva del livello plasmatico in funzione del tempo della sostanza in esame e/o dei suoi metaboliti, e attraverso il raffronto con i dati di un gruppo di riferimento.

<sup>(1)</sup> In questo metodo un gruppo di riferimento è un gruppo nel quale la sostanza in esame è somministrata per un'altra via che permette la disponibilità completa della dose

### Distribuzione

Sono attualmente disponibili due procedure che possono essere usate insieme o separatamente per le analisi dei profili di distribuzione:

- un'utile informazione qualitativa si ottiene facendo uso di tecniche autoradiografiche su tutto il corpo,
- un'informazione quantitativa si ottiene sacrificando gli animali a intervalli diversi dopo l'esposizione e determinando la concentrazione e la quantità della sostanza in esame e/o dei suoi metaboliti nei tessuti e negli organi.

### Escrezione

Negli studi di escrezione si raccolgono l'urina, le feci e l'aria espirata e, in determinate circostanze, la bile. La quantità della sostanza in esame e/o dei suoi metaboliti dovrebbe essere misurata in detti escreti ad intervalli diversi dopo l'esposizione, fino a che sia stato escreto intorno al 95% della dose somministrata, ovvero per sette giorni, secondo la condizione che si verifica per prima.

In casi speciali può essere necessario considerare l'escrezione della sostanza in esame nel latte degli animali da esperimento che allattano i piccoli.

### Metabolismo

Per determinare l'estensione e il profilo del metabolismo si dovrebbero analizzare campioni biologici secondo tecniche appropriate. Se vi è la necessità di dare risposta a quesiti derivanti da studi tossicologici precedenti si dovrebbero chiarire le strutture dei metaboliti e proporre vie metaboliche appropriate. Per ottenere informazioni sulle vie metaboliche può essere proficuo effettuare studi in vitro.

Ulteriori informazioni sulle relazioni fra il metabolismo e la tossicità possono essere ottenute da studi biochimici, quali la determinazione degli effetti sui sistemi di enzimi metabolizzanti, sulla deplezione dei composti sulfidrilici endogeni non proteici e sull'unione della sostanza con macromolecole.

## 2. DATI

In relazione al tipo di studio effettuato i dati dovrebbero essere riassunti in forma di tabella integrata se del caso da rappresentazioni grafiche. Per ciascun gruppo di saggio dovrebbero essere poste in evidenza, in tutti i casi in cui ciò è possibile, le variazioni medie e statistiche delle misurazioni in relazione al tempo, al dosaggio, ai tessuti e agli organi. L'entità dell'assorbimento e la quantità e la velocità dell'escrezione dovrebbero essere determinate con metodi appropriati. Quando si effettuano studi del metabolismo, la struttura dei metaboliti identificati dovrebbe essere data e le possibili vie metaboliche presentate.

## 3. RELAZIONE

### 3.1 Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile

- specie, ceppo, provenienza, condizioni ambientali, dieta,
- caratterizzazione di eventuali materiali marcati,
- livelli di dosaggio e intervalli usati,
- via o vie di somministrazione ed ogni veicolo usato,
- effetti tossici ed altri effetti osservati,
- metodi per la determinazione della sostanza in esame e/o dei suoi metaboliti nei campioni biologici, ivi compresa l'aria espirata,
- presentazione in forma tabulare delle misurazioni per sesso, dose regime, tempo, tessuti ed organi,
- presentazione dell'entità dell'assorbimento e dell'escrezione nel tempo,



- metodi per la caratterizzazione e l'identificazione di metaboliti nei campioni biologici,
- metodi per le misurazioni biochimiche concernenti il metabolismo,
- vie proposte per il metabolismo,
- discussione dei risultati,
- interpretazione dei risultati

3.2. Valutazione e interpretazione

Vedi introduzione generale, parte B.

4 RIFERIMENTI

Vedi introduzione generale, parte B.

**•B.37 NEUROTOSSICITÀ RITARDATA DI SOSTANZE ORGANOFOSFORICHE DOPO ESPOSIZIONE ACUTA****1 METODO****1.1 Introduzione**

Per la valutazione degli effetti tossici delle sostanze è importante tener conto della facoltà di talune classi di sostanze di indurre effetti neurotossici specifici che potrebbero non essere messi in luce da altri studi di tossicità. Alcune sostanze organofosforiche, che hanno evidenziato una neurotossicità ritardata, dovrebbero essere oggetto di una valutazione in questo senso.

Saggi preliminari in vitro consentono di identificare le sostanze suscettibili di indurre una polineuropatia ritardata; tuttavia risultati di studi in vitro non garantiscono l'assenza di neurotossicità della sostanza saggiata.

Vedi introduzione generale, parte B.

**1.2 Definizioni**

*Le sostanze organofosforiche comprendono esteri, tioesteri o anidridi organofosforici neutri degli acidi organofosforico, organofosfonico o organofosforamidico o dei corrispondenti acidi fosforotioico, fosfonotioico o fosforotioamidico, o altre sostanze suscettibili di indurre gli effetti neurotossici ritardati talvolta osservati in questa classe di sostanze.*

*La neurotossicità ritardata è una sindrome associata ad atassia prolungata a comparsa tardiva, ad assonopatie distali del midollo spinale e dei nervi periferici e ad un'inibizione e un'invecchiamento dell'esterasi suggestiva di neuropatia (NTE, neuropathy target esterase) nei tessuti nervosi.*

**1.3 Sostanze di riferimento**

Una sostanza di riferimento può essere saggiata in un gruppo di controllo positivo al fine di dimostrare che, nelle condizioni sperimentali utilizzate, la reazione delle specie esaminate non ha subito variazioni significative.

Una sostanza neurotossica di comune utilizzo è il tri-*o*-tolil fosfato [CAS 78-30-8, EINECS 201-103-5, nomenclatura CAS: acido fosfonico, tris (2-metilfenil)estere], noto anche come tris-*o*-cresil fosfato.

**1.4 Principio del metodo di saggio**

La sostanza in esame viene somministrata per via orale in un'unica dose a galline eventualmente protette contro effetti colinergici acuti. Gli animali vengono tenuti in osservazione per 21 giorni al fine di individuare eventuali anomalie del comportamento, atassia e paralisi. A 24 e 48 ore di distanza dalla somministrazione vengono effettuate analisi biochimiche, e in particolare l'inibizione della NTE, su galline selezionate da ciascun gruppo secondo un criterio di casualità. Ventun giorni dopo l'esposizione si sopprimono gli animali superstiti e si procede all'esame istopatologico di determinati tessuti nervosi.

**1.5 Descrizione del metodo di saggio****1.5.1 Preparazioni**

Galline adulte, giovani e sane, che non presentino affezioni virali e non siano trattate con farmaci suscettibili di alterare i risultati del saggio, nonché esenti da turbe della deambulazione, vengono assegnate in modo casuale a gruppi da trattare e di controllo e acclimatate alle condizioni di laboratorio per almeno 5 giorni prima dell'inizio del saggio.

Le gabbie o i recinti saranno sufficientemente ampi affinché gli animali possano muoversi liberamente ed essere facilmente osservati durante la deambulazione.

Di norma la sostanza in esame viene somministrata per via orale tramite sonda gastrica, capsule di gelatina o un metodo analogo. Le sostanze liquide possono essere somministrate non diluite o disciolte in un veicolo appropriato, quale l'olio di mais. Se possibile, si avrà cura di sciogliere le sostanze solide, in quanto dosi elevate di tali sostanze in capsule di gelatina possono non essere completamente assorbite. Per i veicoli non acquosi, le caratteristiche di tossicità del veicolo dovranno essere note o, in caso contrario, determinate prima del saggio.

1 5 2 *Condizioni sperimentali*1 5 2 1 *Animali da esperimento*

Si utilizzeranno di preferenza galline domestiche ovaiole (*Gallus gallus domesticus*), giovani e adulte, di età compresa tra 8 e 12 mesi, appartenenti a razze e a ceppi di taglia standard. Gli animali saranno allevati in condizioni che ne garantiscano la libertà di movimento.

1 5 2 2 *Numero e sesso*

Oltre al gruppo da trattare, si utilizzeranno un gruppo di controllo positivo ed uno con somministrazione del solo veicolo. Quest'ultimo sarà trattato in modo identico al primo, tranne per il fatto che agli animali non verrà somministrata la sostanza in esame.

Ogni gruppo dovrà comprendere un numero sufficiente di animali, in modo che almeno sei esemplari possano essere soppressi per effettuare le analisi biochimiche (tre a 24 ore e tre a 48 ore di distanza dalla somministrazione) ed altri sei possano sopravvivere per i 21 giorni del periodo di osservazione.

Il gruppo di controllo positivo può essere attuale o appartenere a studi recentemente effettuati. Esso comprenderà almeno sei animali trattati con una sostanza neurotossica nota ad effetto ritardato, tre dei quali saranno destinati alle analisi biochimiche e tre all'osservazione. È opportuno procedere ad un aggiornamento periodico dei dati storici. Nuovi dati di controllo positivo dovranno essere elaborati ogniqualvolta venga modificato un elemento essenziale del saggio (quale il ceppo, il tipo di alimentazione o le condizioni di alloggiamento degli animali).

1 5 2 3 *Livelli di dosaggio*

Per la determinazione del livello di dosaggio da utilizzare nello studio principale si procederà ad uno studio preliminare su un numero adeguato di animali suddivisi in gruppi trattati con diversi livelli di dosaggio. Per una corretta definizione di detto parametro sono generalmente necessari in questa fase preliminare, un certo numero di decessi. Tuttavia, al fine di evitare decessi cagionati da effetti colinergici acuti, si potrà fare ricorso ad atropina o ad un altro agente protettivo che non sia suscettibile di interferire con eventuali reazioni neurotossiche ritardate. Esistono diversi modi per la determinazione della dose massima non letale di una sostanza (vedi metodo B 1 bis). Anche i dati di precedenti studi su galline o altre informazioni tossicologiche possono essere utili a questo scopo.

Il livello di dosaggio da utilizzare nello studio principale deve essere il più elevato possibile tenendo conto dei risultati ottenuti nello studio preliminare per la determinazione del dosaggio e del limite massimo di 2.000 mg/kg peso corporeo. Indipendentemente dal tasso di mortalità, è indispensabile che un numero sufficiente di animali sopravviva per l'esecuzione delle analisi biochimiche (sei) e dell'esame istologico del ventunesimo giorno (sei). Per evitare decessi cagionati da effetti colinergici acuti, si potranno somministrare atropina o un analogo agente protettivo che non sia suscettibile di interferire con eventuali reazioni neurotossiche ritardate.

1 5 2 4 *Saggio limite*

Qualora un saggio, effettuato in conformità con il metodo descritto, con un livello di dosaggio di almeno 2.000 mg/kg di peso corporeo/giorno, non produca effetti tossici evidenti e se i dati relativi a sostanze di struttura affine non sono suggestivi di tossicità, può non essere necessario somministrare un dosaggio superiore. Il saggio limite è giustificato, salvo nel caso in cui l'esposizione umana comporti la necessità di utilizzare un più elevato livello di dosaggio.

1 5 2 5 *Periodo di osservazione*

Il periodo di osservazione avrà una durata di 21 giorni.

1 5 3 *Procedimento*

Dopo aver trattato gli animali con un agente protettivo atto a prevenire effetti colinergici acuti potenzialmente letali, si somministra la sostanza in esame in una singola dose.

1 5 3 1 *Osservazioni generali*

Il periodo di osservazione inizia subito dopo l'esposizione alla sostanza. Tutte le galline saranno accuratamente esaminate diverse volte per i primi 2 giorni e almeno quotidianamente a partire dal terzo fino alla soppressione degli animali, prevista per il ventunesimo giorno. Si registreranno tutti i segni di tossicità, nonché il momento della comparsa, la natura, la gravità e la durata di qualsiasi anomalia del comportamento. Per l'atassia si utilizzerà un sistema di classificazione comprendente un minimo di quattro livelli, si registreranno altresì i casi di paralisi. Almeno due volte alla settimana le galline selezionate per l'osservazione dovranno essere tolte dalle gabbie o sottoposte ad attività motoria forzata (per esempio salire le scale) al fine di agevolare l'osservazione degli effetti tossici minimi. Gli animali moribondi o recanti segni gravi e persistenti di sofferenza dovranno essere immediatamente sottoposti ad eutanasia e ad esame necroscopico.

1 5 3 2    **Peso corporeo**

Tutte le galline saranno pesate poco prima della somministrazione della sostanza e almeno una volta alla settimana successivamente

1 5 3 3    **Biochimica**

Pochi giorni dopo l'esposizione si sopprimeranno sei galline scelte in modo casuale da ciascuno dei gruppi trattati e di controllo negativo e tre appartenenti al gruppo di controllo positivo (se realizzato). Il cervello e il midollo spinale lombare saranno quindi preparati e analizzati per identificare un'eventuale attività di inibizione della NTE. Inoltre può essere utile effettuare la stessa analisi su tessuti del nervo sciatico. Generalmente si sopprimono tre animali per il gruppo di controllo e per ciascuno dei gruppi trattati a distanza di 24 ore ed altri tre a distanza di 48 ore, mentre le tre galline del gruppo di controllo positivo vengono sopresse dopo 24 ore. Qualora l'osservazione dei segni clinici di intossicazione (spesso valutabili in funzione della comparsa di effetti colinergici) suggerisca che l'eliminazione della sostanza tossica avviene molto lentamente, può essere preferibile effettuare altri due prelievi tissutali da tre animali nel periodo compreso tra 24 e non oltre 72 ore dopo la somministrazione.

Se del caso, è possibile effettuare su tali tessuti analisi dell'acetilcolinesterasi (AChE). Tuttavia si può avere una riattivazione spontanea dell'AChE in vivo, il che potrebbe indurre a sottovalutare il potenziale di inibizione dell'AChE di una sostanza.

1 5 3 4    **Necropsia macroscopica**

L'esame necroscopico di tutti gli animali (sia di quelli soppressi come da programma che di quelli sottoposti ad eutanasia) dovrà comprendere l'osservazione dell'aspetto del cervello e del midollo spinale.

1 5 3 5    **Esame istopatologico**

I tessuti nervosi degli animali sopravvissuti al periodo di osservazione e non utilizzati per gli studi biochimici saranno sottoposti ad esame microscopico. Essi saranno fissati in situ con tecniche di perfusione. I prelievi tissutali saranno effettuati su cervelletto (piano longitudinale medio), midollo allungato, midollo spinale e nervi periferici. Il midollo spinale sarà prelevato dal tratto cervicale superiore, dal terzo toracico centrale e dal tratto lombo-sacrale. Si preleveranno inoltre tessuti dal segmento distale del nervo tibiale e delle sue ramificazioni verso il muscolo gastrocnemio e dal nervo sciatico. I tessuti saranno colorati con appositi coloranti specifici per la mielina e gli assoni.

2        **DATI**

Di norma, se i risultati ottenuti per i parametri di valutazione adottati nel presente metodo (biochimica, istopatologia e osservazione del comportamento) sono negativi, non è necessario eseguire ulteriori saggi di neurotossicità ritardata. Risultati equivoci o non conclusivi possono invece richiedere un approfondimento.

Dovranno essere forniti i dati individuali di ciascun animale. Inoltre, tutti i dati dovranno essere riassunti in una tabella indicante, per ogni gruppo, il numero di animali all'inizio del saggio, il numero di animali recanti lesioni, alterazioni del comportamento o effetti biochimici, la natura e la gravità di detti effetti o lesioni e la percentuale di animali per ogni tipo di effetto o lesione e per ogni livello di gravità.

I risultati del presente studio dovranno essere valutati in termini di incidenza, gravità e correlazione tra effetti comportamentali, biochimici e istopatologici e qualsiasi altro effetto osservato nei gruppi trattati e di controllo.

I risultati numerici dovranno essere elaborati sulla base di metodi statistici appropriati e generalmente riconosciuti. I metodi statistici saranno selezionati durante la fase di progettazione dello studio.

3. **RELAZIONE****Relazione sul saggio**

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

*Animali da esperimento:*

- ceppo utilizzato;
- numero e età degli animali;
- origine, condizioni di alloggiamento, ecc.,
- peso di ciascun animale all'inizio del saggio.

*Condizioni sperimentali:*

- modalità precise di preparazione della sostanza in esame, stabilità e omogeneità, ove del caso,
- motivazione della scelta del veicolo,
- modalità precise di somministrazione della sostanza in esame,
- caratteristiche della qualità del cibo e dell'acqua,
- motivazione della scelta del dosaggio;
- dosi somministrate, caratteristiche del veicolo, volume e forma fisica della sostanza somministrata;
- tipo di agente protettivo e caratteristiche di somministrazione, ove del caso

*Risultati:*

- dati relativi al peso corporeo;
- dati relativi alla reazione tossica per ciascun gruppo, compresa la mortalità;
- natura, gravità e durata degli effetti clinici osservati (ed eventuale reversibilità),
- descrizione particolareggiata delle analisi biochimiche e relativi risultati;
- risultati dell'esame necroscopico;
- descrizione particolareggiata di tutti i reperti istopatologici,
- elaborazione statistica dei risultati, ove del caso

*Discussione dei risultati.**Conclusioni.*4. **RIFERIMENTI**

Il presente metodo corrisponde al metodo OCSE TG 418

## B 38 NEUROTOSSICITÀ RITARDATA DI SOSTANZE ORGANOFOSFORICHE CON SOMMINISTRAZIONE RIPETUTA PER 28 GIORNI

### 1 METODO

#### 1.1 Introduzione

Per la valutazione degli effetti tossici delle sostanze è importante tener conto della facoltà di talune classi di sostanze di indurre effetti neurotossici specifici che potrebbero non essere messi in luce da altri studi di tossicità. Alcune sostanze organofosforiche, che hanno evidenziato una neurotossicità ritardata, dovrebbero essere oggetto di una valutazione in questo senso.

Saggi preliminari in vitro consentono di identificare le sostanze suscettibili di indurre una poli-neuropatia ritardata, tuttavia risultati negativi di studi in vitro non garantiscono l'assenza di neurotossicità della sostanza saggiata.

Il presente saggio di neurotossicità ritardata su 28 giorni fornisce informazioni sui rischi che l'esposizione ripetuta per un periodo limitato di tempo può comportare per la salute. Esso consente di trarre indicazioni sulla correlazione dose-risposta e di valutare il NOAEL applicabile per la determinazione di criteri di sicurezza per l'esposizione.

Vedi anche introduzione generale, parte B

#### 1.2 Definizioni

*Le sostanze organofosforiche* comprendono esteri, tioesteri o anidridi organofosforici neutri degli acidi organofosforici, organofosfonici o organofosforamidici o dei corrispondenti acidi fosforotioici, fosfonotioici o fosforotioamidici, o altre sostanze suscettibili di indurre gli effetti neurotossici ritardati talvolta osservati in questa classe di sostanze.

*La neurotossicità ritardata* è una sindrome associata ad atassia prolungata a comparsa tardiva, ad assonopatie distali del midollo spinale e dei nervi periferici e ad un'inibizione e un invecchiamento dell'esterasi suggestiva di neuropatia (NTE, neuropathy target esterase) nei tessuti nervosi.

#### 1.3 Principio del metodo di saggio

La sostanza in esame viene quotidianamente somministrata per via orale a galline domestiche per un periodo di 28 giorni. Gli animali vengono esaminati almeno una volta al giorno al fine di individuare eventuali anomalie del comportamento, atassia e paralisi fino a 14 giorni dopo l'ultima somministrazione. Analisi biochimiche, e in particolare l'inibizione della NTE, vengono di norma eseguite 24 e 48 ore dopo l'ultima esposizione su galline selezionate da ciascun gruppo secondo un criterio di casualità. Due settimane dopo l'ultima somministrazione si sopprimono gli animali superstiti e si procede all'esame istopatologico di determinati tessuti nervosi.

#### 1.4 Descrizione del metodo di saggio

##### 1.4.1 Preparazioni

Galline adulte, giovani e sane, che non presentino affezioni virali e non siano trattate con farmaci suscettibili di alterare i risultati del saggio, nonché esenti da turbe della deambulazione, vengono assegnate in modo casuale a gruppi da trattare e di controllo e acclimate alle condizioni di laboratorio per almeno 5 giorni prima dell'inizio del saggio.

Le gabbie o i recinti saranno sufficientemente ampi affinché gli animali possano muoversi liberamente ed essere facilmente osservati durante la deambulazione.

La sostanza viene somministrata giornalmente, sette giorni su sette, preferibilmente tramite sonda gastrica o capsule di gelatina. Le sostanze liquide possono essere somministrate non diluite o disciolte in un veicolo appropriato, quale l'olio di mais. Se possibile, si avrà cura di sciogliere le sostanze solide, in quanto dosi elevate di tali sostanze in capsule di gelatina possono non essere completamente assorbite. Per i veicoli non acquosi, le caratteristiche di tossicità del veicolo dovranno essere note o, in caso contrario, determinate prima del saggio.

##### 1.4.2 Condizioni sperimentali

###### 1.4.2.1 Animali da esperimento

Si utilizzeranno di preferenza galline domestiche ovaiole (*Gallus gallus domesticus*), giovani e adulte, di età compresa tra 8 e 12 mesi, appartenenti a razze e a ceppi di taglia standard. Gli animali saranno allevati in condizioni che ne garantiscano la libertà di movimento.

## 1.4.2.2. Numero e sesso

Si utilizzano di norma almeno tre gruppi da trattare ed uno di controllo con somministrazione del solo veicolo. Quest'ultimo sarà trattato in modo identico ai primi, tranne per il fatto che agli animali non verrà somministrata la sostanza in esame.

Ogni gruppo dovrà comprendere un numero sufficiente di animali, in modo che almeno sei esemplari possano essere soppressi per effettuare le analisi biochimiche (tre a 24 e tre a 48 ore di distanza dall'ultima somministrazione) ed altri sei possano sopravvivere per i 14 giorni del periodo di osservazione.

## 1.4.2.3. Livelli di dosaggio

I livelli di dosaggio dovranno essere selezionati tenendo conto dei risultati del saggio di neurotossicità ritardata dopo esposizione acuta e di tutti i dati di tossicità o di tossicocinetica esistenti per la sostanza in esame. Il livello massimo di dosaggio dovrà essere tale da indurre effetti tossici, preferibilmente effetti neurotossici ritardati, senza tuttavia cagionare la morte o sofferenze gravi. Sarà inoltre definita una serie decrescente di dosaggi al fine di individuare eventuali risposte a dosi determinate e dimostrare l'assenza di effetti avversi al dosaggio minimo.

## 1.4.2.4. Saggio limite

Qualora un saggio, effettuato in conformità con il metodo descritto, con un livello di dosaggio di almeno 1000 mg/kg di peso corporeo/giorno, non produca effetti tossici evidenti e se i dati relativi a sostanze di struttura affine non sono suggestivi di tossicità, può non essere necessario somministrare un dosaggio superiore. Il saggio limite giustificato, salvo nel caso in cui l'esposizione umana comporti la necessità di utilizzare un più elevato livello di dosaggio.

## 1.4.2.5. Periodo di osservazione

Tutti gli animali saranno esaminati almeno quotidianamente durante il periodo di esposizione e nei 14 giorni successivi, salvo nel caso in cui sia previsto un esame necroscopico.

## 1.4.3. Procedimento

La sostanza in esame viene somministrata sette giorni su sette per un periodo di 28 giorni.

## 1.4.3.1. Osservazioni generali

Il periodo di osservazione inizia subito dopo l'esposizione alla sostanza. Tutte le galline saranno accuratamente esaminate almeno una volta al giorno per i 28 giorni del trattamento e i 14 giorni successivi, fino al momento della loro soppressione. Si registreranno tutti i segni di tossicità, specificandone il momento della comparsa, la natura, la gravità e la durata. Le osservazioni riguarderanno, tra l'altro, eventuali anomalie comportamentali. Per l'atassia si utilizzerà un sistema di classificazione comprendente un minimo di quattro livelli; si registreranno altresì i casi di paralisi. Almeno due volte alla settimana le galline selezionate per l'osservazione dovranno essere tolte dalle gabbie e sottoposte ad attività motoria forzata (per esempio salire le scale) al fine di agevolare l'osservazione degli effetti tossici minimi. Gli animali moribondi o recanti segni gravi e persistenti di sofferenza dovranno essere immediatamente sottoposti ad eutanasia e ad esame necroscopico.

## 1.4.3.2. Peso corporeo

Tutte le galline saranno pesate poco prima della somministrazione della sostanza e almeno una volta alla settimana successivamente.

## 1.4.3.3. Biochimica

Pochi giorni dopo l'ultima esposizione si sopprimeranno sei galline scelte in modo casuale da ciascuno dei gruppi trattati e dal gruppo di controllo con somministrazione del solo veicolo. Il cervello e il midollo spinale lombare saranno quindi preparati e analizzati per identificare un eventuale attività di inibizione della NTE. Inoltre può essere utile effettuare la stessa analisi su tessuti del nervo sciatico. Generalmente si sopprimono tre animali per il gruppo di controllo e per ciascuno dei gruppi trattati dopo 24 ore ed altri tre dopo 48 ore dall'ultima somministrazione. Qualora ciò risulti preferibile in base ai risultati dello studio con esposizione acuta o di altri studi (per esempio di tossicocinetica), si potranno modificare i tempi previsti per la soppressione degli animali. Tale scelta dovrà essere tuttavia scientificamente motivata.

Se del caso, è possibile effettuare su tali tessuti analisi dell'acetilcolinesterasi (AChE). Tuttavia si può avere una riattivazione spontanea dell'AChE in vivo il che potrebbe indurre a sottovalutare il potenziale di inibizione dell'AChE di una sostanza.

#### 1.4.3.4 Necropsia macroscopica

L'esame necroscopico di tutti gli animali (sia di quelli soppressi come da programma che di quelli sottoposti ad eutanasia) dovrà comprendere l'osservazione dell'aspetto del cervello e del midollo spinale.

#### 1.4.3.5 Esame istopatologico

I tessuti nervosi degli animali sopravvissuti al periodo di osservazione e non utilizzati per gli studi biochimici saranno sottoposti ad esame microscopico. Essi saranno fissati in situ con tecniche di perfusione. I prelievi tissutali saranno effettuati su cervelletto (piano longitudinale medio), midollo allungato, midollo spinale e nervi periferici. Il midollo spinale sarà prelevato dal tratto cervicale superiore, dal terzo toracico centrale e dal tratto lombosacrale. Si preleveranno inoltre tessuti dal segmento distale del nervo tibiale e delle sue ramificazioni verso il muscolo gastrocnemio e dal nervo sciatico. I tessuti saranno colorati con appositi coloranti specifici per la mielina e gli assoni. L'esame microscopico sarà dapprima effettuato su tessuti conservati di tutti gli animali del gruppo di controllo e di quello trattato con il livello massimo di dosaggio. Qualora in questo gruppo si riscontrino effetti, si procederà all'esame microscopico di tessuti prelevati da animali appartenenti agli altri due gruppi (rispettivamente con somministrazione del dosaggio intermedio e del dosaggio minimo).

### 2 DATI

Di norma, se i risultati ottenuti per i parametri di valutazione adottati nel presente metodo (biochimica, istopatologia e osservazione del comportamento) sono negativi, non è necessario eseguire ulteriori saggi di neurotossicità ritardata. Risultati equivoci o non conclusivi possono invece richiedere un approfondimento.

Dovranno essere forniti i dati individuali di ciascun animale. Inoltre, tutti i dati dovranno essere riassunti in una tabella indicante, per ogni gruppo, il numero di animali all'inizio del saggio, il numero di animali recanti lesioni, alterazioni del comportamento o effetti biochimici, la natura e la gravità di detti effetti o lesioni e la percentuale di animali per ogni tipo di effetto o lesione e per ogni livello di gravità.

I risultati del presente studio dovranno essere valutati in termini di incidenza, gravità e correlazione tra effetti comportamentali, biochimici e istopatologici e qualsiasi altro effetto osservato nei gruppi trattati e di controllo.

I risultati numerici dovranno essere elaborati sulla base di metodi statistici appropriati e generalmente sconosciuti. I metodi statistici saranno selezionati durante la fase di progettazione dello studio.

### 3 RELAZIONE

#### Relazione sul saggio

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

##### *Animali da esperimento*

- ceppo utilizzato,
- numero e età degli animali,
- origine, condizioni di alloggiamento ecc.
- peso di ciascun animale all'inizio del saggio.

##### *Condizioni sperimentali*

- modalità precise di preparazione della sostanza in esame: stabilità e omogeneità, ove del caso;
- motivazione della scelta del veicolo;
- modalità precise di somministrazione della sostanza in esame: caratteristiche della qualità del cibo e dell'acqua;
- motivazione della scelta del dosaggio;
- dosi somministrate: caratteristiche del veicolo: volume e forma fisica della sostanza somministrata;
- qualora le analisi biochimiche vengano effettuate in tempi diversi da quelli previsti (24 e 48 h): motivazione di tale scelta.



*Risultati*

- dati relativi al peso corporeo,
- dati relativi alla reazione tossica per ciascun livello di dosaggio, compresa la mortalità
- livello di esposizione massimo per il quale non siano stati osservati effetti avversi (NOAEL),
- natura, gravità e durata degli effetti clinici osservati (ed eventuale reversibilità)
- descrizione particolareggiata delle analisi biochimiche e relativi risultati,
- risultati dell'esame necroscopico,
- descrizione particolareggiata di tutti i reperti istopatologici
- elaborazione statistica dei risultati, ove del caso

*Discussione dei risultati**Conclusioni***4. RIFERIMENTI**

Il presente metodo corrisponde al metodo OCSE TG 419.

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## PARTE C: METODI PER LA DETERMINAZIONE DELLA ECOTOSSICITÀ

## INTRODUZIONE GENERALE: PARTE C

I metodi di prova di seguito descritti servono alla determinazione di alcune proprietà ecotossicologiche enumerate nell'allegato VII e nell'allegato VIII. Il notificatore deve tener presente che i metodi per la determinazione delle seguenti proprietà previste al livello I dell'allegato VIII non sono inclusi nel testo:

- studio di tossicità prolungata sulla *Daphnia magna*,
- prova su una pianta superiore,
- studio di tossicità prolungata su un pesce,
- prova di accumulazione in una specie.

Quando opportuni metodi di prova per la determinazione di queste proprietà saranno ultimati, saranno pubblicati sotto forma di un ulteriore adeguamento al progresso tecnico. Nel frattempo il notificatore deve applicare metodi opportuni, internazionalmente riconosciuti, che devono essere specificati all'autorità competente.

## C.1. TOSSICITÀ ACUTA PER I PESCI

## 1 METODO

## 1.1 INTRODUZIONE

Lo scopo di questo saggio è di determinare la tossicità letale acuta di una sostanza nei confronti di pesci in acqua dolce

Per poter scegliere il metodo di saggio (statico, semistatico o a flusso continuo) più idoneo a garantire che le concentrazioni della sostanza in esame si mantengano soddisfacentemente costanti per tutta la durata del saggio, è desiderabile disporre, per quanto possibile, di dati concernenti la solubilità in acqua, la tensione di vapore, la stabilità chimica, le costanti di dissociazione e la biodegradabilità della sostanza in esame

Sia per la programmazione della prova che per l'interpretazione dei risultati si dovrebbero tenere in considerazione anche altre informazioni (per esempio formula di struttura, grado di purezza, natura e percentuale delle impurezze significative, presenza e quantità di additivi e coefficiente di ripartizione n-ottanolo/acqua)

## 1.2 DEFINIZIONE E UNITÀ

La tossicità acuta è l'effetto avverso osservabile indotto in un organismo entro un breve tempo (giorni) di esposizione ad una data sostanza. Nel presente saggio, la tossicità acuta viene espressa come concentrazione letale media ( $CL_{50}$ ), che è la concentrazione di una sostanza nell'acqua capace di uccidere il 50 % di un gruppo di pesci entro un periodo continuo di esposizione, la cui durata deve essere precisata

Tutte le concentrazioni delle sostanze in esame sono espresse in peso/volume (mg/l). Esse possono anche venire espresse in peso/peso ( $mg\ kg^{-1}$ )

## 1.3 SOSTANZE DI RIFERIMENTO

Per dimostrare che, nelle condizioni sperimentali di laboratorio, la risposta della specie usata per il saggio non è variata in modo significativo, può essere saggiata una sostanza di riferimento

Per il presente saggio non vengono specificate sostanze di riferimento

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

Si può eseguire un saggio limite a 100 mg per litro allo scopo di dimostrare che la  $CL_{50}$  è maggiore di questa concentrazione

I pesci sono esposti alla sostanza (alle sostanze) in esame, aggiunta all'acqua in varie concentrazioni, per un periodo di 96 ore. Le mortalità vengono registrate almeno ad intervalli di 24 ore, quando possibile, per ciascun tempo di osservazione si calcola la concentrazione ( $CL_{50}$ ) alla quale muore il 50 % dei pesci

## 1.5 CRITERI DI QUALITÀ

I criteri di qualità dovranno essere applicati sia per il saggio limite che per il metodo di saggio completo

La mortalità negli animali di controllo usati non deve essere superiore al 10 % (o 1 pesce se se ne usano meno di 10) al termine della prova

La concentrazione dell'ossigeno deve rimanere per tutta la prova al di sopra del 60 % del valore di saturazione dell'aria

La concentrazione della sostanza in esame deve essere mantenuta entro l'80 % della concentrazione iniziale per tutta la durata della prova

Per sostanze che si sciolgono facilmente nel mezzo di saggio producendo soluzioni stabili, cioè quelle che non presentano un grado significativo di volatilizzazione, degradazione, idrolisi o adsorbimento, la concentrazione iniziale può essere presa equivalente alla concentrazione nominale. Deve essere fornita la documentazione che la concentrazione si è mantenuta costante per tutta la durata del saggio e che sono stati soddisfatti i criteri di qualità

Per sostanze che sono

- (i) scarsamente solubili nel mezzo di saggio,  
o
- (ii) in grado di formare emulsioni o dispersioni stabili,  
o
- (iii) non stabili in soluzione acquosa,

come concentrazione iniziale si dovrà prendere la concentrazione misurata in soluzione (o, se non è possibile tecnicamente, misurata nella colonna d'acqua) all'inizio della prova. La concentrazione sarà determinata dopo un periodo di equilibratura, ma prima dell'introduzione dei pesci di prova

In ciascuno di questi casi, ulteriori misure devono essere effettuate durante il saggio per confermare che la concentrazione di esposizione effettiva o i criteri di qualità sono stati rispettati

Il pH non dovrebbe variare più di una unità

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

Tre diversi procedimenti possono essere usati

### *Prova statica*

Prova di tossicità su pesci nel corso della quale non ha luogo alcun flusso della soluzione di saggio (le soluzioni non vengono cambiate per tutta la durata della prova)

### *Prova semistatica*

Prova senza alcun flusso della soluzione ma nella quale le soluzioni di saggio vengono rinnovate ad intervalli regolari e prolungati (ad esempio 24 ore)

### *Prova a flusso continuo*

Prova di tossicità nella quale l'acqua è rinnovata costantemente nelle vasche di saggio e la sostanza in esame viene trasportata insieme all'acqua usata per rinnovare l'ambiente del saggio

## 1.6.1 Reattivi

### 1.6.1.1 Soluzioni delle sostanze da esaminare

Si preparano soluzioni di riserva alla concentrazione richiesta, sciogliendo la sostanza in acqua deionizzata o comunque rispondente alle caratteristiche descritte al punto 1.6.1.2

Le concentrazioni di prova scelte vengono preparate per diluizione della soluzione di riserva. Se si saggiare concentrazioni elevate, la sostanza può essere disciolta direttamente nell'acqua di diluizione

Le sostanze devono normalmente essere saggiate solo fino al limite di solubilità. Per alcune sostanze (per esempio sostanze che hanno una scarsa solubilità in acqua o un elevato  $P_{ow}$ , o quelle che formano dispersioni stabili piuttosto che soluzioni vere in acqua), è accettabile preparare un livello di concentrazione al di sotto del limite di solubilità della sostanza per garantire di raggiungere la massima concentrazione solubile/stabile. È importante tuttavia che questa concentrazione non disturbi altrimenti il sistema di saggio (per esempio la pellicola della sostanza sulla superficie dell'acqua che impedisca l'ossigenazione dell'acqua, ecc.)

Si può ricorrere a dispersione ultrasonica, solventi organici, emulsionanti o disperdenti come aiuti per preparare le soluzioni concentrate di riserva delle sostanze di scarsa solubilità in acqua o per disperdere queste sostanze nell'ambiente di prova. Quando si utilizzano tali sostanze ausiliarie, tutte le concentrazioni da saggiare dovrebbero contenere la stessa quantità di sostanza ausiliaria, e pesci di controllo addizionali dovrebbero essere

esposti alla stessa concentrazione della sostanza ausiliaria usata nella serie di concentrazioni da saggiare. La concentrazione di tali sostanze ausiliarie deve essere minimizzata, e in nessun caso deve superare i 100 mg per litro nell'ambiente di prova.

La prova dovrebbe essere effettuata senza aggiustamento del pH. Se esiste evidenza di variazioni pronunciate del pH, si consiglia di ripetere la prova procedendo all'opportuna regolazione del pH e riportando i risultati. In questo caso, il valore del pH della soluzione di riserva dovrebbe essere aggiustato a quello dell'acqua di diluizione, a meno che non esistano specifiche ragioni per agire diversamente. A tal fine sono da preferirsi HCl ed NaOH. Questa regolazione del pH dovrebbe essere effettuata in modo che la concentrazione della sostanza in esame nella soluzione di riserva non cambi in modo significativo. Qualora la regolazione dovesse provocare reazioni chimiche o la precipitazione fisica del composto in esame, ciò dovrebbe essere riportato.

1.6.1.2. *Acqua di stabulazione e di diluizione*

Si possono impiegare acqua potabile (non contaminata da concentrazioni potenzialmente pericolose di cloro, metalli pesanti od altre sostanze), acqua naturale di buona qualità od acqua ricostituita (vedi Appendice 1). Sono da preferirsi acque con una durezza totale compresa tra 10 e 250 mg/l (come  $\text{CaCO}_3$ ) e con pH fra 6,0 e 8,5.

1.6.2. *Attrezzatura*

Tutte le attrezzature devono essere costruite in materiale chimicamente inerte.

- sistema di diluizione automatico (per le prove a flusso continuo),
- misuratore di ossigeno,
- apparecchiatura per la determinazione della durezza dell'acqua,
- apparecchiatura adeguata per il controllo della temperatura,
- pH-metro.

1.6.3. *Pesci per il saggio*

I pesci devono essere in buona salute e non presentare evidenti malformazioni.

Le specie usate devono essere scelte sulla base di criteri pratici, come la loro facile disponibilità per tutto l'anno, la facilità di mantenimento, la idoneità per il saggio, sensibilità relativa e qualsiasi fattore economico, biologico o ecologico avente qualche rilevanza. Nella scelta della specie di pesce si deve tenere presente anche la necessità di poter confrontare i dati ottenuti e l'armonizzazione internazionale esistente (riferimento 1).

Un elenco di specie ittiche che sono raccomandate per l'esecuzione di questo saggio è presentato in Appendice 2. Le specie preferite sono il danio zebrato e la trota.

1.6.3.1. *Stabulazione*

I pesci dovrebbero provenire di preferenza da un singolo gruppo con lunghezza ed età simili. Essi devono essere mantenuti per almeno 12 giorni nelle seguenti condizioni:

*densità degli animali*

appropriata al sistema (riciclo o flusso continuo) e alla specie di pesce.

*acqua*

vedi punto 1.6.1.2.

*illuminazione*

fotoperiodo da 12 a 16 ore al giorno.

*concentrazione dell'ossigeno disciolto*

almeno l'80 % del valore di saturazione dell'aria,

*alimentazione*

tre volte alla settimana o quotidianamente con sospensione 24 ore prima dell'inizio della prova

1 6 3 2      **Mortalità**

Dopo un periodo di adattamento di 48 ore, si procede a registrare la mortalità e si applicano i seguenti criteri

- mortalità superiore al 10 % della popolazione in sette giorni  
l'intera partita viene respinta,
- mortalità tra il 5 e il 10 % della popolazione il periodo di adattamento prosegue per altri sette giorni. Se non si verificano ulteriori mortalità, la partita è accettabile, in caso contrario essa deve essere respinta,
- mortalità inferiore al 5 % della popolazione  
la partita è accettabile

1 6 4      **Adattamento**

Prima dell'impiego, tutti i pesci debbono essere posti per almeno sette giorni in acqua della qualità e temperatura da impiegare per il saggio

1 6 5      **Procedimento del saggio**

Al saggio definitivo si può far precedere una prova orientativa allo scopo di ottenere informazioni per definire l'intervallo di concentrazioni da impiegare

In aggiunta alla serie di concentrazioni da saggiare, si esegue anche una esposizione di controllo senza la sostanza in esame e, se pertinente, una esposizione di controllo contenente la sostanza ausiliaria

A seconda delle proprietà fisiche e chimiche del composto in esame, si deve scegliere una prova statica, semistatica o a flusso continuo, secondo quanto più appropriato per soddisfare i criteri di qualità

I pesci vengono esposti alla sostanza nel modo indicato di seguito

- durata 96 ore,
- numero di animali almeno 7 per concentrazione,
- vasche di capacità opportuna secondo il carico raccomandato,
- densità dei pesci per i saggi statici e semistatici si raccomanda un carico di biomassa massimo di 1,0 g/l, per i sistemi a flusso continuo può essere accettabile un carico più elevato,
- concentrazioni di saggio almeno cinque concentrazioni, differenti per un fattore costante non superiore a 2,2, e che, nel limite del possibile, coprano l'intervallo di mortalità dallo 0 al 100 %,
- acqua vedi punto 1 6 1 2,
- illuminazione fotoperiodo quotidiano da 12 a 16 ore al giorno,
- temperatura appropriata alla specie (vedi appendice 2) ma con variazioni entro  $\pm 1^\circ\text{C}$  per ciascuna prova,
- concentrazione dell'ossigeno disciolto non meno del 60 % del valore di saturazione dell'aria alla temperatura prescelta,
- alimentazione nessuna

I pesci sono esaminati dopo le prime 2-4 ore ed almeno a intervalli di 24 ore. Essi sono considerati morti se toccando il peduncolo caudale non si ha alcuna reazione e non sono visibili movimenti respiratori. I pesci morti sono allontanati al momento in cui vengono osservati e le mortalità devono essere registrate

Va presa nota delle anomalie visibili (come la perdita di equilibrio, cambiamento di comportamento alla natazione, funzione respiratoria, pigmentazione, ecc.).

Il pH, l'ossigeno disciolto e la temperatura devono essere misurati quotidianamente

#### *Saggio limite*

Usando le procedure descritte in questo metodo di saggio, si può eseguire un saggio limite a 100 mg per litro allo scopo di dimostrare che la  $CL_{50}$  è più elevata di questa concentrazione

Se la natura della sostanza è tale che non si possa raggiungere una concentrazione di 100 mg per litro nel mezzo di saggio, il saggio limite deve essere eseguito ad una concentrazione uguale alla solubilità della sostanza (o alla concentrazione massima formante una dispersione stabile) nell'ambiente usato (vedi anche 1.6.1.1.)

Il saggio limite deve essere eseguito usando da 7 a 10 pesci, con lo stesso numero nel saggio (nei saggi) di controllo. (La teoria binomiale stabilisce che quando si utilizzano 10 pesci con mortalità 0, c'è il 99,9 % di confidenza che la  $CL_{50}$  sia maggiore della concentrazione usata nel saggio limite. Con 7, 8 o 9 pesci l'assenza di mortalità assicura una confidenza di almeno il 99 % che la  $CL_{50}$  sia maggiore della concentrazione usata.)

Se si verifica mortalità, occorre eseguire uno studio completo. Se si osservano effetti sub-letali, questi devono essere registrati.

## 2. DATI E VALUTAZIONE

Per ciascun periodo in cui sono registrate osservazioni (24, 48, 72 e 96 ore) riportare su carta logaritmico-probabilistica la mortalità percentuale per ciascun periodo di esposizione raccomandato in funzione della concentrazione.

Dove è possibile, e per ciascun tempo di osservazione, si dovrebbero stimare la  $CL_{50}$  e i limiti di confidenza statistica ( $p = 0,05$ ) con l'uso di procedure standard; questi valori devono essere arrotondati ad una (o al massimo due) cifre significative (esempi di arrotondamento a due cifre: 170 per 173,5; 0,13 per 0,127; 1,2 per 1,21).

Nei casi in cui il coefficiente angolare della curva di concentrazione/risposta percentuale è troppo alto per permettere il calcolo della  $CL_{50}$ , è sufficiente una stima grafica di questo valore.

Quando due concentrazioni consecutive in un rapporto di 2,2 danno solo 0 e 100 % di mortalità, questi due valori sono sufficienti per indicare l'intervallo in cui cade la  $CL_{50}$ .

Qualora si osservasse che la stabilità o l'omogeneità della sostanza in esame non può essere mantenuta, tale fatto dovrebbe essere indicato nella relazione e l'interpretazione dei risultati dovrebbe essere fatta con prudenza.

## 3. RELAZIONE

La relazione sulla prova deve, se possibile, includere le seguenti informazioni

- informazioni sul pesce impiegato per la prova (nome scientifico, ceppo, fornitore, eventuali pretrattamenti, grandezza e numero impiegato a ciascuna concentrazione di saggio);
- fonte dell'acqua di diluizione e principali caratteristiche chimiche (pH, durezza, temperatura);
- nel caso di una sostanza di scarsa solubilità in acqua, il metodo di preparazione della soluzione concentrata di riserva e della soluzione di saggio;
- concentrazione di eventuali sostanze ausiliarie.

- elenco delle concentrazioni usate e qualsiasi informazione disponibile relativa alla stabilità, alle concentrazioni della sostanza chimica provata nella soluzione di saggio;
- se si eseguono analisi chimiche, metodi usati e risultati ottenuti;
- risultati dell'eventuale saggio limite;
- ragioni della scelta e dettagli del procedimento usato nel saggio (per esempio statico, semistatico, tasso di dosaggio, portata nel caso di flusso continuo, eventuale aereazione, densità dei pesci, ecc.);
- descrizione dell'apparecchiatura sperimentale;
- regime di illuminazione;
- concentrazione dell'ossigeno disciolto, pH e temperatura delle soluzioni di saggio ogni 24 ore;
- evidenze del fatto che sono stati soddisfatti i criteri di qualità;
- una tabella che presenti la mortalità cumulativa a ciascuna concentrazione e nel controllo (e controllo con la sostanza ausiliaria, se richiesto) a ciascuno dei tempi di osservazione raccomandati;
- grafico della curva di concentrazione/risposta percentuale al termine del saggio;
- se possibile, i valori di  $CL_{50}$  a ciascuno dei tempi di osservazione raccomandati (con limiti di confidenza statistica al 95 %);
- procedure statistiche usate per determinare i valori della  $CL_{50}$ ;
- se si usa una sostanza di riferimento, risultati ottenuti;
- concentrazione di saggio massima che non ha causato mortalità nel periodo di saggio;
- concentrazione di saggio minima che ha provocato il 100 % di mortalità nel periodo del saggio.

#### 4. BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guideline 203, Decision of the Council C(81) 30 final and updates.
- (2) AFNOR — Determination of the acute toxicity of a substance to *Brachydanio rerio* — Static and Flow Through methods — NFT 90-303 June 1985.
- (3) AFNOR — Determination of the acute toxicity of a substance to *Salmo gairdneri* — Static and Flow Through methods — NFT 90-305 June 1985.
- (4) ISO 7346/1, /2 and /3 — Water Quality — Determination of the acute lethal toxicity of substances to a fresh water fish (*Brachydanio rerio* Hamilton-Buchanan — Teleostei, Cyprinidae). Part 1: Static method. Part 2: Semi-static method. Part 3: Flow-through method.
- (5) Eidgenössisches Department des Innern, Schweiz: Richtlinien für Probenahme und Normung von Wasseruntersuchungsmethoden — Part II 1974.
- (6) DIN Testverfahren mit Wasserorganismen, 38 412 (L1) und L (15).
- (7) JIS K 0102, Acute toxicity test for fish.
- (8) NEN 6506 — Water — Bepaling van de akute toxiciteit met behulp van *Poecilia reticulata* — 1980.
- (9) Environmental Protection Agency, Methods for the acute toxicity tests with fish, macroinvertebrates and amphibians. The Committee on Methods for Toxicity tests with Aquatic Organisms, Ecological Research Series EPA-660-75-009, 1975.
- (10) Environmental Protection Agency, Environmental monitoring and support laboratory, Office of Research and Development, EPA-600/4-78-012, January 1978.
- (11) Environmental Protection Agency, Toxic Substance Control, Part IV, 16 March 1979.
- (12) Standard methods for the examination of water and wastewater, 14th edition, APHA-AWWA-WPCF, 1975.



- (13) Commission of the European Communities, Inter-Laboratory test programme concerning the study of the ecotoxicity of a chemical substance with respect to the fish. EEC Study D.8368, 22 March 1979
- (14) Verfahrensvorschlag des Umweltbundesamtes zum akuten Fisch-test. Rudolph, P. und Boje, R. Ökotoxikologie, Grundlagen für die ökotoxikologische Bewertung von Umweltchemikalien nach dem Chemikaliengesetz, ecomed 1986.
- (15) Litchfield, J.T. and Wilcoxon, F., A simplified method for evaluating dose effects experiments, J. Pharm. Exp. Therap., 1949, vol. 96, 99.
- (16) Finney, D.J. Statistical Methods in Biological Assay. Griffin, Weycombe, U.K., 1978.
- (17) Sprague, J.B. Measurement of pollutant toxicity to fish. I Bioassay methods for acute toxicity. Water Res. 1969, vol. 3, 793-821.
- (18) Sprague, J.B. Measurement of pollutant toxicity to fish. II Utilising and applying bioassay results. Water Res. 1970, vol. 4, 3-32.
- (19) Stephan, C.E. Methods for calculating an LC50. In Aquatic Toxicology and Hazard Evaluation (edited by F.I. Mayer and J.L. Hamelinck). American Society for Testing and Materials. ASTM STP 634, 1977, 65-84.
- (20) Stephan, C.E., Busch, K.A., Smith, R., Burke, J. and Andrews, R.W. A computer program for calculating an LC50. US EPA.

#### Appendice I

##### Acqua ricostituita

*Esempio di acqua di diluizione appropriata*

Tutti i prodotti chimici devono avere purezza analitica.

Dovrebbe essere impiegata acqua distillata di buona qualità oppure acqua deionizzata, di conduttività, inferiore a  $5 \mu\text{Scm}^{-1}$

L'apparecchio per la distillazione dell'acqua non deve contenere parti in rame.

##### *Soluzioni di riserva*

CaCl <sub>2</sub> · 2H <sub>2</sub> O (calcio cloruro idrato):	11,76 g
Sciogliere e portare ad un litro con acqua.	
MgSO <sub>4</sub> · 7H <sub>2</sub> O (magnesio solfato eptaidrato):	4,93 g
Sciogliere e portare ad un litro con acqua.	
NaHCO <sub>3</sub> (sodio bicarbonato):	2,59 g
Sciogliere e portare ad un litro con acqua.	
KCl (potassio cloruro):	0,23 g
Sciogliere e portare ad un litro con acqua.	

##### *Acqua di diluizione ricostituita*

Mescolare 25 ml di ciascuna delle quattro soluzioni di riserva e portare ad un litro con acqua.

Aerare finché la concentrazione dell'ossigeno disciolto uguagli il valore di saturazione per l'aria

Il pH dovrebbe essere di  $7,8 \pm 0,2$ .

Se necessario regolare il pH mediante aggiunte di NaOH (sodio idrossido) o HCl (acido cloridrico)

L'acqua di diluizione così preparata viene lasciata da parte per circa 12 ore e non richiede alcuna ulteriore aerazione.

La somma degli ioni Ca e Mg in questa soluzione è di 2,5 mmol/l. Il rapporto degli ioni Ca e Mg è di 4:1 e quello degli ioni Na e K è di 10:1. L'alcalinità totale di questa soluzione è 0,8 mmol/l.

Eventuali deviazioni nel modo di preparare l'acqua di diluizione non devono modificarne la composizione e le proprietà.

#### Appendice 2

##### Specie di pesci raccomandate per il saggio

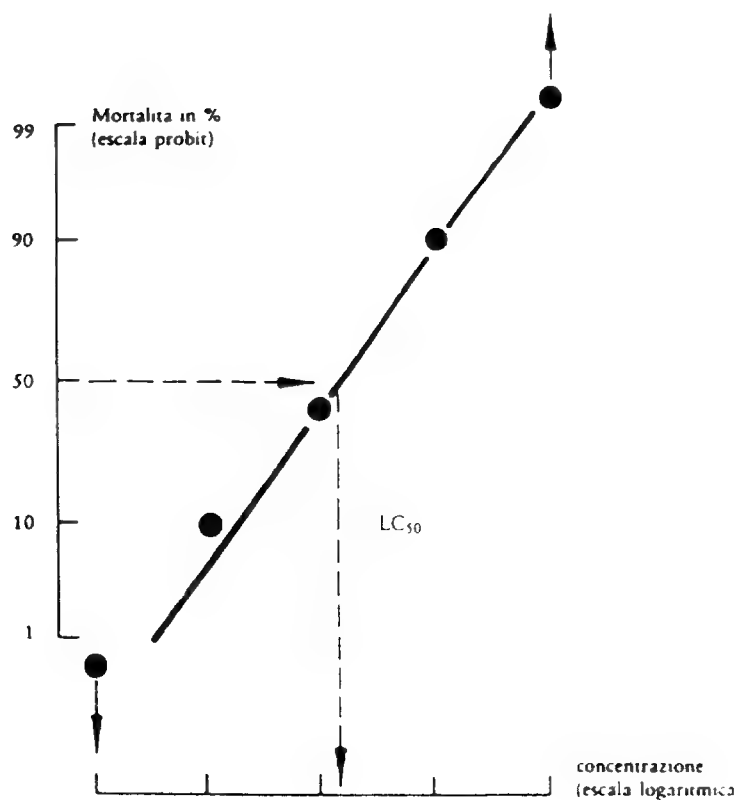
Specie raccomandate	Intervallo di temperatura raccomandato per il saggio (°C)	Lunghezza totale raccomandata per gli animali da saggio (cm)
<i>Brachydanio rerio</i> (Teleostei, Cyprinidae) (Hamilton-Buchanan) Danio Zebra	20 a 24	3,0 ± 0,5
<i>Pimephales promelas</i> (Teleostei, Cyprinidae) (Rafinesque) Fathead minnow	20 a 24	5,0 ± 2,0
<i>Cyprinus carpio</i> (Teleostei, Cyprinidae) (Linnaeus 1758) Carpe comune	20 a 24	6,0 ± 2,0
<i>Oryzias latipes</i> (Teleostei, Poeciliidae) (Tomminck et Schlegel 1850) Red Killifish	20 a 24	3,0 ± 1,0
<i>Poecilia reticulata</i> (Teleostei, Poeciliidae) (Peters 1859) Guppy	20 a 24	3,0 ± 1,0
<i>Lepomis macrochirus</i> (Teleostei, Centrarchidae) (Rafinesque Linnaeus 1758) Bluegill	20 a 24	5,0 ± 2,0
<i>Onchorhynchus mykiss</i> (Teleostei, Salmonidae) (Walbaum 1988) Trota iridea	12 a 17	6,0 ± 2,0
<i>Leuciscus idus</i> (Teleostei, Cyprinidae) (Linnaeus 1758) Golden orfe	20 a 24	6,0 ± 2,0

#### Raccolta

I pesci suelencati sono allevabili facilmente e/o sono largamente disponibili per tutto l'anno. Possono riprodursi e essere mantenuti sia in stabilimenti di acquicoltura sia in laboratorio, sotto condizioni di controllo delle malattie e dei parassiti, in modo che gli animali di saggio saranno sani e geneticamente controllati. Questi pesci sono disponibili in molte parti del mondo.

## Appendice 3

Esempio di curva concentrazione/percento di mortalità

Esempio di determinazione della  $LC_{50}$  usando carta log-probit

## C.2. TOSSICITÀ ACUTA PER LE DAPHNIA

## 1 METODO

## 1.1 INTRODUZIONE

Lo scopo di questo saggio è di determinare la concentrazione efficace mediana di immobilizzazione ( $CE_{50}$ ) di una sostanza nei confronti di *Daphnia* in acqua dolce.

Prima di iniziare il saggio è desiderabile disporre per quanto è possibile di informazioni aggiuntive concernenti la solubilità in acqua, la tensione di vapore, la stabilità chimica, le costanti di dissociazione e la biodegradabilità della sostanza in esame.

Sia per la programmazione della prova che per l'interpretazione dei risultati si dovrebbero tenere in considerazione anche altre informazioni (per esempio formula di struttura, grado di purezza, natura e percentuale delle impurezze significative, presenza e quantità di additivi e coefficiente di ripartizione n ottanolo/acqua).

## 1.2 DEFINIZIONE E UNITÀ

Il disposto della direttiva concernente la  $CL_{50}$  per *Daphnia* è da considerarsi soddisfatto dalla determinazione della  $CE_{50}$  come descritto nel presente metodo.

Ai fini di questa prova, la tossicità acuta viene espressa come concentrazione effettiva mediana ( $CE_{50}$ ) per l'immobilizzazione. Essa è la concentrazione (come valori iniziali) che immobilizza il 50 % delle daphnie in un gruppo di prova entro un certo periodo di esposizione continua, che deve essere definito.

*Immobilizzazione*

Sono considerati immobili gli animali che, dopo lieve agitazione del contenitore usato per il saggio, non sono in grado di nuotare entro 15 secondi.

Tutte le concentrazioni delle sostanze in esame sono espresse in peso/volume (mg/l). Esse possono anche venire espresse in peso/peso (mg kg<sup>-1</sup>).

## 1.3 SOSTANZE DI RIFERIMENTO

Per dimostrare che, nelle condizioni sperimentali di laboratorio, la sensibilità della risposta della specie usata per il saggio non è variata in modo significativo, può essere saggiata una sostanza di riferimento.

In appendice 2 è presentato il sommario dei risultati ottenuti in una prova d'intercalibrazione tra laboratori nell'ambito della CEE con l'uso di 4 differenti sostanze.

## 1.4 PRINCIPIO DEL METODO DI SAGGIO

Si può eseguire un saggio limite a 100 mg per litro allo scopo di dimostrare che la  $CE_{50}$  è più elevata di questa concentrazione.

Le daphnie sono esposte alla sostanza in esame aggiunta ad acqua in un certo intervallo di concentrazioni per 48 ore, se si utilizza un saggio più breve, nella relazione di prova deve essere fornita una giustificazione.

In condizioni sperimentali per il resto identiche e in un campo adeguato di concentrazioni della sostanza in esame, concentrazioni diverse di una data sostanza in esame esercitano di solito effetti diversi sulla attività natatoria della *Daphnia*. A concentrazioni diverse, si ottengono differenti percentuali di daphnie che alla fine della prova non sono più in grado di nuotare. Le concentrazioni che provocano un'immobilizzazione dello 0 o del 100 % vengono derivate direttamente dalle osservazioni sperimentali, mentre la  $CE_{50}$  a 48 ore viene determinata, se possibile, per calcolo.

Per il presente metodo si usa un sistema statico, quindi le soluzioni non vengono rinnovate durante il periodo di esposizione.

## 1.5 CRITERI DI QUALITÀ

I criteri di qualità valgono sia per il saggio limite che per il metodo di saggio completo

L'immobilizzazione negli animali di controllo non deve superare il 10 % al termine della prova

Le daphnie usate per la prova nei gruppi di controllo non devono essere state intrappolate alla superficie dell'acqua

Preferibilmente, la concentrazione dell'ossigeno disciolto nei contenitori usati nel saggio dovrebbe mantenersi al di sopra di  $3 \text{ mg l}^{-1}$  per tutta la durata del saggio. In nessuna circostanza, comunque la concentrazione dell'ossigeno disciolto deve scendere al di sotto di  $2 \text{ mg l}^{-1}$

La concentrazione della sostanza in esame deve essere mantenuta con variabilità ammissibile con limite inferiore dell'80 % della concentrazione iniziale per tutta la durata della prova

Per le sostanze che si sciolgono facilmente nell'ambiente di saggio e che forniscono soluzioni stabili, ossia che non presentano in grado significativo volatilizzazione, degradazione, idrolisi o adsorbimento, la concentrazione iniziale può essere considerata come equivalente alla concentrazione nominale. Deve essere fornita la prova che la concentrazione si è mantenuta costante per tutta la durata del saggio e che sono stati soddisfatti i criteri di qualità

Per le sostanze che sono

- (i) scarsamente solubili nel mezzo liquido del saggio, o
- (ii) in grado di formare emulsioni o dispersioni stabili, o
- (iii) non stabili in soluzione acquosa,

come concentrazione iniziale si dovrà prendere la concentrazione misurata in soluzione (o, se non possibile tecnicamente, misurata nella colonna d'acqua) all'inizio della prova. La concentrazione sarà determinata dopo un periodo concesso per il raggiungimento dell'equilibrio, ma prima dell'introduzione degli organismi di prova.

In ciascuno di questi casi, ulteriori misure devono essere effettuate durante il saggio per confermare la concentrazione di esposizione effettiva o i criteri di qualità sono stati rispettati

Il pH deve variare di non più di una unità

## 1.6 DESCRIZIONE DEL METODO DI SAGGIO

### 1.6.1 Reattivi

#### 1.6.1.1 Soluzioni delle sostanze da esaminare

Si preparano soluzioni di riserva opportunamente concentrate, sciogliendo la sostanza in acqua deionizzata o comunque rispondente alle caratteristiche descritte al punto 1.6.1.2

Le concentrazioni del saggio scelte vengono preparate per diluizione della soluzione di riserva (concentrata). Se si provano concentrazioni elevate, la sostanza può essere disciolta direttamente nell'acqua di diluizione

Le sostanze devono normalmente essere sottoposte ad esame solo fino al limite di solubilità. Per alcune sostanze (per esempio sostanze che hanno una scarsa solubilità in acqua o un elevato  $P_{\text{ow}}$ , o quelle che formano dispersioni stabili piuttosto che soluzioni vere in acqua), è accettabile eseguire una prova a concentrazione superiore al limite di solubilità della sostanza per garantire di raggiungere la massima concentrazione solubile/stabile. È importante tuttavia che questa concentrazione non disturbi altrimenti il sistema di saggio (per esempio una pellicola della sostanza sulla superficie dell'acqua che impedisca l'ossigenazione dell'acqua, ecc.)

Si può ricorrere alla dispersione ultrasonica, solventi organici, emulsionanti o disperdenti come aiuto per preparare le soluzioni concentrate di riserva delle sostanze di scarsa solubilità in acqua o per disperdere queste sostanze nel mezzo liquido del saggio. Quando si utilizzano tali sostanze ausiliari, tutte le concentrazioni di saggio devono contenere la stessa quantità di sostanza ausiliare, e devono essere esposte alla stessa concentrazione della sostanza ausiliare usata nella serie di prove del saggio *Daphnia* di un gruppo di controllo addizionale. La concentrazione di tali ausiliari deve essere minimizzata, e in nessun caso deve superare i 100 mg per litro nel mezzo liquido del saggio

Il saggio deve essere effettuato senza regolazione del pH. Se quest'ultimo manifestasse notevoli variazioni, si consiglia di ripetere il saggio procedendo all'opportuna regolazione del pH e riportando i risultati. In questo caso, il pH della soluzione di riserva deve essere portato al valore del pH dell'acqua di diluizione, a meno che non esistano specifiche ragioni per agire diversamente. A tal fine sono da preferirsi HCl ed NaOH. Questa regolazione del pH deve essere effettuata in modo che la concentrazione della sostanza in esame nella soluzione di riserva non cambi in modo significativo. Qualora la regolazione dovesse provocare reazioni chimiche o la precipitazione fisica del composto in esame, ciò andrebbe riferito.

#### 1.6.1.2 Acqua usata per le prove

In questa prova si utilizza acqua ricostituita (vedi appendice 1 e riferimento (2): ISO 6341). Per evitare la necessità di acclimatazione prima della prova, si raccomanda che l'acqua usata per l'allevamento sia di qualità simile (pH, durezza) all'acqua usata per il saggio.

#### 1.6.2 Apparecchiatura

Devono essere utilizzate normali apparecchiature e strumentazioni di laboratorio. Gli apparecchi destinati a venire a contatto con le soluzioni del saggio dovrebbero essere preferibilmente completamente in vetro.

- misuratore di ossigeno (con microelettrodo od altro apparecchio adatto per la misurazione dell'ossigeno in campioni di piccolo volume);
- adeguata apparecchiatura per il controllo della temperatura;
- pH-metro;
- apparecchiatura per la determinazione della durezza dell'acqua.

#### 1.6.3 Organismi per il saggio

*Daphnia magna* è la specie sperimentale preferita, è però ammessa anche la *Daphnia pulex*. Gli animali sperimentali dovranno avere un'età minore di 24 ore all'inizio della prova, essere allevati in laboratorio, esenti da malattie palesi e la loro storia deve essere nota (per esempio allevamento — eventuali pre-trattamenti, ecc.).

#### 1.6.4 Procedura del saggio

Al saggio definitivo si può far precedere una prova orientativa allo scopo di ottenere informazioni per definire l'intervallo di concentrazioni da impiegare.

In aggiunta alla serie di prove del saggio, si devono eseguire una prova di controllo senza la sostanza in esame e, se pertinente, anche una prova di controllo contenente la sostanza ausiliare.

Le daphnie sono esposte alla sostanza come descritto nel seguito:

- *durata*: preferibilmente 48 ore;
- *numero di animali*: almeno 20 animali per ciascuna concentrazione di saggio, di preferenza divisi in 4 gruppi di 5 individui ciascuno o in 2 gruppi di 10;
- *carico*: per le daphnie deve esserci una disponibilità della soluzione in esame in ragione di almeno 2 ml per ciascun animale;
- *concentrazione di saggio*: la soluzione da esaminare dovrebbe essere preparata immediatamente prima dell'introduzione delle daphnie, preferibilmente senza impiegare solventi diversi dall'acqua. Le concentrazioni si preparano in una serie che segue una progressione geometrica con un rapporto tra due concentrazioni immediatamente consecutive non superiore a 2,2. Si dovrebbero sperimentare, insieme alle prove di controllo, concentrazioni sufficienti a dare lo 0 e il 100 % di immobilizzazione dopo 48 ore e un campo di percentuali di immobilizzazione intermedie, che permetta il calcolo della CE<sub>50</sub> a 48 ore.
- *acqua*: vedi punto 1.6.1.2.;
- *illuminazione*: è facoltativo un ciclo luce-oscurità;
- *temperatura*: la temperatura del saggio dev'essere compresa tra 18 e 22 °C, ma una volta scelta dev'essere mantenersi costante con variazione ammissibile di  $\pm 1$  °C;

- *aerazione*: le soluzioni del saggio non devono essere aerate con gorgogliamento d'aria;
- *alimentazione*: nessuna.

Alla fine della prova devono essere misurati il pH e la concentrazione di ossigeno dei controlli e di tutte le concentrazioni della sostanza in esame. Il pH delle soluzioni della sostanza in esame non deve essere modificato.

I composti volatili devono essere saggiati in contenitori chiusi e riempiti per intero, abbastanza grandi da evitare che l'ossigeno venga a mancare.

Le daphnie vengono esaminate dopo almeno 24 ore di esposizione, e di nuovo dopo 48 ore.

#### *Saggio limite*

Usando le procedure descritte in questo metodo di saggio, si può eseguire un saggio limite a 100 mg per litro allo scopo di dimostrare che la  $CE_{50}$  si colloca al di sopra di questa concentrazione.

Se la natura della sostanza è tale che non si possa raggiungere una concentrazione di 100 mg per litro nell'acqua di esecuzione della prova, il saggio limite deve essere eseguito ad una concentrazione uguale alla solubilità della sostanza (o alla concentrazione massima formante una dispersione stabile) nel mezzo liquido usato (vedi anche 1.6.1.1.).

Il saggio limite deve essere eseguito usando 20 daphnie divise in 2 o 4 gruppi, con un ugual numero nel gruppo (nei gruppi) di controllo. Se si verifica immobilizzazione, si deve eseguire uno studio completo.

## 2. DATI E VALUTAZIONE

Per ciascun periodo in cui si sono registrate le osservazioni (24 e 48 ore) riportare su carta probit-semilogaritmica la mortalità percentuale in funzione della concentrazione.

Dove è possibile, e per ciascun tempo di osservazione, si dovrebbero stimare la  $CE_{50}$  e i limiti di confidenza ( $p = 0,05$ ) con l'uso di procedimenti standard; questi valori devono essere arrotondati ad una (o al massimo due) cifre significative (esempi di arrotondamento a due cifre: 170 per 173,5; 0,13 per 0,127; 1,2 per 1,21).

Nei casi in cui la pendenza della curva di concentrazione / risposta in percentuali di immobilizzazione è troppo ripida per permettere il calcolo della  $CL_{50}$ , è sufficiente una stima grafica di questo valore.

Nel caso in cui due concentrazioni immediatamente consecutive in un rapporto di 2,2 diano solo 0 e 100 % di immobilizzazione, questi due valori sarebbero sufficienti come indicazione dell'intervallo in cui cade la  $CE_{50}$ .

Qualora si osservasse che la stabilità o l'omogeneità della sostanza in esame non possa essere mantenuta, il fatto va riferito nella relazione e si raccomanda cautela nell'interpretazione dei risultati.

## 3. RELAZIONE

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

- informazioni sull'organismo impiegato per il saggio (nome scientifico, ceppo, fornitore o origine, eventuali pre-trattamenti, metodo di allevamento — inclusa la fonte, il tipo e la quantità di alimento e la frequenza di alimentazione);
- origine dell'acqua di diluizione e principali caratteristiche chimiche (pH, durezza, temperatura);
- nel caso di una sostanza di scarsa solubilità in acqua, il metodo di preparazione della soluzione concentrata di riserva e della soluzione di saggio;
- concentrazione di eventuali sostanze ausiliari;
- elenco delle concentrazioni usate e qualsiasi informazione disponibile relativa alla stabilità alle concentrazioni della sostanza chimica provata nella soluzione di saggio.

- se si eseguono analisi chimiche, metodi usati e risultati ottenuti;
- risultati dell'eventuale saggio limite;
- descrizione dell'apparecchiatura sperimentale;
- regime di illuminazione;
- concentrazione dell'ossigeno disciolto, pH e temperatura delle soluzioni di saggio;
- prova che sono stati soddisfatti i criteri di qualità;
- una tabella riportante l'immobilizzazione cumulativa ottenuta a ciascuna concentrazione e al gruppo controllo (e al gruppo controllo con la sostanza ausiliare quando questo sia necessario) in corrispondenza di ciascuno dei tempi di osservazione raccomandati (24 e 48 ore);
- grafico della curva di concentrazione/risposta in percentuale di immobilizzazione al termine del saggio;
- se possibile, i valori di  $CE_{50}$  a ciascuno dei tempi di osservazione raccomandati (con limiti di confidenza al 95 %);
- procedimenti statistici usati per determinare i valori della  $CE_{50}$ ;
- se si usa una sostanza di riferimento, risultati ottenuti;
- la maggiore concentrazione sperimentata che non ha causato immobilizzazione nel periodo di saggio;
- la minore concentrazione sperimentata che ha provocato il 100 % di immobilizzazione nel periodo del saggio

#### BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guidelines 202, Decision of the Council C(81) 30 final and updates.
- (2) International Standard ISO, Water Quality — Determination of inhibition of mobility of *Daphnia magna* Straus, ISO 6341-1989.
- (3) AFNOR Inhibition of mobility of *Daphnia magna* Straus (Cladocera — crustacea) NFT 90 301 (January 1983).
- (4) Verfahrensvorschlag des Umweltbundesamtes zum akuten Daphnien-Test. Rudolph, P. und Boje, R. Ökotoxikologie, Grundlagen für die Ökotoxikologische Bewertung von Umweltchemikalien nach dem Chemikaliengesetz, ecomed 1986.
- (5) DIN Testverfahren mit Wasserorganismen 38412 (L1) und (L11).
- (6) Finney, D.J. Statistical Methods in Biological Assay. Griffin, Weycombe, U.K., 1978.
- (7) Litchfield, J.T. and Wilcoxon, F. A simplified method of evaluating dose-effect experiments J Pharmacol. and Exper. Ther., 1949, vol. 96, 99-113.
- (8) Sprague, J.B. Measurement of pollutant toxicity to fish. I Bioassay methods for acute toxicity. Water Res., 1969, vol. 3, 793-821.
- (9) Sprague, J.B. Measurement of pollutant toxicity to fish. II Utilising and applying bioassay results. Water Res., 1970, vol. 4, 3-32.
- (10) Stephan, C.E. Methods for calculating an  $LC_{50}$ . In Aquatic Toxicology and Hazard Evaluation (edited by F.I. Mayer and J.L. Hamelink. American Society for Testing and Materials. ASTM, 1977, STP 634, 65-84.
- (11) Stephan, C.E., Busch, K.A., Smith, R., Burke, J. and Andrews, R.W. A computer program for calculating an  $LC_{50}$ . US EPA

#### Appendice 1

##### Acqua ricostituita

*Esempio di una acqua di diluizione adatta (secondo la norma ISO 6341)*

Tutti i prodotti chimici devono avere purezza analitica

Deve essere impiegata acqua distillata di buona qualità oppure acqua deionizzata, di conduttività inferiore a  $5 \mu S cm^{-1}$

L'apparecchio per la distillazione dell'acqua non deve contenere parti in rame



*Soluzioni di riserva*

CaCl <sub>2</sub> · 2 H <sub>2</sub> O (cloruro di calcio idrato)	11,76 g
Sciogliere e portare ad un litro con acqua	
MgSO <sub>4</sub> · 7 H <sub>2</sub> O (solfato di magnesio eptaidrato)	4,93 g
Sciogliere e portare ad un litro con acqua	
NaHCO <sub>3</sub> (bicarbonato di sodio)	2,59 g
Sciogliere e portare ad un litro con acqua	
KCl (cloruro di potassio)	0,23 g
Sciogliere e portare ad un litro con acqua	

*Acqua di diluizione ricostituita*

Mescolare 25 ml di ciascuna delle quattro soluzioni di riserva e portare ad un litro con acqua

Aerare finchè la concentrazione dell'ossigeno disciolto uguagli il valore di saturazione per l'aria

Il pH deve essere di  $7,8 \pm 0,2$

Se necessario regolare il pH mediante aggiunte di NaOH (idrossido di sodio) o HCl (acido cloridrico)

L'acqua di diluizione così preparata viene lasciata da parte per circa 12 ore e non richiede alcuna ulteriore aerazione

La somma degli ioni Ca e Mg in questa soluzione è di 2,5 mmol/l. Il rapporto ioni Ca/Mg è di 4/1 e quello degli ioni Na/K è di 10/1. L'alcalinità totale di questa soluzione è 0,8 mmol/l.

Eventuali deviazioni nel modo di preparare l'acqua di diluizione non devono modificarne la composizione e le proprietà

*Appendice 2*

Sommario dei risultati di una prova d'intercalibrazione tra laboratori nell'ambito della CEE eseguita nel 1978 (citata anche nel riferimento 2)

*Nota:* lo scopo di questa prova era di determinare la CE<sub>50</sub> a 24 ore

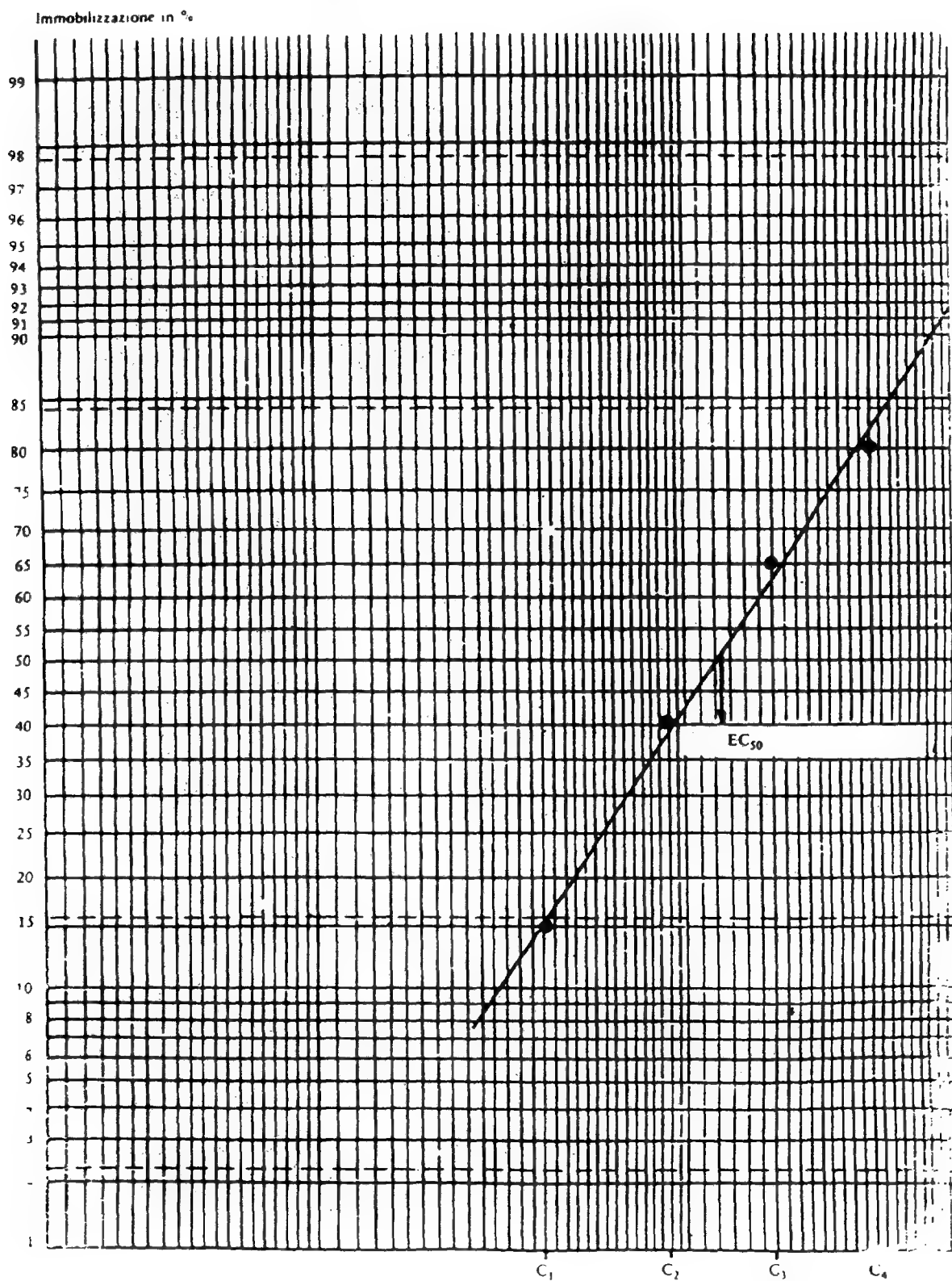
*Sostanze usate*

- 1) dicromato di potassio
- 2) acido tetrapropilbenzensolfonico
- 3) acido tetrapropilbenzensolfonico, sale di sodio
- 4) acido triclolo 2,4,5 fenossiacetico, sale di potassio

Sostanze	Numero di laboratori partecipanti	Numero di risultati considerati per il calcolo	CE <sub>50</sub> 24 ore mg/l media
1	46	129	1,5
2	36	108	27
3	31	84	27
4	32	72	770

## Appendice 3

Esempio di rappresentazione grafica: concentrazione corrispondente percentuale di immobilizzazione

Esempio di determinazione della  $CE_{50}$  con l'utilizzo di carta probit-semilogaritmica

## C.3. SAGGIO DI INIBIZIONE DELLA CRESCITA DELLE ALGHE

## 1. METODO

## 1.1. INTRODUZIONE

Lo scopo di questo saggio è di determinare gli effetti di una sostanza sulla crescita di una specie di alga verde unicellulare. Con saggi relativamente brevi (72 ore) si possono valutare gli effetti su varie generazioni. Questo metodo può essere adattato all'uso di parecchie specie di alghe unicellulari, nel qual caso nella relazione sul saggio deve essere fornita una descrizione del metodo usato.

Questo metodo viene applicato con particolare facilità a sostanze solubili in acqua che, nelle condizioni del saggio, hanno buone probabilità di rimanere nell'acqua.

Il metodo può essere usato per sostanze che non interferiscano direttamente con la misura della crescita delle alghe.

Prima di iniziare il saggio è desiderabile disporre, per quanto è possibile, di informazioni concernenti la solubilità in acqua, la tensione di vapore, la stabilità chimica, le costanti di dissociazione e la biodegradabilità della sostanza in esame.

Sia per la programmazione della prova che per l'interpretazione dei risultati si dovrebbero tenere in considerazione anche altre informazioni... (per esempio formula di struttura, grado di purezza, natura e percentuale delle impurezze significative, presenza e quantità di additivi e coefficiente di ripartizione n-ottanolo/acqua).

## 1.2. DEFINIZIONI E UNITÀ

Densità delle cellule: numero di cellule per millilitro;

Crescita: aumento della densità delle cellule lungo il periodo sperimentale,

Tasso di crescita: aumento di densità delle cellule per unità di tempo,

CE<sub>50</sub>: in questo metodo, la concentrazione della sostanza in esame che provoca una riduzione del 50 % della crescita (C<sub>g</sub>E<sub>50</sub>) o del tasso di crescita (C<sub>r</sub>E<sub>50</sub>) rispetto al controllo;

NOEC (concentrazione senza effetti osservabili): in questo metodo, la maggiore concentrazione sperimentata alla quale non si osserva alcuna inibizione significativa della crescita rispetto al controllo.

Tutte le concentrazioni delle sostanze in esame sono espresse in peso/volume (mg/l). Esse possono anche venire espresse in peso/peso (mg.kg<sup>-1</sup>).

## 1.3. SOSTANZE DI RIFERIMENTO

Per dimostrare che, nelle condizioni sperimentali di laboratorio, la sensibilità della risposta della specie usata per il saggio non è variata in modo significativo, può essere saggiata una sostanza di riferimento.

Se si usa una sostanza di riferimento, i risultati ottenuti devono essere presentati nella relazione sul saggio. Come sostanza di riferimento si può usare dicromato di potassio, ma il suo colore può interferire con la qualità della luce e la sua intensità disponibile per le cellule e inoltre con le determinazioni spettrofotometriche, nel caso vengano usate. Il dicromato di potassio è stato usato in un saggio interlaboratorio internazionale (vedi riferimento (3) e appendice 2).

**1.4 PRINCIPIO DEL METODO DI SAGGIO**

Si può eseguire un saggio limite a 100 mg per litro della sostanza in esame allo scopo di dimostrare che la  $CE_{50}$  si pone al di sopra di questa concentrazione.

Culture in crescita esponenziale di alghe verdi selezionate sono esposte a varie concentrazioni della sostanza in esame su varie generazioni in condizioni definite.

Le soluzioni di prova sono incubate per un periodo di 72 ore, durante cui la densità delle cellule in ciascuna viene misurata almeno ogni 24 ore. Si determina l'inibizione della crescita rispetto ad una coltura di controllo.

**1.5 CRITERI DI QUALITÀ**

I criteri di qualità valgono sia per il saggio limite che per il metodo di saggio completo.

La densità delle cellule nelle colture di controllo deve aumentare di un fattore di almeno 16 entro 3 giorni.

La concentrazione della sostanza in esame deve essere mantenuta in modo da non scendere al di sotto dell'80 % della concentrazione iniziale per tutta la durata della prova.

Per le sostanze che si sciolgono facilmente nel mezzo liquido del saggio e che forniscono soluzioni stabili, ossia che non presentano in grado significativo volatilizzazione, degradazione, idrolisi o adsorbimento, la concentrazione iniziale può essere considerata come equivalente alla concentrazione nominale. Deve essere fornita la prova che la concentrazione si è mantenuta costante per tutta la durata del saggio e che sono stati soddisfatti i criteri di qualità.

Per le sostanze che sono:

- (i) scarsamente solubili nel mezzo liquido del saggio, o
- (ii) in grado di formare emulsioni o dispersioni stabili, o
- (iii) non stabili in soluzione acquosa,

come concentrazione iniziale si assume la concentrazione misurata all'inizio del saggio. La concentrazione deve essere determinata dopo un periodo concesso per il raggiungimento dell'equilibrio.

In ciascuno di questi casi, ulteriori misure devono essere effettuate durante il saggio per confermare la concentrazione di esposizione effettiva o i criteri di qualità sono stati rispettati.

È certo che quantità significative della sostanza in esame saranno incorporate nella biomassa delle alghe nel periodo di esecuzione del saggio. Pertanto, allo scopo di dimostrare la conformità coi criteri di qualità visti sopra, si deve prendere in considerazione sia la sostanza incorporata nella biomassa algale che la sostanza in soluzione (o, se ciò non è tecnicamente possibile, misurata nella colonna d'acqua). Tuttavia, poichè la determinazione della concentrazione di sostanza nella biomassa delle alghe può presentare dei problemi tecnici significativi, il rispetto dei criteri di qualità può essere dimostrato eseguendo una prova in un recipiente alla concentrazione massima della sostanza ma senza alghe e misurando la concentrazione in soluzione (o, se ciò non è tecnicamente possibile nella colonna d'acqua) all'inizio e al termine del periodo di prova.

**1.6 DESCRIZIONE DEL PROCEDIMENTO SPERIMENTALE****1.6.1 Reagenti****1.6.1.1 Soluzioni di sostanze in esame**

Soluzioni di riserva opportunamente concentrate vengono preparate sciogliendo la sostanza in acqua deionizzata o in acqua secondo il punto 1.6.1.2.

Si preparano le concentrazioni scelte per il saggio. Aggiungendone adatte aliquote a preculture di alghe (vedi appendice 1).

Normalmente le sostanze devono essere sottoposte al saggio solo fino al limite di solubilità. Per alcune sostanze (per esempio sostanze che hanno una scarsa solubilità in acqua o un elevato  $P_{0.01}$ , o quelle che formano dispersioni stabili piuttosto che soluzioni vere in acqua), è accettabile includere nel saggio una concentrazione che superi il limite di solubilità della sostanza al fine di garantire di raggiungere la massima concentrazione solubile/stabile. È importante tuttavia che questa concentrazione non disturbi altrimenti il sistema di saggio (per esempio una pellicola della sostanza sulla superficie dell'acqua che impedisca l'ossigenazione dell'acqua, ecc.).

Si può ricorrere alla dispersione ultrasonica, solventi organici, emulsionanti o disperdenti come aiuto per preparare le soluzioni concentrate di riserva delle sostanze di scarsa solubilità in acqua o per disperdere queste sostanze nel mezzo liquido del saggio. Quando si utilizzano tali sostanze ausiliari, tutte le concentrazioni di saggio devono contenere la stessa quantità di sostanza ausiliare, e devono essere esposte colture di controllo aggiuntive alla stessa concentrazione della sostanza ausiliare usata nella serie di prove del saggio. La concentrazione di tali ausiliari deve essere minimizzata, e in nessun caso deve superare i 100 mg per litro nel mezzo liquido del saggio.

La prova deve essere effettuata senza regolazione del pH. Se quest'ultimo presentasse notevoli variazioni, si consiglia di ripetere la prova procedendo all'opportuna regolazione del pH e riportando i risultati. In questo caso, il valore del pH della soluzione di riserva deve essere portato al valore di quello dell'acqua di diluizione, a meno che non esistano specifiche ragioni per agire diversamente. A tal fine sono da preferirsi HCl ed NaOH. Questa regolazione del pH dovrebbe essere effettuata in modo che la concentrazione della sostanza in esame nella soluzione di riserva non cambi in modo significativo. Qualora la regolazione dovesse provocare reazioni chimiche o la precipitazione fisica del composto in esame, ciò andrebbe riferito.

#### 6.1.2 Terreno di coltura del saggio

L'acqua deve essere acqua distillata di buona qualità o acqua deionizzata con una conducibilità minore di  $5 \mu\text{S cm}^{-1}$ . L'apparecchio per la distillazione dell'acqua non deve contenere parti in rame.

Si raccomanda il seguente terreno di coltura:

Si preparano quattro soluzioni madri secondo la tabella seguente. Le soluzioni madri sono sterilizzate per filtrazione su membrana oppure in autoclave e conservate al buio a  $4^\circ\text{C}$ . La soluzione madre numero 4 deve essere sterilizzata esclusivamente per filtrazione su membrana. Queste soluzioni madri vanno diluite per ottenere le concentrazioni finali di nutrienti nelle soluzioni sperimentali del saggio.

Nutriente	Concentrazione nella soluzione madre		Concentrazione finale nella soluzione da usare nel saggio	
Soluzione di riserva 1: macro-nutrienti				
NH <sub>4</sub> Cl	1,5	g/l	15	mg/l
MgCl <sub>2</sub> 6H <sub>2</sub> O	1,2	g/l	12	mg/l
CaCl <sub>2</sub> 2H <sub>2</sub> O	1,8	g/l	18	mg/l
MgSO <sub>4</sub> 7H <sub>2</sub> O	1,5	g/l	15	mg/l
KH <sub>2</sub> PO <sub>4</sub>	0,16	g/l	1,6	mg/l
Soluzione di riserva 2 Fe EDTA				
FeCl <sub>3</sub> 6H <sub>2</sub> O	80 mg/l		0,08 mg/l	
Na <sub>2</sub> EDTA 2H <sub>2</sub> O	100 mg/l		0,1 mg/l	
Soluzione di riserva 3: oligoelementi				
H <sub>3</sub> BO <sub>3</sub>	185	mg/l	0,185	mg/l
MnCl <sub>2</sub> 4H <sub>2</sub> O	415	mg/l	0,415	mg/l
ZnCl <sub>2</sub>	3	mg/l	3 × 10 <sup>-3</sup>	mg/l
CoCl <sub>2</sub> 6H <sub>2</sub> O	1,5	mg/l	1,5 × 10 <sup>-3</sup>	mg/l
CuCl <sub>2</sub> 2H <sub>2</sub> O	0,01	mg/l	10 <sup>-5</sup>	mg/l
Na <sub>2</sub> MoO <sub>4</sub> 2H <sub>2</sub> O	7	mg/l	7 × 10 <sup>-3</sup>	mg/l
Soluzione di riserva 4: NaHCO <sub>3</sub>				
NaHCO <sub>3</sub>	50	g/l	50	mg/l

Il pH del terreno di coltura, messo in equilibrio con l'aria, è approssimativamente 8.

1 6 2      **Apparecchiatura**

- normale attrezzatura di laboratorio,
  - beute per il saggio di volume adatto (per esempio, quando il volume della soluzione sperimentale è di 100 ml occorrono beute da 250 ml). Tutte le beute devono essere identiche in quanto a materiale e dimensioni
  - Attrezzatura per le colture: cabina o camera in cui è possibile mantenere con una precisione di  $\pm 2^\circ\text{C}$  una temperatura nel campo tra  $21$  e  $25^\circ\text{C}$  e fornire una illuminazione uniforme continua nel campo spettrale da  $400$  a  $700\text{ nm}$ . Se le alghe nelle colture di controllo hanno raggiunto i tassi di crescita raccomandati, si può assumere che le condizioni di crescita, inclusa l'intensità luminosa, siano state adeguate.
- Si raccomanda di usare, al livello medio delle soluzioni sperimentali, un'intensità luminosa nel campo da  $60$  a  $120\ \mu\text{E}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$  (da  $35$  a  $70 \times 10^{18}$  fotoni  $\text{m}^{-2}\cdot\text{s}^{-1}$ ) quando si effettui la misura nel campo da  $400$  a  $700\text{ nm}$  utilizzando un idoneo sensore. Per gli strumenti di misura della luce calibrati in lux, è accettabile un intervallo equivalente tra  $6\,000$  e  $10\,000\text{ lux}$ .
- L'intensità luminosa occorrente può essere ottenuta usando da  $4$  a  $7$  lampade a fluorescenza da  $30\text{ W}$  del tipo bianco universale (temperatura di colore approssimativamente  $4\,300\text{ K}$ ), poste ad una distanza di  $0,35\text{ m}$  dalla coltura di alghe.
- Le misure della densità delle cellule devono essere effettuate utilizzando un metodo di conta diretto delle cellule viventi, per esempio un microscopio con camere di conteggio. Tuttavia, si possono usare altri metodi (fotometria, torbidimetria) se sono sufficientemente sensibili e se si riscontra una sufficientemente buona correlazione con la densità delle cellule.

1 6 3      **Organismi per il saggio**

Si consiglia di usare specie di alghe verdi a rapida crescita adatte per la coltura e l'esecuzione del saggio. Sono preferite le seguenti specie:

- *Selenastrum capricornutum*, p. es. ATCC 22662 o CCAP 278/4,
- *Scenedesmus subspicatus*, p. es. 86-81 SAG,

**Nota**

ATCC = Raccolta Americana di Colture Tipo (U.S.A.)

CCAP = Centro per la Coltura di Alghe e Protozoi (G.B.)

SAG = Raccolta di Colture Algali (Göttingen, R.F.G.)

Se si usano altre specie, la relazione deve indicarne il ceppo.

1 6 4      **Procedimento sperimentale**

Si determina l'intervallo di concentrazioni nel quale è facile che si verifichino degli effetti sulle basi di risultati ottenuti da esperimenti di selezione dell'intervallo.

Le due misure di crescita (biomassa e tasso di crescita) possono dare come risultato misure molto disperate dell'inibizione della crescita, entrambe le misure devono essere usate nella prova di individuazione del campo per assicurare che la progressione geometrica delle concentrazioni permetta una stima sia della  $C_{50}$  sia della  $C_{E50}$ .

**Densità iniziale delle cellule**

Si raccomanda di regolare la densità iniziale delle cellule nelle colture sperimentali ad approssimativamente  $10^4$  cellule/ml per *Selenastrum capricornutum* e *Scenedesmus subspicatus*. Quando si utilizzano altre specie, la biomassa dovrebbe essere confrontabile.

**Concentrazioni della sostanza in esame**

Per il saggio, si preparano almeno 5 concentrazioni in serie geometrica con un rapporto tra ogni concentrazione e quella immediatamente successiva non superiore a 2,2. La più bassa concentrazione sperimentata non dovrebbe permettere di osservare effetti sulla crescita delle alghe. La più elevata concentrazione sperimentata dovrebbe inibire la crescita di almeno il 50 % rispetto al controllo o, preferibilmente, arrestare completamente la crescita.

#### Repliche e controlli

Lo schema sperimentale deve comprendere tre repliche per ogni concentrazione. Sono previsti tre controlli senza sostanza in esame e, se del caso, altri tre controlli contenenti la sostanza ausiliare. Se giustificato, lo schema sperimentale può venire modificato per aumentare il numero di concentrazioni e ridurre il numero di repliche per concentrazione.

#### Esecuzione del saggio

Le colture del saggio contenenti le concentrazioni desiderate di sostanza in esame e la quantità desiderata di inoculo algale vengono preparate aggiungendo aliquote di soluzioni di riserva della sostanza in esame a quantità adatte di precolture algali (vedi appendice 1). Le beute di coltura vengono agitate e disposte nell'apparecchiatura di coltura. Le cellule algali vengono mantenute in sospensione mediante sbattimento, mescolamento o gorgogliamento d'aria allo scopo di facilitare lo scambio gassoso e di ridurre le variazioni di pH nelle soluzioni del saggio. Le colture devono essere mantenute ad una temperatura con variazione ammissibile di  $\pm 2^\circ\text{C}$  nell'intervallo da 21 a 25  $^\circ\text{C}$ .

La densità delle cellule in ciascuna beuta viene determinata almeno 24, 48 e 72 ore dopo l'inizio del saggio. Nei casi in cui si utilizza una misura della densità delle cellule diversa del metodo di conteggio diretto, si usa il terreno di coltura algale filtrato contenente la concentrazione appropriata della sostanza chimica in esame per fissare il bianco.

Il pH viene misurato all'inizio del saggio e dopo 72 ore.

Normalmente durante il saggio il pH delle colture di controllo non deve variare più di 1,5 unità.

#### Saggio con sostanze volatili

Fino ad oggi non esiste un metodo accettato in modo generale per saggiare sostanze volatili. Quando è noto che una sostanza ha la tendenza a evaporare, si può far uso nel saggio di beute chiuse con la parte vuota superiore aumentata. Nel calcolare lo spazio vuoto superiore delle beute chiuse occorre tenere in considerazione la possibilità di una scarsità di  $\text{CO}_2$ . Sono state proposte delle modifiche a questo metodo [Vedi riferimento (4)].

Si dovrebbe tentare di determinare la quantità di sostanza che rimane in soluzione, e si consiglia comunque una estrema cautela nell'interpretazione dei risultati dei saggi con sostanze volatili eseguiti con l'uso di sistemi chiusi.

#### Saggio limite

Utilizzando i procedimenti descritti nel presente metodo, si può eseguire un saggio limite a 100 mg per litro allo scopo di dimostrare che la  $\text{CE}_{50}$  si trova al di sopra di questa concentrazione.

Se a causa della natura della sostanza non fosse possibile raggiungere una concentrazione di 100 mg per litro nell'acqua usata per il saggio, il saggio limite dovrebbe essere eseguito ad una concentrazione corrispondente alla solubilità della sostanza (o alla concentrazione massima in cui si forma una dispersione stabile) nel terreno di coltura usato (vedi anche punto 1.6.1.1).

Il saggio limite deve essere eseguito almeno in tre repliche, anche per il controllo. Nel saggio limite devono essere usate ambedue le misure della crescita (biomassa e velocità di crescita).

Qualora in un saggio limite si riscontrasse una diminuzione media del 25 % o più nella biomassa o nel tasso di crescita rispetto al controllo, si dovrebbe eseguire un saggio completo.

## 2

### DATI E VALUTAZIONE

La densità delle cellule misurata nelle colture sperimentali e nelle colture di controllo viene tabulata insieme con la concentrazione della sostanza in esame e dei tempi di effettuazione delle misure. Per ciascuna concentrazione della sostanza in esame e i controlli il valore medio della densità delle cellule va graficamente riportato in funzione del tempo (0-72 h) in modo da poter costruire delle curve di crescita.

Per determinare la relazione concentrazione/effetto, si ricorre a due metodi descritti qui di seguito. Alcune sostanze possono stimolare la crescita a basse concentrazioni. Devono essere presi in considerazione solamente i dati che indicano un'inibizione compresa tra lo 0 e il 100 %.

## 2.1 CONFRONTO DELLE AREE SOTTO LE CURVE DI CRESCITA

L'area compresa tra una determinata curva di crescita e la linea orizzontale  $N = N_0$  può essere calcolata secondo la formula:

$$A = \frac{N_1 - N_0}{2} \times t_1 + \frac{N_1 + N_2 - 2N_0}{2} \times (t_2 - t_1) + \frac{N_{n-1} + N_n - 2N_0}{2} \times (t_n - t_{n-1})$$

in cui:

$A$  = area,

$N_0$  = numero di cellule/ml al momento  $t_0$  (inizio del saggio),

$N_1$  = numero di cellule/ml determinato a  $t_1$ ,

$N_n$  = numero di cellule/ml determinato al tempo  $t_n$ ,

$t_1$  = tempo di effettuazione della prima misura dopo l'inizio del saggio,

$t_n$  = tempo di effettuazione della ennesima misura dopo l'inizio del saggio,

$n$  = numero di misure effettuate dopo l'inizio del saggio

L'inibizione percentuale della crescita cellulare relativa a ciascuna concentrazione della sostanza in esame ( $I_A$ ) viene calcolata secondo la formula:

$$I_A = \frac{A_c - A_t}{A_c} \times 100$$

in cui:

$A$  = area compresa tra la curva di crescita del controllo e la linea orizzontale  $N = N_0$ .

$A_t$  = area compresa tra la curva di crescita alla concentrazione  $t$  e la linea orizzontale  $N = N_0$ .

I valori di  $I_A$  sono riportati su carta semi-logaritmica o su carta probit semi-logaritmica corrispondentemente alle rispettive concentrazioni. Se vengono tracciati su carta probit, i punti vengono interpolati con una linea retta tracciata a occhio oppure ricavata mediante calcolo di regressione.

La  $CE_{50}$  viene stimata dalla linea di regressione leggendo la concentrazione equivalente al 50 % di inibizione ( $I_A = 50\%$ ). Per identificare in modo univoco questo valore in relazione a questo metodo di calcolo, si propone di usare il simbolo  $C_bE_{50}$ . È essenziale che la  $C_bE_{50}$  sia indicata con il periodo di esposizione pertinente, per esempio  $C_bE_{50}$  (0-72h).

## 2.2 CONFRONTO DEI TASSI DI CRESCITA

Il tasso medio specifico di crescita ( $\mu$ ) per colture in crescita esponenziale può essere calcolato come

$$\mu = \frac{\ln N_n - \ln N_0}{t_n - t_0}$$

dove  $t_0$  è il tempo all'inizio del saggio

In alternativa, il tasso medio specifico di crescita può essere derivato dal coefficiente angolare della linea di regressione in un grafico ove  $\ln N$  appare in funzione del tempo.

L'inibizione percentuale del tasso specifico di crescita a ciascuna concentrazione della sostanza in esame ( $I_{\mu t}$ ) viene calcolata secondo la formula:

$$I_{\mu t} = \frac{\mu_c - \mu_t}{\mu_c} \times 100$$

in cui:

$\mu_c$  = tasso medio specifico di crescita della coltura di controllo

$\mu_t$  = tasso medio specifico di crescita per la concentrazione del saggio  $t$



La riduzione percentuale del tasso medio specifico di crescita a ciascuna concentrazione della sostanza in esame calcolata sulla base del confronto con il valore del controllo va graficamente riportata in corrispondenza del logaritmo della concentrazione. La  $CE_{50}$  può essere direttamente ricavata dal grafico che ne risulta. Per indicare in modo univoco la  $CE_{50}$  ottenuta mediante questo metodo si propone di usare il simbolo  $C_rE_{50}$ . Si deve indicare il tempo di effettuazione della misura, per esempio se il valore riguarda i tempi 0 e 72 ore, il simbolo diventa  $C_rE_{50}(0-72\text{ h})$ .

*Nota:* il tasso di crescita specifico è un termine logaritmico, e piccole variazioni del tasso di crescita possono portare a grandi variazioni della biomassa. I valori di  $C_rE$  e di  $C_rE$  non possono pertanto essere confrontati numericamente.

### 2.3. CALCOLO DELLA NOEC

La concentrazione senza effetti osservati è determinata mediante un'adatta procedura statistica per il confronto multicampione (per esempio analisi della varianza e test di Dunnett), utilizzando i valori delle repliche (prese individualmente) appartenenti alle aree che si trovano sotto le curve di crescita A (vedi punto 2.1) oppure i tassi specifici di crescita  $\mu$  (vedi punto 2.2).

### 3. RELAZIONE

La relazione sul saggio deve, se possibile, includere le seguenti informazioni:

- sostanze in esame: dati di identificazione chimica,
- organismi sperimentali: origine, cultura di laboratorio, numero del ceppo, metodo di cultura,
- condizioni sperimentali:
  - data di inizio e fine del saggio e sua durata,
  - temperatura,
  - composizione del terreno di coltura,
  - apparecchiatura per le colture,
  - pH delle soluzioni all'inizio e alla prova del saggio (se si osservano deviazioni del pH superiori a 1,5 unità si devono fornire delle spiegazioni),
  - veicolo e metodo usato per solubilizzare la sostanza in esame e concentrazioni del veicolo nelle soluzioni del saggio,
  - intensità e qualità dell'illuminazione,
  - concentrazioni provate (misurate o nominali),
- risultati:
  - densità delle cellule per ciascuna beuta corrispondente ad ogni singola misurazione, e metodo usato per la misura della densità delle cellule,
  - valori medi di densità delle cellule,
  - curve di crescita,
  - rappresentazione grafica della relazione tra concentrazione ed effetto,
  - rappresentazione grafica della relazione tra concentrazione ed effetto,
  - valori di CE e metodo di calcolo,
  - NOEC,
  - altri effetti osservati

### 4. BIBLIOGRAFIA

- (1) OECD, Paris, 1981, Test Guideline 201, Decision of the Council C 81j 30 Final.
- (2) Umweltbundesamt, Berlin, 1984, Verfahrensvorschlag «Hemmung der Zellvermehrung bei der Grünalge *Scenedesmus subspicatus*», in: Rudolph/Boje: Ökotoxikologie, ecomed, Landsberg, 1986.
- (3) ISO 8692 — Water quality — Fresh water algal growth inhibition test with *Scenedesmus subspicatus* and *Selenastrum capricornutum*.
- (4) S. Galassi and M. Vighi — Chemosphere, 1981, vol. 10, 1123-1126.

## Appendice 1

## Esempio di un procedimento per coltura di alghe

## Osservazioni generali

La preparazione di colture sulla base del seguente procedimento ha per scopo di ottenere colture algali per saggi di tossicità

Si devono usare metodi adatti per assicurare che le colture algali non siano infette da batteri (ISO 4833). Sono desiderabili infatti colture axeniche, e sono essenziali colture unialgali.

Tutte le operazioni devono essere eseguite in condizioni sterili allo scopo di evitare una contaminazione con batteri e altre alghe. Le colture contaminate devono essere scartate.

## Procedimenti per l'ottenimento di colture algali

## Preparazione di soluzioni di nutrienti (terreni di coltura)

Il terreno di coltura può essere preparato diluendo soluzioni di riserva concentrate di elementi nutritivi. Per un terreno solido, si aggiunge lo 0,8 % di agar. Il terreno usato deve essere sterile. La sterilizzazione in autoclave può portare ad una perdita di  $\text{NH}_3$ .

## Coltura di riserva

Le colture di riserva (colture madri) sono piccole colture algali che vengono trasferite con regolarità su terreno di coltura fresco per fungere da materiale di partenza per il saggio. Nel caso in cui le colture non vengano usate con regolarità, esse vanno strisciate su pezzi di agar inclinati entro provette. Questi vengono trasferiti su terreno fresco almeno una volta ogni due mesi.

Le colture di riserva vengono fatte crescere in beute contenenti il terreno appropriato (volume circa 100 ml). Quando le alghe vengono incubate a 20 °C con illuminazione continua, è necessario un trasferimento settimanale.

Durante il trasferimento, una certa quantità di coltura «vecchia» viene trasferita con pipette sterili in una beuta di terreno di coltura fresco e la quantità deve essere tale che, nel caso delle specie di crescita veloce, la concentrazione iniziale sia circa 100 volte minore di quella della coltura vecchia.

Il tasso di crescita di una specie può essere determinato dalla curva di crescita. Se questa è nota, è possibile stimare la densità alla quale la coltura deve essere trasferita ad un terreno di coltura nuovo. Ciò deve essere fatto prima che la coltura raggiunga la fase di mortalità.

## Precoltura

La precoltura serve a fornire il quantitativo di alghe adatto per l'inoculo delle colture del saggio. La precoltura viene incubata nelle condizioni del saggio e usata quando è ancora in crescita esponenziale, normalmente dopo un periodo di incubazione di circa 3 giorni. Quando le colture algali contengono cellule deformate o anormali, devono essere scartate.

## Appendice 2

Il protocollo «ISO 8692 — Water quality — Fresh water algal growth inhibition test with *Scenedesmus subspicatus* and *Selenastrum capricornutum*» riporta i seguenti risultati ottenuti in un saggio interlaboratorio che ha interessato 16 laboratori e nel quale è stato saggiato il dicromato di potassio.

	Media (mg/l)	Intervallo (mg/l)
$I_{50}$ (0-72 h)	0,84	0,60-1,03
$I_{50}$ (0-72 h)	0,53	0,20-0,75

## C 4 BIODEGRADAZIONE Determinazione della «pronta» (ready) biodegradabilità

## PARTE I CONSIDERAZIONI GENERALI

## I 1 INTRODUZIONE

Vengono descritti sei metodi d'analisi che permettono di valutare la pronta biodegradabilità di composti chimici in un mezzo acquoso in condizioni aerobiche

- (a) Carbonio organico disciolto (DOC) — rimozione lenta (Metodo C 4 A)
- (b) «Screening» OCSE modificato — rimozione lenta del DOC (Metodo C 4 B)
- (c) Sviluppo di biossido di carbonio (CO<sub>2</sub>) — Saggio di Sturm modificato (Metodo C 4-C)
- (d) Respirimetria manometrica (Metodo C 4-D)
- (e) Bottiglia chiusa (Metodo C 4-E)
- (f) MITI (Ministero del Commercio Internazionale e dell'Industria — Giappone) (Metodo C 4-F)

Nella Parte I del metodo sono date indicazioni di carattere generale nonché considerazioni comuni per tutti sei i saggi. Gli aspetti specifici dei metodi sono presentati nelle parti da II a VII. Gli allegati contengono definizioni, formule e materiale operativo

Un saggio di confronto interlaboratori OCSE, effettuato nel 1988, ha mostrato che i metodi forniscono dei risultati coerenti. Tuttavia, secondo le caratteristiche fisiche della sostanza da saggiare, si può preferire l'uno o l'altro metodo

## I 2 SCELTA DEL METODO PIU' APPROPRIATO

Allo scopo di scegliere il metodo più appropriato, è essenziale disporre di informazioni sulla solubilità, sulla tensione di vapore e sulle caratteristiche di adsorbimento del composto chimico. Dovrebbe essere nota la struttura chimica o la formula bruta per calcolare i valori teorici e/o per controllare i valori dei parametri significativi, per esempio ThOD, ThCO<sub>2</sub>, DOC, TOD, COD, misurati (si vedano gli allegati I e II)

I composti chimici da esaminare che sono solubili in acqua, ad una concentrazione di almeno 100 mg/l, possono essere valutati con tutti i metodi, a condizione che non siano volatili e non diano luogo a fenomeni di adsorbimento. In tabella n. 1 vengono riportati metodi idonei per quei composti chimici, volatili o adsorbibili, scarsamente solubili in acqua. Nell'allegato III è descritto come si possono trattare i composti chimici scarsamente solubili in acqua e quelli volatili. Composti chimici moderatamente volatili possono essere controllati mediante il metodo di rimozione lenta del DOC se nei contenitori di prova si dispone di uno spazio gassoso sufficiente (che dovrebbe opportunamente tappato). In questo caso, è necessario eseguire anche un controllo abiotico per tener conto di eventuali perdite per fenomeni fisici

Tabella 1: Applicabilità dei metodi di saggio

Saggio	Metodo analitico	Idoneità del metodo per sostanze		
		scars. solub.	volatili	adsorbibili
Rimozione lenta DOC	Carbonio organico disciolto	-		+ /
Rimozione lenta OCSE modificato	Carbonio organico disciolto	—	—	+ / -
Sviluppo CO <sub>2</sub>	Respirometria sviluppo CO <sub>2</sub>	+	-	+
Respirometria manometrica	Respirometria consumo d'ossigeno	+	+ / -	+
Bottiglia chiusa	Respirometria ossigeno disciolto	+ / -	+	+
MITI	Respirometria consumo d'ossigeno	+	+ / -	+

Per interpretare i risultati ottenuti, in particolare quando i valori di biodegradabilità sono bassi o marginali, è necessario acquisire ulteriori informazioni riguardo alla purezza e alle proporzioni relative dei componenti principali del materiale da saggiare.

Informazioni sulla tossicità del composto chimico da saggiare, nei confronti dei batteri (vedi allegato IV), possono essere molto utili per una scelta mirata della concentrazione da sottoporre a saggio e per una corretta interpretazione dei bassi valori di biodegradazione.

### 1.3. SOSTANZE DI RIFERIMENTO

Allo scopo di verificare la procedura, si controllano prodotti chimici di riferimento che rispettano i criteri di pronta biodegradabilità installando un pallone opportuno in parallelo come parte delle normali prove sperimentali.

Composti chimici adatti sono anilina (distillata di fresco), acetato di sodio e benzoato di sodio. Questi prodotti chimici di riferimento si degradano tutti in questi metodi anche quando non si aggiunge deliberatamente inoculo.

È stato suggerito che si dovrebbe cercare un prodotto chimico di riferimento che sia facilmente biodegradabile, ma che richieda l'aggiunta di un inoculo, anche nel saggio della bottiglia chiusa. È stato proposto l'idrogenofthalato di potassio, ma mancano le prove per accettare questa sostanza come sostanza di riferimento.

Nei saggi respirometrici, i composti contenenti azoto possono influire sull'assorbimento di ossigeno a causa della nitrificazione (si vedano gli allegati II e V).

### 1.4. PRINCIPIO DEI METODI DI SAGGIO

Una soluzione, o sospensione, della sostanza in esame in un mezzo minerale viene inoculata e incubata in condizioni aerobiche al buio o a luce diffusa. La quantità di DOC introdotta nella soluzione con l'inoculo dovrebbe essere quanto più bassa possibile in paragone alla quantità di DOC dovuta alla sostanza in esame.

Per valutare l'attività endogena dell'inoculo, si eseguono, in parallelo, dei saggi in bianco con l'inoculo ma senza sostanze in esame, in quanto l'attività endogena delle cellule, in presenza della sostanza, non si concilia esattamente con quella del controllo. Un saggio con una sostanza di riferimento viene eseguito in parallelo per valutare l'efficacia della procedura.

In generale, la degradazione viene seguita mediante la determinazione di parametri significativi, come DOC, produzione di CO<sub>2</sub> e consumo dell'ossigeno. Le misure vengono effettuate ad intervalli sufficientemente frequenti per permettere l'identificazione della biodegradazione dall'inizio alla fine. Con respirometri automatici, la misurazione è continua. Il DOC viene misurato in aggiunta ad un altro parametro, di solito all'inizio e al termine della prova. Si può anche utilizzare un'analisi chimica specifica per valutare la degradazione primaria della sostanza in esame e per determinare la concentrazione delle eventuali sostanze intermedie formate (questa analisi è obbligatoria nel saggio MITI).

Normalmente la prova dura 28 giorni. Tuttavia è possibile terminare il saggio prima dei 28 giorni, per esempio appena la curva della degradazione biologica ha raggiunto un livello stazionario per almeno tre determinazioni. Le prove possono anche essere prolungate oltre i 28 giorni quando la curva mostra che la biodegradazione è iniziata ma che non si è ancora raggiunto lo stato stazionario al 28° giorno.

### 1.5. CRITERIO DI QUALITÀ

#### 1.5.1. Riproducibilità

A causa della natura della biodegradazione e delle popolazioni batteriche miste usate come inoculi, le determinazioni devono essere eseguite almeno in doppio.

È esperienza comune che quanto più grande è la concentrazione di microorganismi aggiunti inizialmente al mezzo colturale, tanto minori saranno le variazioni tra le repliche. Prove di intercalibrazione tra laboratori hanno mostrato che vi possono essere grandi variazioni tra i risultati ottenuti da differenti laboratori, ma normalmente si ottiene un buon accordo con composti chimici di riferimento facilmente biodegradabili.

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Validità del saggio

Il saggio viene considerato valido se la differenza tra i valori estremi delle prove in multiplo di rimozione del composto chimico in esame al «plateau», alla fine del saggio o alla fine della fase di crescita (time window) di 10 giorni, è minore del 20 % e se la degradazione percentuale della sostanza di riferimento ha raggiunto il livello corrispondente alla «pronta» biodegradabilità in 14 giorni. Se non si verifica una di queste condizioni, la prova deve venire ripetuta. Data la rigosità dei metodi, bassi valori non significano necessariamente che la sostanza in esame non sia biodegradabile nell'ambiente, ma che sarà necessario ulteriore lavoro per definire la biodegradabilità.

Se in un saggio di tossicità, contenente sia la sostanza in esame che un composto chimico di riferimento, in 14 giorni si verifica una degradazione inferiore al 35 % (in base al DOC) o minore del 25 % (in base a ThOD o  $\text{ThCO}_2$ ), si deve supporre che i composti chimici in esame siano inibitori (si veda anche l'allegato IV). Le prove dovrebbero essere ripetute, possibilmente con l'uso di una concentrazione minore di sostanza chimica in esame e/o una concentrazione più elevata di inoculo, ma non superiore a 30 mg per litro di solido.

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## PROCEDURE GENERALI E PREPARAZIONI

Le condizioni generali che valgono per le prove sono riassunte in Tabella 2. Le apparecchiature e le altre condizioni sperimentali valide per un particolare tipo di saggio sono descritte più avanti al paragrafo «saggio specifico».

Tabella 2. Condizioni sperimentali

Saggio	Rimozione lenta DOC	Sviluppo CO <sub>2</sub>	Respirometria manometrica	Screenig OCSE modif	Bottiglia chiusa	MITI (1)	
Concentrazione della sostanza in esame in mg/L mg DOC/L mg ThOD/L	10-40	10-20	100 50 100	10 40	2 10 5-10	100	
Concentrazione dell'inoculo (in cellule/L, approssimata)	≤ 30 mg/l SS o ≤ 100 ml effluente/l  (10 <sup>7</sup> - 10 <sup>8</sup> )			0,5 ml effluente second- ario/L (10 <sup>5</sup> )	≤ 5 ml di effluente/l  (10 <sup>4</sup> - 10 <sup>6</sup> )	30 mg/l SS  (10 <sup>7</sup> - 10 <sup>8</sup> )	
Concentrazione di elementi nel mezzo minerale (in mg/l)							
P	116					11,6	29
N	1,3					0,13	1,3
Na	86					8,6	17,2
K	122					12,2	36,5
Mg	2,2					2,2	6,6
Ca	9,9					9,9	29,7
Fe	0,05 0,1					0,05 0,1	0,15
pH	7,4 ± 0,2					preferibil- mente 7,0	
Temperatura	22 ± 2 °C					25 ± 1 °C	
DOC = carbonio organico disciolto      ThOD = domanda teorica ossigeno      SS = solidi sospesi							

## 1.6.1. Acqua di diluizione

L'acqua deionizzata o distillata, esente da concentrazioni inibitrici di sostanze tossiche (per esempio ioni  $\text{Cu}^{++}$ ), è usata come solvente. Essa deve contenere non oltre il 10 % del carbonio organico introdotto mediante il materiale in esame. L'elevata purezza dell'acqua per il saggio è necessaria per eliminare valori di bianco elevati. La contaminazione può essere dovuta a impurezze intrinseche, all'impiego di resine a scambio ionico o a materiale lisato proveniente da batteri e alghe. Per ciascuna serie di saggi usare una sola partita d'acqua, controllata preventivamente mediante analisi DOC. Detto controllo non è necessario per il saggio della bottiglia chiusa, perchè il consumo di ossigeno da parte dei microorganismi dell'acqua sia basso.

## 1.6.2. Soluzioni «stock» dei sali minerali

Per preparare le soluzioni per il saggio, devono essere preventivamente preparate delle soluzioni «stock» di appropriata concentrazione dei sali minerali. Possono essere usate le seguenti soluzioni «stock» (con differenti fattori di diluizione) per i metodi: rimozione lenta DOC, screening OCSE modificato, sviluppo di  $\text{CO}_2$ , respirometria manometrica, saggio della bottiglia chiusa.

I fattori di diluizione e, per il saggio MITI, la preparazione specifica del mezzo minerale sono indicati nei saggi specifici.

## Soluzioni «stock»

Preparare le seguenti soluzioni «stock» utilizzando reagenti puri per analisi.

(a)	Diidrogenoortofosfato monopotassico, $\text{KH}_2\text{PO}_4$	8,50 g
	Monoidrogenoortofosfato dipotassico, $\text{K}_2\text{HPO}_4$	21,75 g
	Monoidrogenoortofosfato disodico diidrato $\text{Na}_2\text{HPO}_4 \cdot 2 \text{H}_2\text{O}$	33,40 g
	Cloruro d'ammonio, $\text{NH}_4\text{Cl}$	0,50 g

Sciogliere in acqua e portare a 1 litro il pH della soluzione deve essere 7,4

(b)	Cloruro di calcio anidro, $\text{CaCl}_2$	27,50 g
	o cloruro di calcio diidrato, $\text{CaCl}_2 \cdot 2 \text{H}_2\text{O}$	36,40 g
	Sciogliere in acqua e portare a 1 litro	

(c)	Solfato di magnesio eptaidrato, $\text{MgSO}_4 \cdot 7 \text{H}_2\text{O}$	22,50 g
	Sciogliere in acqua e portare a 1 litro	

(d)	Cloruro di ferro (III) esaidrato, $\text{FeCl}_3 \cdot 6 \text{H}_2\text{O}$	0,25 g
	Sciogliere in acqua e portare a 1 litro.	

Nota: allo scopo di evitare di dover preparare questa soluzione immediatamente prima dell'uso, aggiungere una goccia di HCl concentrato o 0,4 g di acido etilendiamminotetra-acetico sale disodico (EDTA) per litro.

## 1.6.3. Soluzioni «stock» di composti chimici

Per esempio, sciogliere da 1 a 10 g, a seconda della sostanza chimica da saggiare o di riferimento in acqua deionizzata e portare a 1 litro quando la solubilità sia superiore a 1 g/l. Altrimenti, preparare soluzioni «stock» del mezzo minerale, oppure aggiungere la sostanza chimica direttamente al mezzo minerale. Per la solubilizzazione di composti chimici poco solubili, si veda l'allegato III, ma nel saggio MITI (Metodo C 4-F), non si devono usare né solventi né emulsionanti.

## 1.6.4. Inoculi

L'inoculo può essere ottenuto da varie fonti: fango attivo, acque di scarico (non clorate), acque superficiali e terreni, oppure da una miscela di questi. Per i saggi di rimozione lenta del DOC, sviluppo di  $\text{CO}_2$ , e respirometria manometrica, se si usa fango attivo esso dovrebbe essere prelevato da un impianto di trattamento o da una unità su scala di laboratorio che riceva principalmente scarichi domestici. Si è visto che gli inoculi provenienti da altre fonti danno luogo ad una dispersione maggiore dei risultati. Per lo screening OCSE modificato e per il saggio della bottiglia chiusa occorre un inoculo più diluito senza fiocchi di fango; la fonte preferita è un effluente secondario di un impianto di trattamento delle acque di rifiuto domestiche o una

rispettiva unità su scala di laboratorio. Per il saggio MITI l'inoculo viene ricavato da una miscela di fanghi di diversa provenienza ed è descritto nel paragrafo di questo saggio specifico

#### 1.6.4.1 *Inoculo da fanghi attivi*

Raccogliere un campione di fango attivo fresco dal serbatoio di aereazione di un impianto di trattamento o da una unità pilota di laboratorio per il trattamento delle acque di scarico che tratti prevalentemente acque di origine domestica. Rimuovere, se necessario, le particelle grossolane mediante filtrazione attraverso un setaccio fine, e quindi mantenere il fango in condizioni aerobiche.

In alternativa, decantare o centrifugare (per esempio a 1 100 g per 10 minuti) dopo la rimozione di eventuali particelle grossolane. Scartare il surnatante. Il fango può essere lavato nel mezzo minerale. Sospendere il fango concentrato in mezzo minerale per ottenere una concentrazione di 3-5 g di solidi sospesi/l e aereare fino a quando è necessario.

Il fango dovrebbe essere prelevato da un impianto convenzionale ben funzionante. Se il fango è stato preso da un impianto ad alta potenzialità o si ritiene contenga inibitori dovrebbe essere lavato. Decantare o centrifugare il fango risospeso dopo accurata miscelazione, scartare il surnatante e risospendere il fango lavato in un volume ulteriore di terreno minerale. Ripetere questa procedura fino a quando il fango può essere considerato esente da eccesso di substrato e da inibitori.

Dopo avere ottenuto la completa risospensione, con fango non trattato, prelevare un'aliquota prima dell'uso per la determinazione del peso secco dei solidi sospesi.

Un'ulteriore alternativa è quella di omogeneizzare il fango attivo (3-5 g di solidi sospesi/l). Trattare il fango in un miscelatore meccanico per due minuti a velocità media. Decantare il fango miscelato per 30 minuti, o più a lungo se necessario, e utilizzare il liquido sovrastante per l'uso come inoculo nel rapporto di 10 ml/l nel mezzo minerale.

#### 1.6.4.2 *Altre fonti di inoculo*

Esso può essere ottenuto da un effluente secondario di un impianto di trattamento o da una unità pilota di laboratorio che riceve prevalentemente scarichi domestici. Raccogliere un campione fresco e mantenerlo in condizioni aerobiche durante il trasporto. Lasciare decantare per 1 ora o filtrare con carta da filtro grossolana e mantenere l'effluente decantato o il filtrato in condizioni aerobiche fino a quando è necessario. Si possono usare fino a 100 ml di questo tipo di inoculo per litro di mezzo minerale.

Una fonte alternativa per l'inoculo è l'acqua superficiale. In questo caso, raccogliere un'adeguata quantità di campione acqua superficiale, per esempio acqua di fiume, di lago, e mantenerla in condizioni aerobiche fino a quando è necessario. Se è il caso, concentrare l'inoculo mediante filtrazione o centrifugazione.

#### 1.6.5 *Precondizionamento degli inoculi*

Gli inoculi possono essere precondizionati alle condizioni sperimentali, ma non preadattati al composto chimico in esame. Il precondizionamento consiste nell'aereare fango attivo nel mezzo minerale o effluente secondario per 5-7 giorni alla temperatura di prova. Il precondizionamento migliora talvolta la precisione dei metodi sperimentali riducendo i valori del bianco. Si ritiene non necessario precondizionare l'inoculo nel metodo MITI.

#### 1.6.6 *Controlli abiotici*

Quando è necessario, controllare la possibile degradazione abiotica della sostanza in esame determinando la rimozione di DOC, l'assorbimento di ossigeno o lo sviluppo di biossido di carbonio in controlli sterili che non contengono inoculo. La sterilizzazione può essere fatta mediante filtrazione attraverso una membrana (0,2-0,45 micrometri), mediante l'aggiunta di una sostanza tossica di idonea concentrazione. Se viene usata una membrana filtrante, prelevare i campioni in modo asettico per mantenerli sterili. A meno che l'adsorbimento della sostanza chimica saggiata non sia risultato precedentemente assente, i saggi che misurano la biodegradazione come rimozione del DOC (carbonio organico disciolto), specialmente con inoculi a fanghi attivi, dovrebbero includere un controllo abiotico con inoculo tossico.

## 1 6 7 Numero di contenitori usati in un saggio tipo

Il numero di contenitori usati in una prova tipo è descritto nei rispettivi metodi di ciascun saggio

Possono essere usati i seguenti tipi di contenitori

sospensione	contenente la sostanza per il saggio e l'inoculo
bianco	contenente solo l'inoculo
controllo	contenente la sostanza di riferimento e l'inoculo
controllo abiotico sterile	contenente la sostanza per il saggio sterile (vedi 1 6 6 )
controllo dell'adsorbimento	contenente la sostanza per il saggio, l'inoculo e l'agente sterilizzante
controllo della tossicità	contenente la sostanza per il saggio, la sostanza di riferimento e l'inoculo

Le determinazioni nella sospensione in esame e nel bianco dovrebbero essere fatti in parallelo. È consigliabile effettuare le determinazioni in parallelo negli altri contenitori al meglio

Tuttavia ciò non sempre è possibile. Assicurarsi che vengano prelevati un numero sufficiente di campioni o vengano effettuate un numero sufficiente di letture per permettere di valutare la rimozione percentuale nell'arco di 10 giorni

## 1 7 DATI E VALUTAZIONE

Nel calcolo della degradazione percentuale ( $D_t$ ), si utilizzano i valori medi delle misure in doppio del parametro significativo nei recipienti di prova e nel bianco dell'inoculo. Le formule sono rappresentate nei paragrafi relativi ai saggi specifici. L'andamento della degradazione viene illustrato graficamente e con l'indicazione della fase di crescita (time window) di 10 giorni. Calcolare e riportare la rimozione percentuale ottenuta al termine della fase di crescita (time window) di 10 giorni e il valore raggiunto nella fase di stabilizzazione o al termine della prova, a seconda dei casi

Nelle prove respirometriche, i composti che contengono azoto possono influire sul consumo di ossigeno a causa della nitrificazione (si vedano gli allegati II e V)

## 1 7 1 Misura della degradazione mediante determinazione del DOC

La percentuale di degradazione nel tempo ( $D_t$ ) dovrebbe essere calcolata separatamente nei recipienti contenenti la sostanza da esaminare usando i valori medi della misura in doppio del DOC perché il saggio possa avere significato. Ciò può essere calcolato usando la seguente equazione

$$D_t = \left( 1 - \frac{C_t - C_{bt}}{C_0 - C_{b0}} \right) \times 100$$

dove

$D_t$  = degradazione % al tempo t,

$C_0$  = concentrazione iniziale media di DOC nel mezzo di coltura inoculato contenente la sostanza in esame (mg DOC/l),

$C_t$  = concentrazione media di DOC nel mezzo di coltura inoculato contenente la sostanza in esame al tempo t (mg DOC/l),

$C_{b0}$  = concentrazione media iniziale di DOC nel bianco del mezzo minerale inoculato (mg DOC/l),

$C_{bt}$  = concentrazione media di DOC nel bianco del mezzo minerale inoculato al tempo t (mg DOC/l)

Tutte le concentrazioni sono misurate sperimentalmente



## 172 Misura della degradazione mediante analisi specifica

Quando sono disponibili dati analitici specifici, calcolare la degradazione biologica primaria dalla relazione

$$D_t = \frac{S_b - S_a}{S_b} \times 100$$

$D_t$  = degradazione % al tempo  $t$ , normalmente 28 giorni,

$S_a$  = quantità residua di sostanza in esame nel terreno inoculato al termine della prova (mg),

$S_b$  = quantità residua di sostanza in esame nella prova in bianco con acqua/mezzo minerale a cui è stata aggiunta solo la sostanza in esame (mg)

## 173 Degradazione abiotica

Se è usato un controllo abiotico sterile, calcolare la percentuale di degradazione abiotica usando

$$\% \text{ di degradazione abiotica} = \frac{C_{st(0)} - C_{st(t)}}{C_{st(0)}} \times 100$$

dove

$C_{st(0)}$  = concentrazione del DOC nel controllo sterile al giorno 0,

$C_{st(t)}$  = concentrazione del DOC nel controllo sterile al giorno  $t$

## 18 RELAZIONE

La relazione del saggio deve, se possibile, contenere le seguenti informazioni

- sostanze chimiche sperimentali di riferimento, e loro purezza,
- condizioni del saggio,
- inoculo: natura e località del campionamento, concentrazione ed eventuale trattamento di precondizionamento,
- proporzione e natura degli effluenti industriali presenti nelle acque di scarico, se note,
- tempi di conduzione del saggio e temperatura,
- nel caso di sostanze chimiche scarsamente solubili, il tipo di trattamento adottato,
- metodo di saggio applicato; dovrebbero essere fornite ragioni scientifiche e una spiegazione per eventuali modifiche alla procedura,
- registrazione dei dati,
- dovrebbero essere indicati eventuali fenomeni di inibizione osservati,
- eventuale degradazione abiotica osservata,
- dati analitici chimici specifici, se disponibili,
- dati analitici sugli intermedi, se disponibili,
- grafico della degradazione percentuale in funzione del tempo per le sostanze in esame e per quelle di riferimento, la fase di latenza, la fase di degradazione, la fase di crescita (time window) di 10 giorni e la pendenza devono essere indicate chiaramente (allegato I). Se il saggio ha rispettato il criterio di validità, per il grafico può essere usata la media della percentuale di degradazione dei recipienti contenenti la sostanza da esaminare,
- la rimozione percentuale dopo la fase di crescita (time window) di 10 giorni, nonché la stabilizzazione o il termine della prova

**PARTE II. SAGGIO DI RIMOZIONE LENTA DEL DOC (Metodo C 4-A)****II 1 PRINCIPIO DEL METODO**

Un volume misurato del mezzo minerale inoculato, contenente una concentrazione nota della sostanza in esame (10-40 mg DOC/l) come unica fonte nominale di carbonio organico, viene incubato al buio o in luce diffusa a  $22 \pm 2^\circ\text{C}$ .

La degradazione viene seguita mediante analisi del DOC a intervalli regolari in un arco di tempo di oltre 28 giorni. Il grado di biodegradazione viene calcolato esprimendo la concentrazione di DOC rimossa (corretta del bianco di controllo dell'inoculo) in percento di concentrazione presente inizialmente. Il grado di degradazione biologica primaria può anche essere calcolato da una analisi chimica supplementare effettuata all'inizio e al termine dell'incubazione.

**II 2 DESCRIZIONE DEL METODO****II 2.1 Apparecchiatura**

- a) Beute, per esempio, da 250 ml a 2 litri, secondo il volume necessario per l'analisi DOC,
- b) tavola di agitazione — in grado di accogliere le beute, con controllo automatico della temperatura oppure disposta in un ambiente a temperatura costante — e di potenza tale da mantenere le condizioni aerobiche in tutte le beute,
- c) apparecchio di filtrazione con membrane adatte,
- d) analizzatore di DOC,
- e) apparecchio per determinare l'ossigeno disciolto,
- f) centrifuga.

**II 2.2 Preparazione del mezzo minerale**

Per la preparazione delle soluzioni concentrate vedi I 6.2.

Miscelare 10 ml di soluzione (a) con 800 ml di acqua di diluizione, aggiungere 1 ml di soluzioni di (b) a (d) e portare a 1 litro con acqua di diluizione.

**II 2.3 Preparazione e precondizionamento dell'inoculo**

L'inoculo può essere ottenuto da varie fonti: fango attivo, acque di scarico, acque superficiali e terreni oppure da una miscela di questi.

Vedi I 6.4, I 6.4.1, I 6.4.2 e I 6.5.

**II 2.4 Preparazione delle beute**

Introdurre, per esempio, porzioni da 800 ml di mezzo minerale in beute da 2 litri e aggiungere volumi sufficienti di soluzioni concentrate delle sostanze in esame e di riferimento a beute separate in modo da ottenere una concentrazione di sostanza chimica equivalente a 10-40 mg DOC/l. Controllare il valore del pH e correggerlo, se necessario, a  $\text{pH} = 7,4$ . Inoculare i palloni con fango attivo o altra fonte di inoculo (vedi I 6.4), in modo da ottenere una concentrazione finale non superiore a 30 mg di solidi sospesi/l. Preparare inoltre controlli di inoculo in mezzo minerale senza il composto chimico in esame né quello di riferimento.

Se necessario, usare un recipiente per controllare il possibile effetto inibitore della sostanza chimica in esame inoculando una soluzione contenente, nel mezzo minerale, concentrazioni confrontabili della sostanza chimica in esame e di quella di riferimento.

Inoltre, se richiesto, preparare un'ulteriore beuta sterile per controllare se la sostanza chimica in esame venga degradata abioticamente utilizzando una soluzione non inoculata della sostanza chimica (vedi I 6.6).

In aggiunta, se si sospetta che la sostanza chimica in esame sia adsorbita in modo significativo sul vetro, sul fango etc., effettuare una valutazione preliminare per determinare il grado probabile di adsorbimento e quindi l'idoneità del saggio per il composto chimico (vedi Tabella 1). Preparazione di un recipiente contenente la sostanza da esaminare, l'inoculo e l'agente sterilizzante.

Portare i volumi in tutte le beute a 1 l con mezzo minerale, e, dopo miscelazione, prelevare un campione da ciascuna beuta per determinare la concentrazione iniziale di DOC (vedi allegato II.4). Coprire le aperture delle beute, per esempio, con un foglio di alluminio, in modo da permettere uno scambio libero di aria tra la beuta e l'atmosfera circostante. Inserire poi i contenitori nella tavola di agitazione e avviare il saggio

#### II.2.5. Numero di contenitori usati in un saggio tipo

Recipiente 1 e 2: sospensione

Recipiente 3 e 4: bianco con inoculo

Recipiente 5: controllo

preferibilmente se è necessario:

Recipiente 6: controllo abiotico sterile

Recipiente 7: controllo per l'adsorbimento

Recipiente 8: controllo per la tossicità

Vedi I.6.7.

#### II.2.6. Esecuzione del saggio

Durante l'esecuzione del saggio, determinare la concentrazione di DOC in ciascuna beuta, in doppio, a intervalli di tempo noti, in modo sufficientemente regolare per poter determinare il momento di inizio della fase di crescita (time window) di 10 giorni e la rimozione percentuale al termine della fase di crescita (time window) di 10 giorni. Prelevare solo il volume minimo necessario di sospensione di prova per ciascuna determinazione.

Prima del campionamento, compensare le perdite per evaporazione dalle beute mediante l'aggiunta di acqua di diluizione (I.6.1) nella quantità richiesta, se necessario. Miscelare il mezzo di coltura accuratamente prima di prelevare un campione e assicurarsi che il materiale eventualmente aderente alle pareti dei recipienti sia disciolto o sospeso prima del campionamento. Filtrare su membrana o centrifugare (vedi allegato II.4) immediatamente dopo aver prelevato il campione. Analizzare i campioni filtrati e centrifugati lo stesso giorno, altrimenti conservarli a 2-4 °C per un massimo di 48 ore o al di sotto di -18°C per un periodo più lungo

#### II.3. DATI E RELAZIONE

##### II.3.1. Modalità di esposizione dei risultati

Calcolare la degradazione percentuale al tempo  $t$  come indicato al punto I.7.1. (determinazione del DOC) e (analisi specifica) punto I.7.2. facoltativa.

Trascrivere tutti i risultati su moduli predisposti.

##### II.3.2. Validità dei risultati

Vedi I.5.2.

##### II.3.3. RELAZIONE

Vedi I.8.

II 4

## MODULARIO

Nel seguito è presentato un esempio di modulo predisposto

## SAGGIO DI RIMOZIONE LENTA DEL DOC

## 1 LABORATORIO

## 2 DATA DI INIZIO DEL SAGGIO

## 3 SOSTANZA CHIMICA IN ESAME

Nome

Concentrazione della soluzione stock mg/l come sostanza

Concentrazione iniziale nel mezzo,  $t_0$  mg/l come sostanza

## 4 INOCULO

Fonte

Trattamento applicato

Eventuale preconditionamento

Concentrazione dei solidi sospesi nella miscela di reazione mg/l

## 5 DETERMINAZIONI DEL CARBONIO

Analizzatore di carbonio

	Beuta N		DOC dopo n giorni (mg/l)				
			0	$n_1$	$n_2$	$n_3$	$n_4$
Sostanza chimica in esame più inoculo	1	$a_1$					
		$a_2$					
		a, media $C_{a(t)}$					
	2	$b_1$					
		$b_2$					
		b, media $C_{b(t)}$					
Bianco dell'inoculo senza sostanza chimica in esame	3	$c_1$					
		$c_2$					
		c, media $C_{c(t)}$					
	4	$d_1$					
		$d_2$					
		d, media $C_{d(t)}$					
	$C_{bl(t)} = \frac{C_{c(t)} + C_{d(t)}}{2}$						

## 6 VALUTAZIONE DEI DATI GREZZI

Beuta Nr		% degradazione dopo in giorni				
		0	n <sub>1</sub>	n <sub>2</sub>	n <sub>3</sub>	n <sub>4</sub>
1	$D_1 = \left( 1 - \frac{C_{s(t)} - C_{bl(t)}}{C_{s(0)} - C_{bl(0)}} \right) \times 100$	0				
2	$D_2 = \left( 1 - \frac{C_{s(t)} - C_{bl(t)}}{C_{s(0)} - C_{bl(0)}} \right) \times 100$	0				
Media (*)	$D = \frac{D_1 + D_2}{2}$	0				

(\*) D<sub>1</sub> e D<sub>2</sub> non dovrebbero essere mediate se c'è notevole differenza tra loro

Nota: formule simili possono essere usate per i controlli della sostanza chimica di riferimento e di tossicità

## 7 CONTROLLO ABIOTICO (facoltativo)

	Tempo (in giorni)	
	0	t
DOC conc in (mg/L) nel controllo sterile	C <sub>s(0)</sub>	C <sub>s(t)</sub>

$$\% \text{ di degradazione abiotica} = \frac{C_{s(0)} - C_{s(t)}}{C_{s(0)}} \times 100$$

## 8 ANALISI SPECIFICA DEL COMPOSTO CHIMICO (facoltativa)

	quantità residua della sostanza chimica alla fine del saggio	% di degradazione primaria
Controllo sterile	S <sub>b</sub>	
Saggio del mezzo inoculato	S <sub>a</sub>	$\frac{S_b - S_a}{S_b} \times 100$

## PARTE III SAGGIO DI SCREENING OCSE MODIFICATO (Metodo C 4 B)

## III.1 PRINCIPIO DEL METODO

Un volume noto di mezzo minerale contenente una concentrazione nota della sostanza in esame (10-40 mg DOC/l) come unica fonte nominale di carbonio organico viene inoculato con 0,5 ml di effluente per litro di mezzo minerale. La miscela viene aerata al buio o in luce diffusa a 22 ± 2 °C.

La degradazione viene seguita mediante analisi del DOC a intervalli regolari in un arco di tempo di 28 giorni. Il grado di biodegradazione viene calcolato esprimendo la concentrazione di DOC rimossa (corretta del bianco di controllo dell'inoculo) in percento della concentrazione presente inizialmente. Il grado di degradazione biologica primaria può anche essere calcolato mediante analisi chimica supplementare effettuata all'inizio e al termine dell'incubazione.

## III 2 DESCRIZIONE DEL METODO

## III.2.1 Apparecchiatura

- a) Beute, per esempio da 250 ml a 2 litri, secondo il volume necessario per l'analisi del DOC;
- b) tavola di agitazione — in grado di accogliere le beute, con controllo automatico della temperatura oppure disposta in un ambiente a temperatura costante — e di potenza sufficiente a mantenere le condizioni aerobiche in tutte le beute;
- c) apparecchio di filtrazione con membrane adatte;
- d) analizzatore di DOC;
- e) apparecchio per determinare l'ossigeno disciolto;
- f) centrifuga

## III.2.2 Preparazione del mezzo minerale

Per la preparazione delle soluzioni concentrate vedi I.6.2

Miscelare 10 ml di soluzione (a) con 800 ml di acqua di diluizione, aggiungere 1 ml di soluzioni da (b) a (d) e portare a 1 litro con acqua di diluizione.

In questo metodo si utilizzano solo 0,5 ml di effluente/litro come inoculo e pertanto può essere necessario integrare il terreno con oligoelementi e fattori di crescita aggiungendo 1 ml per ciascuna delle seguenti soluzioni per litro di terreno finale

Soluzione di oligoelementi:

Solfato di manganese tetraidrato, $\text{MnSO}_4 \cdot 4\text{H}_2\text{O}$	39,9 mg
Acido borico, $\text{H}_3\text{BO}_3$	57,2 mg
Solfato di zinco eptaidrato, $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$	42,8 mg
Eptamolibdato d'ammonio, $(\text{NH}_4)_6\text{Mo}_7\text{O}_{24}$	34,7 mg
Chelato di Fe ( $\text{FeCl}_3$ acido etilendiammino-tetraacetico)	100,0 mg

Sciogliere in un matraccio e portare a 1 000 ml con acqua di diluizione.

Soluzione di vitamine:

Estratto di lievito 15,0 mg

Sciogliere l'estratto di lievito in 100 ml di acqua e sterilizzare attraverso una membrana da 0,2 micron, preparare la soluzione al momento dell'uso.

## III 2.3. Preparazione e precondizionamento dell'inoculo

L'inoculo è ottenuto da un effluente secondario di un impianto di trattamento o da un'unità pilota di laboratorio alimentata prevalentemente da scarichi domestici. È usato in ragione di 0,5 ml/l di mezzo minerale. Vedi I.6.4.2. e I.6.5.

## III.2.4. Preparazione dei contenitori

Introdurre, per esempio, porzioni da 800 ml di mezzo minerale in beute da 2 litri e aggiungere volumi sufficienti di soluzioni stock delle sostanze in esame e di riferimento a beute separate in modo da ottenere una concentrazione di sostanza chimica equivalente a 10-40 mg DOC/l. Controllare il valore del pH e correggerlo, se necessario, a pH = 7,4. Inoculare le beute con effluente di acque di scarico (0,5 ml/litro) (vedi I.6.4.2.). Preparare inoltre controlli dell'inoculo nel mezzo minerale senza le sostanze chimiche in esame e di riferimento.

Se necessario, usare un recipiente per controllare il possibile effetto inibitore della sostanza chimica in esame inoculando una soluzione contenente, nel mezzo minerale, concentrazioni confrontabili della sostanza chimica in esame e di quella di riferimento

Inoltre, se richiesto, preparare un'ulteriore beuta sterile per controllare se la sostanza chimica in esame venga degradata abioticamente utilizzando una soluzione non inoculata della sostanza chimica (vedi I 6 6 )

In aggiunta, se si sospetta che la sostanza chimica in esame sia adsorbita in modo significativo sul vetro, sul fango ecc, effettuare una valutazione preliminare per determinare il grado probabile di adsorbimento e quindi l'idoneità del saggio per il composto chimico (vedi Tabella 1) Preparazione di un recipiente contenente la sostanza da esaminare, l'inoculo e l'agente sterilizzante

Portare i volumi in tutte le beute a 1 l con mezzo minerale, e, dopo miscelazione, prelevare un campione da ciascuna beuta per determinare la concentrazione iniziale di DOC (vedi allegato II 4) Coprire le aperture delle beute, per esempio con un foglio di alluminio, in modo da permettere uno scambio libero di aria tra la beuta e l'atmosfera circostante Inserire poi i recipienti nella tavola di agitazione e avviare il saggio

### III 2 5 Numero di contenitori usati in una prova tipo

Recipiente 1 e 2 sospensione

Recipiente 3 e 4 bianco con inoculo

Recipiente 5 controllo

preferibilmente se è necessario

Recipiente 6 controllo abiotico sterile

Recipiente 7 controllo per l'adsorbimento

Recipiente 8 controllo per la tossicità

Vedi I 6 7

### III 2 6 Esecuzione del saggio

Durante l'esecuzione del saggio, determinare la concentrazione di DOC in ciascuna beuta, in doppio, a intervalli di tempo noti, in modo sufficientemente regolare per poter determinare il momento di inizio della fase di crescita (time window) di 10 giorni e la rimozione percentuale al termine della fase di crescita (time window) di 10 giorni Prelevare solo il volume minimo necessario di sospensione di prova per ciascuna determinazione

Prima del campionamento, compensare le perdite per evaporazione dalle beute mediante l'aggiunta di acqua di diluizione (I 6 1), se necessario, nella quantità richiesta Miscelare il mezzo di coltura accuratamente prima di prelevare un campione e assicurarsi che il materiale eventualmente aderente alle pareti dei recipienti sia disciolto o sospeso prima del campionamento Filtrare su membrana o centrifugare (vedi allegato II 4) immediatamente dopo aver prelevato il campione Analizzare i campioni filtrati e centrifugati lo stesso giorno, altrimenti conservarli a 2-4 °C per un massimo di 48 ore o al di sotto di -18 °C per un periodo più lungo

### III 3 DATI E RELAZIONE

#### III 3 1 Trattamento dei risultati

Calcolare la degradazione percentuale al tempo  $t$  come indicato al punto I 7 1 (determinazione del DOC) e, facoltativamente, al punto I 7 2 (analisi specifica)

Trascrivere tutti i risultati su moduli predisposti

#### III 3 2 Validità dei risultati

Vedi I 5 2

#### III 3 3 RELAZIONE

Vedi I 8

III 4

## MODULARIO

Nel seguito è presentato un esempio di modulo

## SAGGIO DI RIMOZIONE LENTA DEL DOC SCREENING OCSE MODIFICATO

## 1 LABORATORIO

## 2 DATA DI INIZIO DEL SAGGIO

## 3 SOSTANZA IN ESAME

Nome

Concentrazione della soluzione stock mg/l come sostanza

Concentrazione iniziale nel mezzo,  $t_0$  mg/l come sostanza

## 4 INOCULO

Fonte

Trattamento applicato

Eventuale preconditionamento

Concentrazione dei solidi sospesi nella miscela di reazione mg/l

## 5 DETERMINAZIONI DEL CARBONIO

Analizzatore di carbonio

	Beuta N		DOC dopo n giorni (mg/l)				
			0	n <sub>1</sub>	n <sub>2</sub>	n <sub>3</sub>	n <sub>4</sub>
Sostanza chimica in esame piu inoculo	1	a <sub>1</sub>					
		a <sub>2</sub>					
		a, media C <sub>a(t)</sub>					
	2	b <sub>1</sub>					
		b <sub>2</sub>					
		b, media C <sub>b(t)</sub>					
Bianco dell'inoculo senza sostanza chimica in esame	3	c <sub>1</sub>					
		c <sub>2</sub>					
		c, media C <sub>c(t)</sub>					
	4	d <sub>1</sub>					
		d <sub>2</sub>					
		d, media C <sub>d(t)</sub>					
C <sub>bl(t)</sub> = $\frac{C_{c(t)} + C_{d(t)}}{2}$							



## 6 VALUTAZIONE DEI DATI GREZZI

Beuta n		% degradazione dopo n giorni				
		0	n <sub>1</sub>	n <sub>2</sub>	n <sub>3</sub>	n <sub>4</sub>
1	$D_1 = \left( 1 - \frac{C_{s(t)} - C_{bl(t)}}{C_{s(0)} - C_{bl(0)}} \right) \times 100$	0				
2	$D_2 = \left( 1 - \frac{C_{b(t)} - C_{bl(t)}}{C_{b(0)} - C_{bl(0)}} \right) \times 100$	0				
Media (*)	$D = \frac{D_1 + D_2}{2}$	0				

(\*) D<sub>1</sub> e D<sub>2</sub> non dovrebbero essere mediate se c'è notevole differenza tra loro

Nota: formule simili possono essere usate per i controlli della sostanza chimica di riferimento e di tossicità

## 7 CONTROLLO ABIOTICO (facoltativo)

	Tempo (in giorni)	
	0	t
DOC conc. in mg/L nel controllo sterile	$C_{s(0)}$	$C_{s(t)}$

$$\% \text{ di degradazione abiotica} = \frac{C_{s(0)} - C_{s(t)}}{C_{s(0)}} \times 100$$

## 8 ANALISI SPECIFICA DEL COMPOSTO CHIMICO (facoltativa)

	quantità residua della sostanza chimica alla fine del saggio	% di degradazione primaria
Controllo sterile	$S_b$	
Saggio del mezzo inoculato	$S_a$	$\frac{S_b - S_a}{S_b} \times 100$

PARTE IV SAGGIO DI SVILUPPO DEL CO<sub>2</sub> (Metodo C 4 C)

## IV 1 PRINCIPIO DEL METODO

Un volume misurato di mezzo minerale inoculato contenente una concentrazione nota della sostanza chimica in esame (10-20 mg DOC o TOC/l) come unica fonte nominale di carbonio organico, viene aerato mediante il passaggio di aria esente da biossido di carbonio ad una portata controllata, al buio o a luce diffusa. La degradazione viene seguita per 28 giorni determinando il biossido di carbonio prodotto, che viene assorbito su idrossido di bario o di sodio e che viene misurato per titolazione dell'idrossido di bario residuo o come carbonio inorganico. La quantità di biossido di carbonio prodotta dalla sostanza chimica in esame (corretta, per tener conto di quella derivante dal bianco dell'inoculo) viene espressa come percentuale di ThCO<sub>2</sub>. Il grado di degradazione biologica può anche essere calcolato da un'analisi DOC supplementare effettuata all'inizio e al termine dell'incubazione.

## IV 2 DESCRIZIONE DEL METODO

## IV 2.1 Apparecchiatura

- a) Palloni, 2,5 litri, dotati ciascuno di un tubo di aerazione che giunge quasi al fondo del recipiente e di una uscita,
- b) agitatori magnetici quando la valutazione viene effettuata su sostanze chimiche scarsamente solubili,
- c) bottiglie per l'assorbimento di gas,
- d) dispositivo per controllare e misurare il flusso d'aria,
- e) apparecchio per la rimozione del biossido di carbonio per la preparazione d'aria esente da biossido di carbonio, in alternativa, una miscela di ossigeno esente da CO<sub>2</sub> e azoto esente da CO<sub>2</sub> prelevata da bombole di gas nelle proporzioni corrette (20 % O<sub>2</sub> 80 % N<sub>2</sub>),
- f) dispositivo per la determinazione del biossido di carbonio, o per titolazione o mediante qualche tipo di analizzatore del carbonio inorganico,
- g) dispositivo di filtrazione su membrana (facoltativo),
- h) analizzatore del DOC (facoltativo).

## IV 2.2 Preparazione del mezzo minerale

Per la preparazione delle soluzioni concentrate vedi I 6.2

Miscelare 10 ml di soluzione (a) con 800 ml di acqua di diluizione, aggiungere 1 ml di soluzioni di (b) a (d) e portare a 1 litro con acqua di diluizione.

## IV 2.3 Preparazione e precondizionamento dell'inoculo

L'inoculo può essere ottenuto da varie fonti: fango attivo, acque di scarico, acque superficiali e terreni oppure da una miscela di questi.

Vedi I 6.4, I 6.4.1, I 6.4.2 e I 6.5

## IV 2.4 Preparazione dei contenitori

Per esempio, i seguenti volumi e pesi indicano i valori per palloni da 5 litri contenenti 3 litri di sospensione. Se si utilizzano volumi più piccoli, modificare proporzionalmente i valori, ma assicurarsi che il biossido di carbonio formato possa venire misurato con accuratezza.

In ciascun pallone da 5 litri introdurre 2.400 ml di mezzo minerale. Aggiungere un volume appropriato di fango attivo preparato (vedi I 6.4.1 e I 6.5) in modo da ottenere una concentrazione di solidi sospesi non maggiore di 30 mg/l nei 3 litri finali di miscela inoculata. In alternativa, diluire per prima cosa l'acqua

preparato in modo da ottenere una sospensione a 500-1 000 mg/l nel mezzo minerale prima di aggiungerne un'aliquota al contenuto del pallone da 5 litri per realizzare una concentrazione di 30 mg/l, questo assicura una maggior precisione. E' possibile usare altre fonti di inoculo (vedi I 6 4 2).

Aerare queste miscele inoculate con aria esente da  $\text{CO}_2$  per una notte in modo da bonificare il sistema dal biossido di carbonio.

Aggiungere il materiale in esame e la sostanza di riferimento, separatamente, come volumi noti delle soluzioni concentrate ai palloni in multiplo, in modo da ottenere concentrazioni, fornite dalle sostanze chimiche aggiunte, da 10 a 20 mg di DOC o TOC/l, lasciare alcuni palloni senza aggiunta di sostanze chimiche come controlli dell'inoculo. Aggiungere le sostanze chimiche in esame, scarsamente solubili, direttamente nei palloni in una percentuale in peso o in volume, oppure trattarle come descritto nell'allegato III.

Se richiesto, usare un pallone per controllare il possibile effetto inibitore della soluzione chimica in esame aggiungendo le sostanze chimiche in esame e di riferimento alle stesse concentrazioni alle quali sono presenti negli altri palloni.

Inoltre, se richiesto, utilizzare un pallone sterile per controllare se la sostanza chimica in esame venga degradata abioticamente, utilizzando una soluzione non inoculata della sostanza chimica (vedi I 6 6). Sterilizzare mediante l'aggiunta di una sostanza tossica ad una idonea concentrazione.

Portare i volumi delle sospensioni in tutti i palloni a 3 l mediante l'aggiunta del mezzo minerale preventivamente aerato con aria esente da  $\text{CO}_2$ . In alternativa, si possono prelevare dei campioni per l'analisi del DOC (vedi allegato II 4) e/o per l'analisi specifica. Collegare le bottiglie di assorbimento alle uscite dell'aria dei palloni.

Se si utilizza idrossido di bario, collegare tre bottiglie di assorbimento, contenenti ciascuna 100 ml di soluzione 0,0125 M di idrossido di bario, in serie con ciascun pallone da 5 l. La soluzione deve essere esente da solfati e carbonati precipitati e la sua concentrazione deve essere determinata immediatamente prima dell'uso. Se si utilizza idrossido di sodio, collegare due recipienti di cattura, dove il secondo agisce da controllo per verificare che tutto il biossido di carbonio è stato assorbito nel primo. Sono adatte bottiglie di assorbimento con chiusure per bottiglie da siero. Aggiungere 200 ml di idrossido di sodio 0,05 M a ciascuna bottiglia, quantità sufficiente per assorbire la quantità totale di biossido di carbonio sviluppata quando la sostanza chimica in esame è completamente degradata. La soluzione di idrossido di sodio, anche quando è stata preparata di fresco, conterrà tracce di carbonati, questo valore viene corretto sottraendo il carbonato contenuto nel bianco.

#### IV 2 5 Numero di palloni usati in un saggio tipo

Recipiente 1 e 2: sospensioni

Recipiente 3 e 4: bianco con inoculo

Recipiente 5: controllo

preferibilmente se è necessario

Recipiente 6: controllo abiotico sterile

Recipiente 7: controllo per la tossicità

Vedi I 6 7

#### IV 2 6 Esecuzione del saggio

Iniziare la prova facendo gorgogliare aria esente da  $\text{CO}_2$  attraverso le sospensioni ad una portata di 30-100 ml/min. Prelevare periodicamente dei campioni dal contenitore che assorbe il biossido di carbonio per l'analisi del contenuto di  $\text{CO}_2$ . Durante i primi 10 giorni si raccomanda di effettuare l'analisi ogni due o tre giorni, poi ogni cinque giorni fino al ventottesimo giorno in modo da poter identificare la fase di crescita (time window) di 10 giorni.

Al ventottesimo giorno, prelevare dei campioni (facoltativamente) per l'analisi del DOC e/o l'analisi specifica, misurare il pH delle sospensioni e aggiungere 1 ml di acido cloridrico concentrato a ciascun contenitore, aerare i contenitori per una notte per scacciare il biossido di carbonio presente nelle sospensioni in esame. Al giorno ventunesimo eseguire l'ultima analisi del biossido di carbonio sviluppato.

Nei giorni di misura del CO<sub>2</sub>, scollegare l'assorbitore dell'idrossido di bario più vicino al pallone e titolare la soluzione di idrossido con HCl 0,05 M utilizzando fenolftaleina come indicatore. Spostare gli assorbitori rimanenti di un posto verso il pallone e porre un nuovo assorbitore contenente 100 ml di idrossido di bario 0,0125 M fresco all'estremità più lontana della serie. Effettuare le titolazioni quando necessario, per esempio quando si vede una sostanziale precipitazione nella prima trappola e prima che sia evidente una precipitazione nella seconda, oppure almeno ogni settimana. In alternativa, con NaOH come assorbente, prelevare con una siringa una piccola aliquota di campione (secondo le caratteristiche dell'analizzatore di carbonio usato) della soluzione di idrossido di sodio nell'assorbitore più vicino al pallone. Iniettare il campione nella parte per il carbonio inorganico dell'analizzatore di carbonio ed effettuare direttamente l'analisi del biossido di carbonio sviluppato.

Analizzare il contenuto della seconda trappola solo al termine del saggio per correggere eventuali trascinamenti di biossido di carbonio.

#### IV 3 DATI E RIFAZIONE

##### IV 3.1 Modalità di esposizione dei risultati

La quantità di CO<sub>2</sub> catturata nell'assorbitore al momento della titolazione è data da

$$\text{mg CO}_2 = (100 \times C_B - 0,5 \times V \times C_A) \times 44$$

in cui

V = volume di HCl utilizzato per la titolazione dei 100 ml nell'assorbitore (ml),

C<sub>B</sub> = concentrazione della soluzione di idrossido di bario (M),

C<sub>A</sub> = concentrazione della soluzione di acido cloridrico (M),

se C<sub>B</sub> è 0,0125 M e C<sub>A</sub> è 0,05 M, la titolazione per 100 ml di idrossido di bario e 50 ml e il peso di CO<sub>2</sub> è dato da

$$\frac{0,05}{2} \times 44 \times \text{ml HCl titolato} = 1,1 \times \text{ml HCl}$$

Così, in questo caso, il fattore di conversione del volume di HCl titolato in mg di CO<sub>2</sub> prodotta è 1,1

Calcolare i pesi di CO<sub>2</sub> prodotto dall'inoculo da solo e dall'inoculo più la sostanza chimica in esame utilizzando i rispettivi valori di titolazione, la differenza e il peso di CO<sub>2</sub> prodotto dalla sostanza chimica in esame di sola.

Per esempio, se l'inoculo da solo fornisce una titolazione di 48 ml e l'inoculo più sostanza chimica in esame fornisce 45 ml

$$\text{CO}_2 \text{ dall'inoculo} = 1,1 \times (50-48) = 2,2 \text{ mg}$$

$$\text{CO}_2 \text{ dall'inoculo più sostanza chimica in esame} = 1,1 \times (50-45) = 5,5 \text{ mg}$$

e così il peso di CO<sub>2</sub> prodotto dalla sostanza chimica in esame è 3,3 mg

La degradazione biologica percentuale si calcola da

$$\% \text{ degradazione} = \frac{\text{mg CO}_2 \text{ prodotti} \times 100}{\text{ThCO}_2 \text{ prodotti} \times \text{mg di sostanza chimica in esame aggiunta}}$$

o,

$$\% \text{ degradazione} = \frac{\text{mg CO}_2 \text{ prodotti} \times 100}{\text{mg TIC aggiunti nella prova} \times 3,67}$$

dove 3,67 è il fattore di conversione (44/12) da carbonio a biossido di carbonio

Ricavare la degradazione percentuale dopo ogni intervallo di tempo aggiungendo la percentuale dei valori di  $\text{ThCO}_2$  calcolati per ciascuno dei giorni in cui è stata misurata fino a quel momento

Per gli assorbitori all'idrossido di sodio, calcolare la quantità di biossido di carbonio prodotto (espressa come IC (mg)), moltiplicando la concentrazione di IC nell'assorbente per il volume dell'assorbente

Calcolare la degradazione percentuale dalla

$$\% \text{ThCO}_2 = \frac{\text{mg IC del pallone di prova} - \text{mg IC del bianco}}{\text{mg TOC aggiunti come sostanza chimica in esame}} \times 100$$

Calcolare il grado di rimozione del DOC (facoltativo) come descritto al punto I 7 Registrare questi risultati, e tutti gli altri, sui registri forniti

#### IV 3 2 Validità dei risultati

Il contenuto di carbonio inorganico nella sospensione della sostanza chimica in esame nel mezzo minerale all'inizio della prova deve essere minore del 5 % del carbonio totale e lo sviluppo totale di  $\text{CO}_2$  nel bianco dell'inoculo al termine della prova non dovrebbe normalmente superare i 40 mg/l di terreno. Se si ottengono valori maggiori di 70 mg  $\text{CO}_2$ /l, si dovrebbero esaminare criticamente i dati e la tecnica sperimentale

Vedi anche I 5 2

#### IV 3 3 Relazione

Vedi I 8

#### IV 4 MODULARIO

Nel seguito è presentato un esempio di modulo predisposto

##### SAGGIO DI SVILUPPO DEL BISSIDO DI CARBONIO

##### 1 LABORATORIO

##### 2 DATA DI INIZIO DEL SAGGIO

##### 3 SOSTANZA IN ESAME

Nome

Concentrazione della soluzione stock mg/l come sostanza

Concentrazione iniziale nel mezzo mg/l come sostanza

C totale aggiunto al contenitore mg C

$\text{ThCO}_2$  mg  $\text{C}(\text{O}_2)$

##### 4 INOCULO

Fonte

Trattamento effettuato

Eventuale precondizionamento

Concentrazione dei solidi sospesi nella miscela di reazione mg/l

## 5 PRODUZIONE DI BIOSSIDO DI CARBONIO E DEGRADABILITÀ

Metodo  $\text{Ba(OH)}_2/\text{NaOH}$ /altro

Tempo (giorno)	CO <sub>2</sub> formato prova (mg)		CO <sub>2</sub> formato bianco (mg)		CO <sub>2</sub> formato cumulativo (mg) (prova meno bianco)		% ThCO <sub>2</sub> CO <sub>2</sub> cumulativo ThCO <sub>2</sub> × 100		
	1	media	3	media	1	2	1	2	media
0									
n <sub>1</sub>									
n <sub>2</sub>									
n <sub>3</sub>									
28									

Nota: formati simili possono essere usati per i controlli della sostanza chimica di riferimento e di tossicità

## 6 ANALISI DEL CARBONIO (facoltativa)

Analizzatore di carbonio

Tempo (giorno)	Bianco mg/l	Sostanza chimica in esame mg/lo
0	C <sub>b(0)</sub>	C <sub>0</sub>
28*	C <sub>b(t)</sub>	C <sub>t</sub>
* o al termine dell'incubazione		

$$\% \text{DOC rimosso} = \left( 1 - \frac{C_t - C_{b(t)}}{C_0 - C_{b(0)}} \right) \times 100$$

## 7 DEGRADAZIONE ABIOTICA (facoltativa)

$$\% \text{ degradazione abiotica} = \frac{\text{Formazione di CO}_2 \text{ contenitore sterile dopo 28 giorni (mg)}}{\text{ThCO}_2 \text{ (mg)}} \times 100$$

**PARTE V SAGGIO RESPIROMETRICO MANOMETRICO (Metodo C 4-D)****V 1 PRINCIPIO DEL METODO**

Un volume misurato di mezzo minerale inoculato, contenente una concentrazione nota della sostanza chimica in esame (100 mg/l della sostanza chimica in esame in modo da fornire almeno 50-100 mg ThOD/l) come unica fonte nominale di carbonio organico, viene tenuto sotto agitazione in un contenitore chiuso a temperatura costante ( $\pm 1^\circ\text{C}$  o meno) per un tempo fino a 28 giorni. Il consumo di ossigeno viene determinato o misurando la quantità di ossigeno (prodotto elettroliticamente) necessario per mantenere costante il volume di gas nel contenitore del respirometro, oppure dalla variazione di volume o di pressione (o da una combinazione delle due variazioni) nell'apparecchiatura. Il biossido di carbonio sviluppato viene assorbito in una soluzione di idrossido di potassio o un altro assorbente adatto. La quantità di ossigeno consumata dalla sostanza chimica in esame (corretta del consumo del bianco dell'inoculo, controllato in parallelo) viene espressa in percentuale di ThOD o COD. In alternativa, la degradazione primaria può anche essere calcolata mediante analisi specifica supplementare fatta all'inizio e alla fine dell'incubazione e la degradazione ultima mediante analisi del DOC.

**V 2 DESCRIZIONE DEL METODO****V 2.1 Apparecchiatura**

- a) Adatto respirometro,
- b) sistema di regolazione della temperatura che mantenga  $\pm 1^\circ\text{C}$ , o meglio,
- c) dispositivo di filtrazione su membrana (facoltativo),
- d) analizzatore di carbonio (facoltativo)

**V 2.2 Preparazione del mezzo minerale**

Per la preparazione delle soluzioni concentrate vedi I 6.2

Miscelare 10 ml di soluzione (a) con 800 ml di acqua di diluizione, aggiungere 1 ml di soluzioni da (b) a (d) e portare a 1 litro con acqua di diluizione

**V 2.3 Preparazione e precondizionamento dell'inoculo**

L'inoculo può essere ottenuto da varie fonti: fango attivo, acque di scarico, acque superficiali e terreni, oppure da una miscela di questi.

Vedi I 6.4, I 6.4.1, I 6.4.2 e I 6.5

**V 2.4 Preparazione dei contenitori**

Preparare separatamente le soluzioni delle sostanze chimiche in esame e di riferimento nel mezzo minerale, normalmente equivalenti ad una concentrazione di 100 mg di sostanza chimica/l (che forniscono almeno 50-100 mg ThOD/l) utilizzando le soluzioni concentrate (stock).

Calcolare la ThOD sulla base della formazione di sali di ammonio, salvo che si preveda una nitrificazione: nel qual caso il calcolo dovrebbe essere basato sulla formazione di nitrati (vedi allegato II.2).

Determinare i valori di pH e, se necessario, regolare a  $\text{pH} = 7,4 \pm 0,2$ .

Sostanze scarsamente solubili dovrebbero essere aggiunte in una fase più avanzata (vedi nel seguito).

Se si deve determinare la tossicità della sostanza chimica in esame, preparare una ulteriore soluzione nel mezzo minerale contenente sia la sostanza chimica in esame che quella di riferimento alle stesse concentrazioni delle singole soluzioni.

Se è richiesta una misura dell'assorbimento chimico-fisico dell'ossigeno, preparare una soluzione sterile della sostanza chimica in esame ad una concentrazione, normalmente, di 100 mg ThOD/l mediante aggiunta di un'adeguata sostanza tossica (vedi I 6.6).

Introdurre il volume richiesto di soluzione delle sostanze chimiche rispettivamente in esame e di riferimento, in contenitori almeno in doppio. Aggiungere ad ulteriori contenitori il mezzo minerale da solo (per i controlli dell'inoculo) e, se richiesto, la soluzione mista della sostanza chimica di prova/riferimento e la soluzione sterile.

Se la sostanza chimica in esame è scarsamente solubile, aggiungerla direttamente a questo stadio, in ragione del peso o del volume, oppure trattarla come descritto nell'allegato III. Nel comparto di assorbimento dell' $\text{CO}_2$  aggiungere idrossido di potassio, pastiglie di calce sodata o altro assorbente.

#### V 2.5 Numero di contenitori usati in un saggio tipo

Recipiente 1 e 2: sospensione

Recipiente 3 e 4: bianco con inoculo

Recipiente 5: controllo

preferibilmente se è necessario

Recipiente 6: controllo sterile

Recipiente 7: controllo per la tossicità

Vedi I 6.7

#### V 2.6 Esecuzione del saggio

Aspettare che i contenitori abbiano raggiunto la temperatura desiderata, inoculare i recipienti appropriati con fango attivo preparato o altra fonte di inoculo in modo da ottenere una concentrazione di solidi sospesi non superiore a 30 mg/l. Montare l'apparecchiatura, avviare l'agitatore e controllare la tenuta nei confronti dell'aria, e iniziare la misura del consumo di ossigeno. Di solito non sono richieste ulteriori attenzioni a parte quella di effettuare le necessarie letture e i controlli giornalieri per verificare che vengano mantenute la temperatura corretta ed una adeguata agitazione.

Calcolare il consumo di ossigeno con letture effettuate ad intervalli regolari e frequenti, utilizzando i metodi forniti dal fabbricante dell'apparecchiatura. Al termine dell'incubazione, normalmente 28 giorni, misurare il pH del contenuto dei contenitori, soprattutto se il consumo di ossigeno è basso o maggiore della  $\text{ThOD}_{\text{NH}_4}$  (vedi composti contenenti azoto).

Se necessario, prelevare campioni dai contenitori del respirometro, all'inizio e alla fine, per l'analisi del DOC o per l'analisi chimica specifica (vedi allegato II 4). Al momento del prelievo iniziale, assicurarsi che il volume della sospensione in esame che rimane nel contenitore sia noto. Quando l'ossigeno viene consumato da una sostanza in esame contenente azoto, determinare l'aumento della concentrazione dei nitrati e dei nitrati durante i 28 giorni e calcolare la correzione per l'ossigeno consumato mediante nitrificazione (allegato V).

#### V 3 DATI E RELAZIONE

##### V 3.1 Modalità di esposizione dei risultati

Dividere il consumo di ossigeno (mg) da parte della sostanza chimica in esame dopo un tempo stabilito (corretto del controllo del bianco di inoculo dopo lo stesso tempo) per il peso della sostanza chimica in esame usata. Questo fornisce il BOD espresso come mg di ossigeno / mg di sostanza chimica in esame, cioè:

$$\begin{aligned} \text{BOD} &= \frac{\text{mg O}_2 \text{ consumato dalla sostanza chimica in esame} - \text{mg O}_2 \text{ consumato dal bianco}}{\text{mg sostanza chimica in esame nel contenitore}} \\ &= \text{mg O}_2 \text{ per mg di sostanza chimica in esame} \end{aligned}$$

Calcolare la percentuale di degradazione biologica con una delle seguenti relazioni:

$$\% \text{ degrad. biologica} = \% \text{ ThOD} = \frac{\text{BOD (mg O}_2/\text{mg sostanza chimica)}}{\text{ThOD (mg O}_2/\text{mg sostanza chimica)}} \times 100$$

o

$$\% \text{ COD} = \frac{\text{BOD (mg O}_2/\text{mg sostanza chimica)}}{\text{COD (mg O}_2/\text{mg sostanza chimica)}} \times 100$$



Si dovrebbe notare che questi due metodi non forniscono necessariamente lo stesso valore; dei due è preferibile usare il primo.

Per le sostanze in esame che contengono azoto, utilizzare il valore appropriato di ThOD ( $\text{NH}_4$  o  $\text{NO}_3$ ) secondo quanto è noto o ci si aspetta per quanto riguarda il verificarsi della nitrificazione (allegato II 2). Se viceversa si verifica una nitrificazione non completa, effettuare una correzione che tenga conto dell'ossigeno consumato dalla nitrificazione in base alle variazioni di concentrazione dei nitriti e dei nitrati (allegato V)

Quando si effettuano determinazioni facoltative del carbonio organico e/o di una sostanza chimica specifica, calcolare la degradazione percentuale come descritto al punto I.7

#### V.3.2. Validità dei risultati

Il consumo di ossigeno da parte del bianco dell'inoculo è normalmente di 20-30 mg  $\text{O}_2$ /l e non dovrebbe essere maggiore di 60 mg/l in 28 giorni. Valori più elevati di 60 mg/l richiedono un esame critico dei dati e delle tecniche sperimentali. Se il valore del pH è al di fuori del campo 6-8,5 ed il consumo di ossigeno da parte della sostanza chimica in esame è minore del 60 %, si dovrebbe ripetere la prova con una minore concentrazione della sostanza chimica in esame

Vedi anche I.5.2

#### V.3.3. Relazione

Vedi I.8.

#### V.4. MODULARIO

Nel seguito è presentato un esempio di modulo predisposto

##### SAGGIO RESPIROMETRICO MANOMETRICO

##### 1. LABORATORIO

##### 2. DATA DI INIZIO DEL SAGGIO

##### 3. SOSTANZA IN ESAME

Nome:

Concentrazione della soluzione stock      mg/l

Concentrazione iniziale nel mezzo,  $C_{in}$ :      mg/l

Volume nel recipiente di saggio (V)      ml

ThOD o COD      mg  $\text{O}_2$ /mg sostanza saggiata ( $\text{NH}_4$ ,  $\text{NO}_3$ )

##### 4. INOCULO

Fonte

Trattamento effettuato

Eventuale preconditionamento

Concentrazione dei solidi sospesi nella miscela di reazione:      mg/l

## 5 CONSUMO DI OSSIGENO: BIODEGRADABILITÀ

		Tempo (giorni)									
		0		7		14		21		28	
O <sub>2</sub> cons (mg) sostanza chimica in esame	1										
	2										
	a, media										
O <sub>2</sub> cons (mg) bianco	3										
	4										
	b, media										
BOD (mg) corretto	(a <sub>1</sub> - b <sub>m</sub> )										
	(a <sub>2</sub> - b <sub>m</sub> )										
BOD per mg di sostanza chimica in esame	$\frac{(a_1 - b)}{C_0 V}$										
	$\frac{(a_2 - b)}{C_0 V}$										
% degradazione  $\frac{\text{BOD}}{\text{ThOD}} \times 100$	D <sub>1</sub> (a <sub>1</sub> )										
	D <sub>2</sub> (a <sub>2</sub> )										
	Media										

V = Volume del mezzo nel contenitore d'esame

(\*) D<sub>1</sub> e D<sub>2</sub> non dovrebbero essere mediati se c'è notevole differenza tra loro

Nota. formule simili possono essere usate per i controlli della sostanza chimica di riferimento e per i controlli di tossicità

## 6 CORREZIONE PER LA NITRIFICAZIONE (vedi allegato V)

Giorno	0	28	Differenza
(i) Concentrazione nitrati (mg N/l)			(N)
(ii) Ossigeno equivalente (4,57 × N × V) (mg)			
(iii) Concentrazione nitriti (mg N/l)			(N)
(iv) Ossigeno equivalente (3,43 × N × V) (mg)			
(ii + iv) Ossigeno equivalente totale			

## 7 ANALISI DEL CARBONIO (facoltativa)

Analizzatore di carbonio

Tempo (giorno)	Bianco mg/l	Sostanza chimica in esame mg/l
0	C <sub>b(0)</sub>	C <sub>0</sub>
28*	C <sub>b(1)</sub>	C <sub>1</sub>

\* o al termine dell'incubazione

$$\% \text{ DOC rimosso} = \left( 1 - \frac{C_t - C_{\text{bkt}}}{C_o - C_{\text{blo}}} \right) \times 100$$

#### 8 SOSTANZA CHIMICA SPECIFICA (facoltativa)

$S_b$  = concentrazione nel controllo chimico-fisico (sterile) al ventottesimo giorno

$S_a$  = concentrazione nel pallone inoculato al ventottesimo giorno.

$$\% \text{ biodegradazione} = \frac{S_b - S_a}{S_b} \times 100$$

#### 9 DEGRADAZIONE ABIOTICA (facoltativa)

$a$  = consumo di ossigeno nei contenitori sterili dopo 28 giorni, (mg)

$$\text{consumo di ossigeno per mg di sostanza chimica in esame} = \frac{a}{C_o V}$$

(vedi sezioni 1 e 3)

$$\% \text{ degradazione abiotica} = \frac{a \times 100}{C_o V \times \text{ThOD}}$$

### PARTI VI. SAGGIO DELLA BOTTIGLIA CHIUSA (Metodo C.4-E)

#### VI.1 PRINCIPIO DEL METODO SPERIMENTALE

La soluzione della sostanza chimica in esame nel mezzo minerale, di solito a 2-5 mg/l, viene inoculata con un numero relativamente piccolo di microorganismi provenienti da una popolazione mista e mantenuti in bottiglie chiuse, completamente piene, al buio a temperatura costante. La degradazione viene seguita mediante l'analisi dell'ossigeno disciolto su un arco di tempo di 28 giorni. La quantità di ossigeno consumata dalla sostanza chimica in esame, corretta per tener conto del bianco dell'inoculo controllato in parallelo, è espressa in percentuale di ThOD o COD.

#### VI.2 DESCRIZIONE DEL METODO

##### VI.2.1 Apparecchiatura

- Bottiglie per BOD, con tappi di vetro, per esempio da 250-300 ml,
- bagno d'acqua o incubatore per mantenere le bottiglie a temperatura costante ( $\pm 1^\circ\text{C}$  o meglio) con l'esclusione di luce,
- bottiglie di vetro grandi (2-5 l) per la preparazione dei terreni e per il riempimento delle bottiglie per BOD;
- elettrodo a ossigeno e misuratore, o apparecchiatura e reagenti per la titolazione di Winkler

##### VI.2.2 Preparazione del mezzo minerale

Per la preparazione della soluzione concentrata, vedi I 6.2

Miscelare 1 ml di soluzioni da (a) a (d) e portare a 1 l con acqua di diluizione

## VI 2.3 Preparazione dell'inoculo

L'inoculo è normalmente proveniente da un effluente secondario di un impianto di trattamento o da una unità pilota di laboratorio alimentata prevalentemente da scarichi domestici. In alternativa una sorgente d'inoculo è un'acqua superficiale. Normalmente si usa da una goccia (0,05 ml) a 5 ml di filtrato per litro di mezzo minerale, e utile eseguire delle prove sperimentali per valutare il volume ottimale per un dato effluente (vedi I 6.4.2 e I 6.5).

## VI 2.4 Preparazione dei contenitori

Aerare fortemente il mezzo minerale per almeno 20 minuti. Eseguire ogni serie di esperimenti con il mezzo minerale ottenuto dalla stessa partita. In generale, il mezzo è pronto per l'uso dopo essere stato a riposo per 20 ore alla temperatura di prova. Determinare la concentrazione dell'ossigeno disciolto a scopo di controllo, il valore dovrebbe essere di circa 9 mg/l a 20 °C. Eseguire tutte le operazioni di trasferimento e di riempimento del terreno saturato con aria evitando la formazione di bolle, per esempio mediante l'uso di sifoni.

Preparare gruppi paralleli di bottiglie per BOD per la determinazione delle sostanze chimiche di prova e di riferimento in serie sperimentali simultanee. Preparare un numero sufficiente di bottiglie per BOD, includendo i bianchi dell'inoculo, per permettere di fare delle misure almeno in doppio del consumo di ossigeno agli intervalli di prova desiderati, per esempio dopo 0, 7, 14, 21 e 28 giorni. Per assicurarsi di poter identificare la fase di crescita di 10 giorni (time window), possono essere necessarie un maggior numero di bottiglie.

Aggiungere mezzo minerale completamente aerato a bottiglie grandi in modo che esse siano riempite per circa un terzo. Aggiungere poi una quantità sufficiente delle soluzioni concentrate della sostanza chimica in esame e della sostanza chimica di riferimento a bottiglie grandi separate in quantità tale che la concentrazione finale delle sostanze chimiche sia normalmente non superiore a 10 mg/l. Non aggiungere sostanze chimiche al terreno di controllo del bianco contenuto in una ulteriore bottiglia grande.

Allo scopo di garantire l'attività dell'inoculo che non sia contenuta, la concentrazione dell'ossigeno disciolto non deve scendere al di sotto di 0,5 mg/l nelle bottiglie per BOD. Questo limita la concentrazione della sostanza chimica in esame a circa 2 mg/l. Tuttavia, per composti scarsamente degradabili e per quelli con un basso ThOD, si possono usare 5-10 mg/l. In alcuni casi, è consigliabile eseguire prove su serie in parallelo della sostanza chimica a due differenti concentrazioni, per esempio 2 e 5 mg/l. Normalmente, si calcola il ThOD sulla base della formazione di sali d'ammonio ma, se è prevista la nitrificazione, si calcola sulla base della formazione di nitrato ( $\text{ThOD}_{\text{NO}_3}$  vedi allegato II.2). Tuttavia, se si verifica una nitrificazione non completa, si effettua una correzione tenendo conto delle variazioni di concentrazione di nitrito e nitrato determinate mediante analisi (vedi allegato V).

Se si deve studiare la tossicità della sostanza chimica in esame (nel caso per esempio sia stato trovato preventivamente un basso valore di biodegradabilità), è necessaria un'altra serie di bottiglie.

Preparare un'altra bottiglia grande, che deve contenere mezzo minerale aerato (fino a circa un terzo del suo volume) più la sostanza chimica in esame e la sostanza chimica di riferimento alle concentrazioni finali normalmente uguali a quelle usate nelle altre bottiglie grandi.

Inoculare le soluzioni contenute nelle bottiglie grandi con effluente secondario (da una goccia, o circa 0,05 ml, a 5 ml/l) o con un'altra fonte, come acqua di fiume (vedi I 6.4.2). Infine, portare a volume le soluzioni con mezzo minerale aerato utilizzando un tubo flessibile che arrivi fino al fondo della bottiglia per realizzare una adeguata miscelazione.

## VI 2.5 Numero di contenitori usati in un saggio tipo

In una prova tipica si usano le seguenti bottiglie:

almeno 10 contenenti la sostanza chimica in esame e l'inoculo (sospensione in esame),

almeno 10 contenenti solo l'inoculo (bianco dell'inoculo),

almeno 10 contenenti la sostanza chimica di riferimento e l'inoculo (controllo),

e, quando sia necessario, 6 bottiglie contenenti la sostanza chimica in esame, la sostanza chimica di riferimento e l'inoculo (controllo di tossicità). Tuttavia, per poter essere sicuri di riuscire a identificare la fase di crescita (time window) di 10 giorni, sarà necessario un numero di bottiglie circa doppio.

## VI.2.6. Esecuzione del saggio

Dosare immediatamente ciascuna soluzione preparata nel rispettivo gruppo di bottiglie per BOD mediante un tubo flessibile prelevandola dal quarto inferiore (non dal fondo) dell'opportuna bottiglia grande in modo che tutte le bottiglie per BOD siano completamente riempite. Battere delicatamente per rimuovere eventuali bolle d'aria. Analizzare immediatamente le bottiglie al tempo zero per determinare l'ossigeno disciolto mediante il metodo di Winkler o il metodo all'elettrodo. Il contenuto delle bottiglie può venire conservato per un'analisi successiva mediante il metodo di Winkler aggiungendo solfato di manganese (II) e idrossido di sodio (il primo reagente di Winkler). Conservare le bottiglie, accuratamente tappate, contenenti l'ossigeno fissato in forma di ossido di manganese (III) idrato marrone, al buio a 10-20 °C per non oltre 24 ore prima di procedere con le fasi rimanenti del metodo di Winkler. Tappare le bottiglie in multiplo rimanenti assicurandosi che non siano intrappolate bolle d'aria, e incubare a 20 °C al buio. Ciascuna serie deve essere accompagnata da una serie parallela completa per la determinazione del bianco del mezzo inoculato. Prelevare bottiglie almeno in doppio di tutte le serie per l'analisi dell'ossigeno disciolto ad intervalli di tempo (almeno settimanali) durante i 28 giorni di incubazione.

I campioni settimanali dovrebbero permettere la valutazione della rimozione percentuale in una fase di crescita di 14 giorni, mentre un campionamento ogni 3-4 giorni dovrebbe permettere di identificare la fase di crescita di 10 giorni, il che richiederà un numero di bottiglie circa doppio.

Per sostanze in esame contenenti azoto, si devono apportare delle correzioni per il consumo dell'ossigeno che si verifica nell'eventuale nitrificazione. A questo scopo, usare il metodo dell'elettrodo a  $O_2$  per la determinazione della concentrazione di ossigeno disciolto e prelevare poi un campione dalla bottiglia per BOD per analizzare nitrati e nitriti. Dall'aumento di concentrazione dei nitriti e dei nitrati, calcolare l'ossigeno consumato (vedi allegato V).

## VI.3. DATI E RELAZIONE

## VI.3.1. Modalità di esposizione dei risultati

Calcolare per prima cosa il BOD dopo ciascun periodo di tempo sottraendo il consumo di ossigeno ( $mg O_2/l$ ) del bianco dell'inoculo da quello presentato dalla sostanza chimica in esame. Dividere questo consumo corretto per la concentrazione ( $mg/l$ ) della sostanza chimica in esame per ottenere il BOD specifico come  $mg$  di ossigeno per  $mg$  di sostanza chimica in esame. Calcolare la biodegradabilità percentuale dividendo il BOD specifico per il ThOD specifico (calcolato secondo l'allegato II.2) o per il COD (determinato mediante analisi, vedi allegato II.3), come segue:

$$BOD = \frac{mg O_2 \text{ consumato dalla sostanza chimica in esame} - mg O_2 \text{ consumato dal bianco}}{mg \text{ sostanza chimica in esame nel contenitore}}$$

$$- mg O_2 \text{ per } mg \text{ di sostanza chimica in esame}$$

$$\% \text{ degradazione} = \frac{BOD (mg O_2/mg \text{ sostanza chimica})}{ThOD (mg O_2/mg \text{ sostanza chimica})} \times 100$$

$$\% \text{ degradazione} = \frac{BOD (mg O_2/mg \text{ sostanza chimica})}{COD (mg O_2/mg \text{ sostanza chimica})} \times 100$$

Si noti che questi due metodi non forniscono necessariamente lo stesso valore, e preferibile usare il primo dei due.

Per le sostanze in esame che contengono azoto, utilizzare il valore appropriato di ThOD ( $NH_4$  o  $NO_3$ ) secondo quanto è noto o ci si aspetta per quanto riguarda il verificarsi della nitrificazione (allegato II.2). Se si verifica la nitrificazione ma non è completa, calcolare una correzione per tener conto dell'ossigeno consumato dalla nitrificazione in base alle variazioni di concentrazione dei nitriti e dei nitrati (allegato V).

## VI.3.2. Validità dei risultati

Il consumo di ossigeno nel bianco dell'inoculo non dovrebbe superare 1,5  $mg$  di ossigeno disciolto/l dopo 28 giorni. Valori più elevati di questo richiedono un esame delle tecniche sperimentali. La concentrazione residua

di ossigeno nelle bottiglie di prova non dovrebbe scendere al di sotto di 0,5 mg/l dopo questo tempo. Livelli di ossigeno così bassi sono validi solo se il metodo usato per la determinazione dell'ossigeno disciolto è in grado di misurare accuratamente livelli così bassi.

Vedi anche I.5.2.

#### VI 3.3 Relazione

Vedi I.8.

#### VI 4 MODULARIO

Nel seguito è presentato un esempio di modulo predisposto.

##### SAGGIO DELLA BOTTIGLIA CHIUSA

##### 1. LABORATORIO

##### 2. DATA DI INIZIO DEL SAGGIO

##### 3. SOSTANZA IN ESAME

Nome: ...

Concentrazione della soluzione stock: ... mg/l

Concentrazione iniziale nella bottiglia: ... mg/l

ThOD o COD: ... mg O<sub>2</sub>/mg sostanza saggata

##### 4. INOCULO

Fonte: ...

Trattamento effettuato: ...

Eventuale preconditionamento: ...

Concentrazione nella miscela di reazione: ... mg/l

##### 5. DETERMINAZIONE DEL DO

Metodo: Winkler / elettrodo

##### Analisi dei contenitori

Tempo di incubazione (d)			DO (mg/l)			
			0	n <sub>1</sub>	n <sub>2</sub>	
Bianco (senza sostanza chimica)	1	C <sub>1</sub>				
	2	C <sub>2</sub>				
Media	$m_b = \frac{C_1 + C_2}{2}$					
Sostanza chimica in esame	1	a <sub>1</sub>				
	2	a <sub>2</sub>				
Media	$m_t = \frac{a_1 + a_2}{2}$					

Nota: formule simili possono essere usate per i controlli della sostanza chimica di riferimento e per i controlli di tossicità.

## 6. CORREZIONE PER LA NITRIFICAZIONE (vedi allegato V)

Tempo di incubazione (d)	0	n <sub>1</sub>	n <sub>2</sub>	n <sub>3</sub>
(i) Concentrazione nitrati (mg N/l)				
(ii) Variazione della concentrazione dei nitrati (mg N/l)	—			
(iii) Ossigeno equivalente (mg/l)	—			
(iv) Concentrazione nitriti (mg N/l)				
(v) Variazione della concentrazione dei nitriti (mg N/l)	—			
(vi) Ossigeno equivalente (mg/l)	—			
(iii + vi) Ossigeno equivalente totale (mg/l)	—			

## 7. CONSUMO DI DO: % DEGRADAZIONE

	Abbattimento dopo n giorni (mg/l)			
	n <sub>1</sub>	n <sub>2</sub>	n <sub>3</sub>	
Recipiente 1: (m <sub>10</sub> - m <sub>1x</sub> ) - (m <sub>b0</sub> - m <sub>bx</sub> )				
Recipiente 2: (m <sub>20</sub> - m <sub>2x</sub> ) - (m <sub>b0</sub> - m <sub>bx</sub> )				
Recipiente 1 $\% D_1 = \frac{(m_{10} - m_{1x}) - (m_{b0} - m_{bx})}{\text{conc. sost. in esame} \times \text{ThOD sost.}} \times 100$				
Recipiente 2: $\% D_2 = \frac{(m_{20} - m_{2x}) - (m_{b0} - m_{bx})}{\text{conc. sost. in esame} \times \text{ThOD sost.}} \times 100$				
$\% D \text{ media} = \frac{D_1 + D_2}{2}$				

(\*) Non prendere il valore medio se c'è una notevole differenza tra due dati replicati

m<sub>10</sub> = valore nel recipiente di saggio al tempo 0m<sub>1x</sub> = valore nel recipiente di saggio al tempo xm<sub>b0</sub> = valore medio del bianco al tempo 0m<sub>bx</sub> = valore medio del bianco al tempo x

Applicare anche la correzione per la nitrificazione da iii + vi della sezione 6.

## 8. CONSUMI DI DO DEL BIANCO

Consumo di ossigeno da parte del bianco: (m<sub>10</sub> - m<sub>b20</sub>) mg/l. Questo consumo è importante per la validità del saggio. Non deve essere inferiore a 1,5 mg/l

**PARTE VII. SAGGIO MITI (Metodo C.4-F)****VII.1. PRINCIPIO DEL METODO**

Il consumo di ossigeno da parte di una soluzione o sospensione agitata della sostanza chimica in esame in un mezzo minerale inoculato con microrganismi non adattati, coltivati in modo speciale, viene misurato in modo automatico in un arco di tempo di 28 giorni in un respirometro tenuto in ambiente chiuso al buio a  $25 \pm 1^\circ\text{C}$ . Il biossido di carbonio sviluppato viene assorbito mediante calce sodata. La biodegradabilità è espressa come percentuale di ossigeno consumato (corretta del consumo del bianco) rispetto all'assorbimento teorico (ThOD). La percentuale di biodegradabilità primaria viene inoltre calcolata mediante una analisi chimica specifica supplementare effettuata all'inizio e al termine dell'incubazione e, possibilmente, mediante analisi del DOC.

**VII.2. DESCRIZIONE DEL METODO****VII.2.1. Apparecchiatura**

- Misuratore elettrolitico automatico di BOD o respirometro equipaggiato normalmente con 6 bottiglie da 300 ml ciascuna munite di contenitori per l'assorbimento del  $\text{CO}_2$ ;
- camera e/o bagno d'acqua a temperatura costante a  $25^\circ\text{C} \pm 1^\circ\text{C}$  o meglio;
- dispositivo di filtrazione su membrana (facoltativo);
- analizzatore di carbonio (facoltativo)

**VII.2.2. Preparazione del mezzo minerale**

Preparare le seguenti soluzioni concentrate (stock) utilizzando reattivi puri per analisi e acqua (I.6.1.)

- |     |   |         |
|-----|---|---------|
| (a) | Didrogenoortofosfato monopotassico, $\text{KH}_2\text{PO}_4$  | 8,50 g  |
|     | Monoidrogenoortofosfato dipotassico, $\text{K}_2\text{HPO}_4$                                       | 21,75 g |
|     | Monoidrogenoortofosfato disodico dodecaidrato $\text{Na}_2\text{HPO}_4 \cdot 12 \text{H}_2\text{O}$ | 44,60 g |
|     | Cloruro d'ammonio, $\text{NH}_4\text{Cl}$   | 1,70 g  |
|     | Sciogliere in acqua e portare a 1 litro   |         |
|     | Il pH della soluzione deve essere 7,2   |         |
| (b) | Solfato di magnesio eptaidrato, $\text{MgSO}_4 \cdot 7 \text{H}_2\text{O}$                          | 22,50 g |
|     | Sciogliere in acqua e portare a 1 litro   |         |
| (c) | Cloruro di calcio anidro, $\text{CaCl}_2$   | 27,50 g |
|     | Sciogliere in acqua e portare a 1 litro   |         |
| (d) | Cloruro di ferro (III) esaidrato, $\text{FeCl}_3 \cdot 6 \text{H}_2\text{O}$                        | 0,25 g  |
|     | Sciogliere in acqua e portare a 1 litro.  |         |

Prelevare 3 ml di ciascuna soluzione (a), (b), (c) e (d) e portare a 1 litro.

**VII.2.3. Preparazione dell'inoculo**

Raccogliere campioni freschi provenienti da almeno 10 località, principalmente da aree nelle quali vengono usati e scaricati vari prodotti chimici. Raccogliere da località come impianti di trattamento degli scarichi di fognatura, trattamento delle acque di scarico industriali, fiumi, laghi, mari, campioni da 1 litro di fango, terreno superficiale, acqua e così via e miscelare accuratamente insieme. Dopo avere rimosso la sostanza galleggiante e aver lasciato il resto a riposo, regolare il surnatante a  $\text{pH } 7 \pm 1$  con idrossido di sodio o acido fosforico.



Utilizzare un volume appropriato del surnatante filtrato per riempire un recipiente a fango attivo del tipo riempi e preleva e aerare il liquido per circa 23 ore e mezzo. Trenta minuti dopo avere arrestato l'aerazione, scartare circa un terzo del volume totale di surnatante e aggiungere un volume uguale di una soluzione (pH = 7) contenente lo 0,1 % rispettivamente di glucosio, peptone e ortofosfato monopotassico al materiale decantato e ricominciare l'aerazione. Ripetere questa procedura una volta al giorno. L'unità del fango deve essere fatta funzionare secondo la buona pratica di laboratorio: gli effluenti dovrebbero essere limpidi, la temperatura dovrebbe mantenersi a  $25 \pm 2^\circ\text{C}$ , il pH dovrebbe essere  $7 \pm 1$ , il fango ben decantato, una sufficiente aerazione per mantenere la miscela aerobica per tutto il tempo, devono essere presenti protozoi e l'attività del fango deve essere verificata contro una sostanza di riferimento almeno ogni tre mesi. Non usare il fango come inoculo prima di almeno un mese di funzionamento, ma nemmeno dopo più di quattro mesi. Prelevare, quindi, campioni da almeno 10 località ad intervalli regolari, una volta ogni tre mesi.

Allo scopo di mantenere il fango fresco e quello vecchio alla stessa attività, miscelare il surnatante filtrato di un fango attivo in uso con un volume uguale del surnatante filtrato di una miscela raccolta di fresco da 10 fonti e coltivare il liquido combinato come visto sopra. Prelevare il fango da usarsi come inoculo 18-24 ore dopo che l'unità è stata alimentata.

#### VII.2.4. Preparazione dei contenitori

Preparare i seguenti sei palloni:

- n. 1: sostanza chimica in esame in acqua di diluizione a 100 mg/l
- n. 2, 3 e 4: sostanza chimica in esame nel mezzo minerale a 100 mg/l
- n. 5: sostanza chimica di riferimento (per esempio anilina) nel mezzo minerale a 100 mg/l
- n. 6: mezzo minerale da solo

Aggiungere le sostanze chimiche scarsamente solubili direttamente, in ragione del peso o del volume, o trattarle come descritto nell'allegato III, salvo il fatto che non si devono usare né solventi né agenti emulsionanti. Aggiungere l'assorbente del  $\text{CO}_2$  in tutti i contenitori in speciali recipienti appositamente previsti. Regolare il pH nei contenitori n. 2, 3 e 4 a 7,0.

#### VII.2.5. Esecuzione del saggio

Inoculare i palloni n. 2, 3 e 4 (sospensioni in esame), n. 5 (controllo dell'attività) e n. 6 (bianco dell'inoculo) con un piccolo volume dell'inoculo fino ad una concentrazione di 30 mg/l di solidi sospesi. Non si aggiunge inoculo nel contenitore n. 1, che serve da controllo abiotico. Montare l'apparecchiatura, controllare che sia a tenuta d'aria, avviare gli agitatori e iniziare la misura dell'assorbimento di ossigeno in condizioni di buio. Controllare giornalmente la temperatura, l'agitatore e il registratore del consumo di ossigeno coulometrico e annotare tutte le eventuali variazioni di colore del contenuto dei contenitori. Leggere il consumo di ossigeno per i sei palloni mediante un idoneo metodo, per esempio direttamente dal registratore scrivente a sei punti, che produce una curva di BOD. Al termine dell'incubazione, normalmente 28 giorni, misurare il pH del contenuto nei contenitori e determinare la concentrazione della sostanza chimica in esame residua e di tutti gli eventuali intermedi e, nel caso di sostanze solubili in acqua, la concentrazione di DOC (allegato II.4). Porre una cura particolare nel caso di sostanze chimiche volatili. Se si prevede la nitrificazione, determinare, se possibile, la concentrazione di nitrati e nitriti.

### VII.3. DATI E RELAZIONE

#### VII.3.1. Modalità di esposizione dei risultati

Dividere il consumo di ossigeno (mg) da parte della sostanza chimica in esame dopo un tempo stabilito (corretto del controllo del bianco di inoculo dopo lo stesso tempo) per il peso della sostanza chimica in esame usata. Questo fornisce il BOD espresso come mg di ossigeno / mg di sostanza chimica in esame, cioè

$$\text{BOD} = \frac{\text{mg O}_2 \text{ consumato dalla sostanza chimica in esame} - \text{mg O}_2 \text{ consumato dal bianco}}{\text{mg sostanza chimica in esame nel contenitore}}$$

$$= \text{mg O}_2 \text{ per mg di sostanza chimica in esame}$$

La biodegradazione percentuale si ottiene poi da

$$\text{degrad biologica} = \% \text{ ThOD} = \frac{\text{BOD (mg O}_2\text{/mg sostanza chimica)}}{\text{ThOD (mg O}_2\text{/mg sostanza chimica)}} \times 100$$

Per le miscele, calcolare il ThOD dall'analisi elementare, come per i composti semplici. Utilizzare il valore appropriato di ThOD (ThOD<sub>NH4</sub> o ThOD<sub>NO3</sub>) a secondo che la nitrificazione sia assente o completa (allegato II.2). Se, tuttavia, si verifica la nitrificazione ma non è completa, calcolare la correzione, che tenga conto dell'ossigeno consumato per nitrificazione, dalle variazioni di concentrazione di nitriti e nitrati (allegato V).

Calcolare la biodegradazione primaria percentuale dalla perdita del composto chimico (progenitore) specifico (vedi I.7.2.).

$$D_t = \frac{S_b - S_a}{S_b} \times 100 \%$$

Se c'è stata una perdita di sostanza chimica in esame nel contenitore n. 1 che misura la rimozione chimico-fisica, riportare questa nella relazione e usare la concentrazione della sostanza chimica in esame ( $S_b$ ) dopo 28 giorni in questo pallone per calcolare la biodegradazione percentuale

Quando si effettuano misure (facoltative) di DOC, calcolare la biodegradazione finale percentuale da

$$D_t = \left( 1 - \frac{C_t - C_{bt}}{C_o - C_{bo}} \right) \times 100$$

come descritto al punto I.7.1. Se c'è stata una perdita di DOC nel pallone n. 1, che misura la rimozione chimico-fisica, utilizzare la concentrazione di DOC in questo pallone per calcolare la biodegradazione percentuale.

Registrare tutti i risultati sui moduli allegati.

#### VII 3.2 Validità dei risultati

Il consumo di ossigeno da parte del bianco dell'inoculo è normalmente di 20-30 mg O<sub>2</sub>/l e non dovrebbe essere maggiore di 60 mg/l in 28 giorni. Valori più elevati di 60 mg/l richiedono un esame critico dei dati e delle tecniche sperimentali. Se il valore del pH è al di fuori del campo 6-8,5 e il consumo di ossigeno da parte della sostanza chimica in esame è minore del 60 %, si dovrebbe ripetere la prova con una minore concentrazione della sostanza chimica in esame.

Vedi anche I.5.2

Se la degradazione percentuale dell'anilina, calcolata dal consumo di ossigeno, non supera il 40 % dopo 7 giorni e il 65 % dopo 14 giorni, la prova viene considerata non valida.

#### VII.3.3. Relazione

Vedi I.8.

#### VII 4 MODULARIO

Nel seguito è presentato un esempio di modulo predisposto.

##### SAGGIO MITI (I)

##### 1. LABORATORIO

##### 2. DATA DI INIZIO DEL SAGGIO

## 3. SOSTANZA IN ESAME

Nome:

Concentrazione della soluzione stock: ... mg/l come sostanza

Concentrazione iniziale nel mezzo,  $C_0$ : ... mg/l come sostanzaVolume della miscela di reazione,  $V$ : ... mlThOD: ... mg  $O_2$ /l

## 4. INOCULO

Località di campionamento del fango:

- |    |     |
|----|-----|
| 1) | 6)  |
| 2) | 7)  |
| 3) | 8)  |
| 4) | 9)  |
| 5) | 10) |

Concentrazione dei solidi sospesi nel fango attivo dopo acclimatazione con liquido fognario sintetico = ... mg/l

Volume di fango attivo per litro di mezzo finale = ... ml

Concentrazione del fango nel mezzo finale = ... mg/l

## 5. CONSUMO DI OSSIGENO: BIODEGRADABILITÀ

Tipo di respirometro usato: ...

			Tempo (giorni)				
			0	7	14	21	28
O <sub>2</sub> cons. (mg) sostanza chimica in esame	a <sub>1</sub>						
	a <sub>2</sub>						
	a <sub>3</sub>						
O <sub>2</sub> cons. (mg) bianco	b						
O <sub>2</sub> cons. (mg) corretto	(a <sub>1</sub> - b) (a <sub>2</sub> - b) (a <sub>3</sub> - b)						
BOD per mg di sostanza chimica in esame	$\frac{(a-b)}{C_0 V}$	Conten. 1					
		Conten. 2					
		Conten. 3					
% degradazione  $\frac{BOD}{ThOD} \times 100$		1					
		2					
		3					
		media (*)					

(\*) Non prendere il valore medio se c'è una notevole differenza tra due dati replicati

Nota: formule simili possono essere usate per i controlli della sostanza chimica di riferimento e per i controlli di tossicità.

## 6 ANALISI DEL CARBONIO (facoltativa)

Analizzatore di carbonio

Contenitore	DOC				% DOC rimosso	Media
	Misurato		Corretto			
Acqua + sost. in esame	a				—	—
Fango + sost. in esame	b <sub>1</sub>		b <sub>1</sub> - c			
Fango + sost. in esame	b <sub>2</sub>		b <sub>2</sub> - c			
Fango + sost. in esame	b <sub>3</sub>		b <sub>3</sub> - c			
Controllo del bianco	c		—		—	—

$$\% \text{ DOC rimosso} = \frac{a - (b - c)}{a} \times 100$$

## 7 DATI ANALITICI DELLA SOSTANZA CHIMICA SPECIFICA

	Quantità residua della sostanza chimica in esame al termine della prova	% degradazione
prova in bianco con acqua	S <sub>b</sub>	
mezzo inoculato	S <sub>a1</sub>	
	S <sub>a2</sub>	
	S <sub>a3</sub>	

$$\text{degradazione} = \frac{S_b - S_a}{S_b} \times 100$$

Calcolare la degradazione % per i contenitori a1, a2 e a3 rispettivamente

## 8 NOTE

Se disponibile, allegare la curva del BOD in funzione del tempo.

## ALLEGATO I

## ABBREVIAZIONI E DEFINIZIONI

- DO:** Ossigeno disciolto (mg/l); è la concentrazione di ossigeno disciolto in un campione acquoso
- BOD:** Domanda biochimica di ossigeno (g); è la quantità di ossigeno consumato dai microorganismi nella metabolizzazione di un composto in esame; espressa anche come grammi di ossigeno consumato per grammo di composto in esame (vedi metodo C.5)
- COD:** Domanda chimica di ossigeno (g); è la quantità di ossigeno consumata durante l'ossidazione di un composto in esame con dicromato acido caldo; fornisce una misura della quantità di materia ossidabile presente; espressa anche come grammi di ossigeno consumati per grammo di sostanza in esame (vedi metodo C.6)
- DOC:** Carbonio organico disciolto; è il carbonio organico presente in soluzione o che passa attraverso un filtro da 0,45 micrometri o che rimane nel surnatante dopo centrifugazione a  $40\,000\text{ m/s}^{-2}$  ( $\pm 4\,000\text{ g}$ ) per 15 minuti.
- ThOD:** Domanda teorica di ossigeno (mg); è la quantità totale di ossigeno richiesta per ossidare completamente una sostanza chimica; viene calcolata dalla formula molecolare (vedi allegato II.2) ed è espressa anche come mg di ossigeno richiesti per mg di sostanza in esame
- ThCO<sub>2</sub>:** Biossido di carbonio teorico (mg); è la quantità di biossido di carbonio prodotto calcolato dal contenuto di carbonio noto o misurato della sostanza in esame quando sia stata completamente mineralizzata; espresso anche come mg di biossido di carbonio sviluppati per mg di sostanza in esame.
- TOC:** Carbonio organico totale di un campione; è la somma del carbonio organico in soluzione e in sospensione.
- IC:** Carbonio inorganico.
- TC:** Carbonio totale; è la somma del carbonio organico e di quello inorganico presenti in un campione

*Biodegradazione primaria*

è l'alterazione della struttura chimica di una sostanza provocata da un'azione biologica, che dà come risultato la perdita delle proprietà specifiche di quella sostanza

*Biodegradazione ultima (aerobica).*

è il livello di degradazione realizzato quando la sostanza in esame è completamente utilizzata da microorganismi, con il risultato della produzione di biossido di carbonio, acqua, sali minerali e nuovi costituenti cellulari microbici (biomassa)

*Prontamente biodegradabile:*

una classificazione arbitraria di sostanze chimiche che hanno superato certe prove specifiche di selezione riguardo alla biodegradabilità ultima; queste prove sono così rigorose che si suppone che tali composti si degraderanno biologicamente in modo rapido e completo in ambienti acquosi in condizioni aerobiche

*Intrinsecamente biodegradabile:*

una classificazione di sostanze chimiche per le quali vi è una dimostrazione inequivocabile di biodegradazione (primaria o ultima) in qualsiasi riconosciuto saggio di biodegradabilità

*Trattabilità*

è la capacità di composti di essere rimossi durante il trattamento biologico di acque di scarico senza influire in modo dannoso sul funzionamento normale dei processi di trattamento. In generale, i composti prontamente biodegradabili possono essere trattati, ma non tutti i composti intrinsecamente biodegradabili lo sono. Possono funzionare anche processi abiotici.

*Tempo di latenza*

è il tempo che passa dall'inoculazione in un saggio di rimozione lenta a quando la degradazione percentuale è aumentata fino ad almeno il 10 %. Il tempo di latenza è spesso notevolmente variabile e scarsamente riproducibile

*Tempo di degradazione*

è il tempo che passa dal termine del tempo di latenza al momento in cui si raggiunge il 90 % o il massimo livello di degradazione.

*Finestra di 10 giorni*

sono i 10 giorni che seguono immediatamente il raggiungimento del 10 % di degradazione.

## ALLEGATO II

## CALCOLO E DETERMINAZIONE DEI PARAMETRI SIGNIFICATIVI

Secondo il metodo scelto, saranno richiesti certi parametri somma. La sezione che segue descrive come ricavare questi valori. L'uso di questi parametri è descritto nei metodi specifici.

1 **Contenuto di carbonio**

Il contenuto di carbonio viene calcolato dalla composizione elementare nota oppure viene determinato mediante analisi elementare della sostanza in esame.

2 **Domanda teorica di ossigeno (ThOD)**

La domanda teorica di ossigeno (ThOD) può essere calcolata se è nota la composizione elementare, oppure se questa viene determinata mediante analisi elementare. Per il composto.



senza nitrificazione, si ha

$$ThOD_{NH4} = \frac{16 (2 c + 1/2 (h - cl - 3 n) + 3 s + 5/2 p + 1/2 na - o)}{PM} \text{ mg/mg}$$

oppure, con nitrificazione,

$$ThOD_{NO3} = \frac{16 (2 c + 1/2 (h - cl) + 5/2 n + 3 s + 5/2 p + 1/2 na - o)}{PM} \text{ mg/mg}$$

3 **Domanda chimica di ossigeno (COD)**

La domanda chimica di ossigeno (COD) viene determinata secondo il metodo C 6.

4 **Carbonio organico disciolto (DOC)**

Il carbonio organico disciolto (DOC) è per definizione il carbonio organico di qualsiasi sostanza chimica o miscela in acqua che passa attraverso un filtro da 0,45 micrometri.

Campioni estratti dal recipiente di prova vengono prelevati e filtrati immediatamente nell'apparecchiatura di filtrazione utilizzando un appropriato filtro a membrana. I primi 20 ml (quantità che può essere ridotta quando si usino filtri piccoli) del filtrato vengono scartati. Per l'analisi del carbonio si trattengono volumi di 10-20 ml, o minori, nel caso vengano iniettati (il volume dipende dalla quantità richiesta dall'analizzatore del carbonio). La concentrazione di DOC viene determinata mediante un analizzatore di carbonio organico che è in grado di misurare accuratamente una concentrazione di carbonio equivalente o minore del 10 % della concentrazione iniziale di DOC usata nella prova.

Campioni filtrati che non possono essere analizzati lo stesso giorno di lavoro possono essere conservati in frigorifero a 2-4 °C per 48 ore o al di sotto di -18 °C per periodi più lunghi.

**Note:**

*I filtri a membrana* sono spesso impregnati di tensioattivi per la idrofilizzazione. Così i filtri possono contenere fino a parecchi mg di carbonio organico solubile che interferirebbe nelle determinazioni di biodegradabilità. I tensioattivi e altri composti organici solubili vengono rimossi dai filtri bollendoli in acqua deionizzata per tre volte di 1 ora ciascuno. I filtri possono poi venire conservati in acqua per una settimana. Se si utilizzano cartucce filtranti a perdere, ciascuna partita deve essere controllata per confermare che non liberi carbonio organico solubile.

Secondo il tipo di filtro a membrana, la sostanza chimica in esame può essere trattenuta per adsorbimento. Pertanto può essere consigliabile assicurarsi che la sostanza chimica in esame non venga trattenuta dal filtro.

Una centrifugazione  $\sim 40\,000\text{ m/s}^{-2}$  (4 000 g) per 15 minuti può venire usata al posto della filtrazione per differenziare tra TOC e DOC. Il metodo non è affidabile a una concentrazione iniziale  $< 10\text{ mg DOC/l}$  perché o non vengono rimossi tutti i batteri, oppure viene ridisciolti carbonio come parte del plasma batterico.

**BIBLIOGRAFIA**

- Standard Methods for the Examination of Water and Wastewater, 12th, ed. Am. Pub. Hlth. Ass., Am. Wat. Poll. Control Fed., Oxygen Demand, 1965, P. 65.
- Wagner, R., Von Wasser, 1976, Vol. 46, 139.
- DIN-Entwurf 38 409 Teil 41 — Deutsche Einheitsverfahren zur Wasser-, Abwasser- und Schlammuntersuchung, Summarische Wirkungs- und Stoffkenngrößen (Gruppe H). Bestimmung des Chemischen Sauerstoffbedarfs (CSB) (H 41), Normenausschuß Wasserwesen (NAW) in DIN Deutsches Institut für Normung e.V.
- Gerike, P. The biodegradability testing of poorly water soluble compounds. Chemosphere, 1984, Vol. 13 (1), 169.

**ALLEGATO III**

**VALUTAZIONE DELLA BIODEGRADABILITÀ DI SOSTANZE SCARSAMENTE SOLUBILI**

Nei saggi di biodegradabilità con sostanze scarsamente solubili, si dovrebbe prestare una particolare attenzione agli aspetti seguenti:

Mentre i liquidi omogenei raramente creano problemi di campionamento, si raccomanda di omogeneizzare i materiali solidi mediante mezzi appropriati per evitare errori dovuti alla disomogeneità. Un'attenzione particolare deve essere adoperata quando occorrono campioni rappresentativi di pochi mg prelevati da miscele di prodotti chimici o sostanze con grandi quantità di impurezze.

Durante le prove si possono usare varie forme di agitazione. Bisogna porre attenzione ad applicare semplicemente una agitazione sufficiente per mantenere in dispersione la sostanza chimica e di evitare un surriscaldamento, eccessiva formazione di schiuma e eccessive forze di taglio.

Si può usare un emulsionante che fornisca una dispersione stabile della sostanza chimica. Esso non dovrebbe essere tossico per i batteri e non dovrebbe essere biodegradato né provocare schiuma nelle condizioni sperimentali.

Gli stessi criteri valgono per i solventi e gli emulsionanti

Non è raccomandabile usare carriers solidi per le sostanze in esame solide, ma essi possono essere adatti per le sostanze oleose

Quando si utilizzano sostanze ausiliarie, come emulsionanti, solventi e veicoli, si dovrebbe eseguire una prova in bianco contenente la sostanza ausiliaria

Per studiare la biodegradabilità di composti scarsamente solubili si può usare uno qualunque dei tre saggi respirometrici  $\text{CO}_2$ , BOD, MITI

#### BIBLIOGRAFIA

- de Morsier, A. et al. Biodegradation tests for poorly soluble compounds Chemosphere, 1987, Vol. 16, 833
- Gerike, P. The Biodegradability testing of poorly water soluble compounds Chemosphere, 1984, Vol. 13, 169

#### ALLEGATO IV

##### VALUTAZIONE DELLA BIODEGRADABILITÀ DI SOSTANZE CHIMICHE DI SOSPETTA TOSSICITÀ PER L'INOCULO

Quando una sostanza chimica viene sottoposta ad un saggio di pronta biodegradabilità e risulta non biodegradabile, si raccomanda di eseguire la procedura seguente se si vuole distinguere tra inibizione e morte (Reynolds et al., 1987)

Si devono usare inoculi simili o identici per i saggi di tossicità e degradazione biologica

Per valutare la tossicità di sostanze chimiche studiate in saggi di pronta biodegradabilità, sembra appropriata l'applicazione di uno dei metodi, o una loro combinazione, di inibizione del tasso di respirazione del fango (saggio di inibizione della respirazione del fango attivo — Direttiva 88/302/CEE), BOD e/o inibizione della crescita

Se si deve evitare l'inibizione dovuta a tossicità, si suggerisce di usare nelle prove di pronta biodegradabilità una concentrazione della sostanza in esame minore di 1/10 dei valori di  $\text{EC}_{50}$  (o minore dei valori di  $\text{EC}_{50}$  ottenuti nelle prove di tossicità). I composti con un valore di  $\text{EC}_{50}$  maggiore di 300 mg/l è improbabile che abbiano effetti tossici nelle prove di pronta biodegradabilità

I valori di  $\text{EC}_{50}$  minori di 20 mg/l è probabile che pongano seri problemi per la successiva esecuzione delle prove. Si devono impiegare concentrazioni di prova basse, che richiedono l'uso del saggio rigoroso e sensibile della bottiglia chiusa oppure l'uso di materiale marcato  $^{14}\text{C}$ . In alternativa, un inoculo acclimatato può permettere di usare concentrazioni più elevate della sostanza in esame. In questo ultimo caso, tuttavia, si perde lo specifico criterio di pronta biodegradabilità

#### BIBLIOGRAFIA

- Reynolds, L. et al. Evaluation of the toxicity of substances to be assessed for biodegradability Chemosphere 1987, Vol. 16, 2259

#### ALLEGATO V

##### CORREZIONE DELL'ASSORBIMENTO DI OSSIGENO PER INTERFERENZA DOVUTA A NITRIFICAZIONE

Errori dovuti al fatto di non considerare la nitrificazione, nella valutazione del consumo di ossigeno nella biodegradabilità di sostanze in esame che non contengono azoto, sono marginali (minori del 5%), anche se si verifica, in modo irregolare, l'ossidazione dell'azoto ammoniacale nel mezzo, tra i recipienti di prova e i recipienti del bianco. Invece, per le sostanze di prova, che contengono azoto, possono verificarsi gravi errori



Se si è avuta nitrificazione ma questa non è completa, il consumo di ossigeno osservato, nella miscela di reazione, può essere corretto tenendo conto della quantità di ossigeno utilizzata nell'ossidazione dell'ammonio a nitrito e nitrato, se si determinano le variazioni di concentrazione dei nitriti e dei nitrati durante l'incubazione, tenendo conto delle equazioni seguenti



Complessivamente



Dall'equazione (1) risulta che l'ossigeno consumato da 28 g d'azoto, contenuti nel cloruro d'ammonio ( $\text{NH}_4\text{Cl}$ ) ossidato a nitrito è pari a 96 g, il che corrisponde ad un fattore di 3,43 (96/28). Nello stesso modo dall'equazione (3) l'assorbimento di ossigeno da parte di 28 g di azoto, ossidati a nitrato, è di 128 g, il che corrisponde ad un fattore di 4,57 (128/28).

Poichè le reazioni avvengono *in sequenza*, in quanto sono eseguite da specie batteriche distinte e differenti, è possibile che la concentrazione di nitrito aumenti o diminuisca, in quest'ultimo caso si formerà una concentrazione equivalente di nitrato. Così, l'ossigeno consumato nella formazione di nitrato è 4,57 moltiplicato per l'aumento di concentrazione del nitrato, mentre l'ossigeno associato alla formazione di nitrito è 3,43 moltiplicato per l'aumento di concentrazione del nitrito o per la diminuzione della sua concentrazione, la perdita di ossigeno è - 3,43 moltiplicato per la diminuzione di concentrazione.

Cioè

$$\text{O}_2 \text{ consumato nella formazione di nitrato} = 4,57 \times \text{aumento di concentrazione dei N-nitrati} \quad (4)$$

e

$$\text{O}_2 \text{ consumato nella formazione di nitrito} = 3,43 \times \text{aumento della concentrazione di N-nitrito} \quad (5)$$

e

$$\text{O}_2 \text{ perso nella sparizione dei nitriti} = - 3,43 \times \text{diminuzione della concentrazione di N-nitriti} \quad (6)$$

$$\text{Di modo che l'assorbimento di O}_2 \text{ dovuto alla nitrificazione} = \pm 3,43 \times \text{variazione della concentrazione di N-nitrito} + 4,57 \times \text{aumento della concentrazione di N-nitrato} \quad (7)$$

$$\text{e così l'assorbimento di O}_2 \text{ dovuto all'ossidazione del C} = \text{assorbimento osservato totale} - \text{assorbimento dovuto alla nitrificazione} \quad (8)$$

In alternativa, se si determina solo l'N totale ossidato, l'assorbimento di ossigeno dovuto alla nitrificazione può essere assunto, in prima approssimazione, pari a  $4,57 \times \text{aumento di N ossidato}$

Il valore corretto per il consumo di ossigeno dovuto all'ossidazione di C viene poi confrontato con il  $\text{ThOD}_{\text{NH}_4}$ , come calcolato nell'allegato II

## C.5. DEGRADAZIONE — DOMANDA BIOCHIMICA DI OSSIGENO (BOD)

## 1 METODO

## 1.1 INTRODUZIONE

Il presente metodo serve a misurare la domanda biochimica di ossigeno (BOD) delle sostanze organiche solide e liquide.

I dati ottenuti con questa prova riguardano i composti idrosolubili, è tuttavia possibile, almeno in linea di principio, esaminare anche i composti volatili e quelli poco solubili in acqua.

Il metodo può essere applicato soltanto a sostanze organiche che non esercitano azione inibitoria sui batteri alla concentrazione impiegata per le prove. Se la sostanza non è solubile, per ottenere una buona dispersione potrà essere necessario ricorrere a speciali accorgimenti, come l'impiego di ultrasuoni.

Informazioni preliminari in merito alla tossicità del composto chimico possono risultare utili per interpretare i valori più bassi e per scegliere adeguate concentrazioni per la prova.

## 1.2 DEFINIZIONI ED UNITÀ

Si definisce BOD la quantità di ossigeno che un determinato quantitativo della sostanza in esame richiede, in determinate condizioni, per consentire il verificarsi del processo di ossidazione biochimica.

I risultati vengono espressi in g di BOD per g di sostanza esaminata.

## 1.3. SOSTANZE DI RIFERIMENTO

È consigliabile impiegare una sostanza di riferimento adatta per verificare l'attività dell'inoculo.

## 1.4 PRINCIPIO DEL METODO

Una quantità predeterminata della sostanza in esame, disciolta o dispersa in un mezzo idoneo ben aerato, viene inoculata con opportuni microorganismi e posta in incubazione al buio, a temperatura ambiente determinata e costante.

Il BOD viene determinato dalla differenza del contenuto di ossigeno disciolto all'inizio e alla fine del saggio. La durata del saggio deve essere almeno di 5 giorni e non più di 28 giorni.

Deve essere effettuata in parallelo una prova in bianco, su un sistema analogo, ma non contenente la sostanza in esame.

## 1.5 CRITERI DI QUALITÀ

La determinazione del BOD non può essere ritenuta una valida determinazione della biodegradabilità di una sostanza. Il presente metodo può essere considerato unicamente come un saggio orientativo.

## 1.6. DESCRIZIONE DEL METODO

Si prepara preliminarmente una soluzione od una dispersione della sostanza da esaminare, per ottenere una concentrazione di BOD compatibile con il metodo impiegato. Si determina successivamente il BOD seguendo un qualunque metodo nazionale o internazionale normalizzato.

**2 DATI E VALUTAZIONE**

Il BOD ottenuto nella soluzione preliminare viene calcolato conformemente al metodo normalizzato prescelto e convertito in grammi di BOD per grammo di sostanza esaminata

**3 RELAZIONE**

Va precisato il metodo impiegato

La domanda biochimica di ossigeno deve risultare dalla media di almeno tre misurazioni valide

Va indicata ogni informazione ed ogni osservazione utile per l'interpretazione del saggio, soprattutto per quanto riguarda le impurezze, lo stato fisico, gli effetti tossici, la composizione intrinseca della sostanza ed ogni altro elemento tale da influenzarne i risultati

Nella relazione va indicato l'eventuale impiego di un additivo mirante a impedire la nitrificazione biologica

**4 BIBLIOGRAFIA**

Elenco di metodi normalizzati, quali ad esempio

NF T 90-103 Determination of the biochemical oxygen demand

NBN 407 Biochemical oxygen demand

NEN 3235 5 4 Bepaling van het biochemisch zuurstofverbruik (BZV)

The determination of biochemical oxygen demand, 1981, Methods for the examination of water and associated materials, HMSO, London

ISO 5815 Determination of biochemical oxygen demand after n days

**C.6 DEGRADAZIONE — DOMANDA CHIMICA DI OSSIGENO (COD)****1 METODO****1.1 INTRODUZIONE**

Il presente metodo è destinato alla determinazione della domanda chimica di ossigeno (COD) delle sostanze organiche solide o liquide, secondo una tecnica normalizzata ed arbitraria, in condizioni di laboratorio prefissate

Per effettuare la prova ed interpretarne i risultati sarà utile disporre di dati sulla formula chimica della sostanza (ad esempio sali idrogenati, sali ferrosi di composti organici, composti organoclorurati)

**1.2 DEFINIZIONI ED UNITÀ**

La richiesta chimica di ossigeno è una misura dell'ossidabilità di una sostanza, espressa come equivalente in ossigeno di un reattivo ossidante consumato dalla sostanza in condizioni di laboratorio prestabilite

Il risultato si esprime in g COD/g sostanza in esame

**1.3 SOSTANZE DI RIFERIMENTO**

Nell'esame di nuovi prodotti non è necessario impiegare costantemente sostanze di riferimento. Queste dovrebbero servire essenzialmente a calibrare saltuariamente il metodo e fornire la possibilità di confrontare i risultati con quelli ottenuti applicando un altro metodo.

**1.4 PRINCIPIO DEL METODO**

Una quantità prestabilita della sostanza da esaminare, disciolta o dispersa in acqua, viene ossidata con potassio dicromato in ambiente fortemente acido per  $H_2SO_4$ , impiegando solfato d'argento come catalizzatore e facendo bollire a ricadere per due ore. La quantità residua di dicromato viene determinata titolando con solfato di ferro (II) e ammonio standardizzato.

Nel caso delle sostanze contenenti cloro, si aggiunge solfato di mercurio (\*) per ridurre l'interferenza dei cloruri.

**1.5 CRITERI DI QUALITÀ**

Dati l'arbitrarietà di determinazione del metodo, il COD è un «indicatore di ossidabilità» e come tale viene usato come un metodo pratico per determinare le sostanze organiche.

Nelle prove possono interferire i cloruri; anche riducenti o ossidanti inorganici possono interferire con la determinazione del COD.

Alcuni composti ciclici e molte sostanze volatili (per esempio acidi grassi inferiori) non vengono ossidati completamente da questo saggio.

**1.6 DESCRIZIONE DEL METODO**

Nel caso delle sostanze contenenti cloro, si aggiunge solfato di mercurio (Dopo l'uso, le soluzioni contenenti sali di mercurio devono essere trattate in modo da evitare la diffusione di mercurio nell'ambiente) per ridurre l'interferenza dei cloruri.

Si prepara una soluzione o una dispersione della sostanza da saggiare, in modo da ottenere una domanda chimica di ossigeno compresa tra 250 e 600 mg/l di COD.

**Osservazioni**

Nel caso di sostanze scarsamente solubili o non disperdibili, si può pesare una quantità di sostanza, finemente polverizzata od allo stato liquido, corrispondente a 5 mg di COD, e si colloca nell'apparecchio sperimentale con acqua.

La domanda chimica di ossigeno (COD) viene spesso determinata, specialmente nel caso di sostanze scarsamente solubili, secondo una variante al metodo, cioè in un sistema chiuso con un equalizzatore di pressione (H. Kelkenberg, 1975). Con questa variante, composti che si determinano solo con difficoltà con il metodo convenzionale — per esempio acido acetico — è spesso possibile riuscire a quantificarli. Anche questo metodo fallisce tuttavia nel caso della piridina. Se si aumenta la concentrazione del dicromato di potassio descritta nel riferimento (1), fino a 0,25 N (0,0416 M), la pesata diretta di 5-10 mg di sostanza viene facilitata, e ciò è essenziale per la determinazione del COD di sostanze scarsamente solubili in acqua (rif. 2).

Altrimenti, il COD viene poi determinato seguendo un qualunque metodo nazionale o internazionale normalizzato.

**2 DATI E VALUTAZIONI**

Il COD del recipiente sperimentale viene calcolato secondo il metodo normalizzato prescelto e trasformato in grammi di COD per grammi della sostanza in esame.

(\*) Dopo l'uso, le soluzioni contenenti sali di mercurio devono essere trattate in modo da evitare la diffusione di mercurio nell'ambiente.

### 3. RELAZIONE

Nella relazione deve essere indicato il metodo di riferimento

Il COD deve risultare dalla media di almeno tre misure. Devono essere riferiti tutti i dati e le osservazioni significative per l'interpretazione dei valori ottenuti: ciò vale particolarmente per le impurezze, lo stato fisico e le proprietà della sostanza (se note), qualora possano influire sui risultati

Va altresì riferito l'eventuale impiego di solfato mercurico per minimizzare l'interferenza dei cloruri.

### 4. BIBLIOGRAFIA

- (1) Kelkenberg, H., Z. von Wasser und Abwasserforschung, 1975, vol. 8, 146
- (2) Gerike, P. The biodegradability testing of poorly water soluble compounds. Chemosphere, 1984, vol. 13, 169

Elenco dei metodi standardizzati, ad esempio

NBN T 91-201 Determination of the chemical oxygen demand

ISBN 0 11 7512494 Chemical oxygen demand (dichromate value) of polluted and waste waters

NF T 90-101 Determination of the chemical oxygen demand

DS 217 — water analysis Determination of the chemical oxygen demand. analysis

DIN 38409-H-41 Determination of the chemical oxygen demand (COD) within the range above 15 mg per litre.

NEN 3235 S. 3 Bepaling van het chemisch zuurstofverbruik

ISO 6060 Water quality: chemical oxygen demand dichromate methods

## C.7. DEGRADAZIONE — DEGRADAZIONE ABIOTICA: IDROLISI IN FUNZIONE DEL pH

### 1. METODO

Il metodo descritto si basa sulla linea guida dell'OCSE (1)

#### 1.1 INTRODUZIONE

Tra le reazioni che influenzano la persistenza delle sostanze nell'ambiente, l'idrolisi è importante ai fini della degradazione abiotica e riveste quindi particolare interesse per le sostanze caratterizzate da bassa biodegradabilità

La maggior parte delle reazioni di idrolisi è di *pseudo*-primo ordine, i tempi di dimezzamento sono quindi indipendenti dalla concentrazione. Questo fatto consente di estrapolare i risultati ottenuti in laboratorio alle condizioni ambientali

Sono stati inoltre riportati numerosi esempi (2), dai quali risulta un soddisfacente accordo tra i risultati ottenuti in acqua pura ed in acqua naturale per varie classi di composti chimici

Ai fini dell'esecuzione del saggio, che è applicabile unicamente a sostanze solubili in acqua, è utile disporre di dati preliminari relativi alla tensione di vapore della sostanza in esame. Le impurezze possono influenzare i risultati.

È necessario esaminare il comportamento idrolitico ai valori di pH normalmente riscontrabili nell'ambiente (pH 4-9).

## 1.2 DEFINIZIONI ED UNITÀ DI MISURA

Per idrolisi si intende la reazione di un composto chimico RX con l'acqua, che può venir rappresentata dallo scambio del gruppo X con OH:



La velocità con cui la concentrazione di RX diminuisce è data da

$$\text{velocità} = k \cdot (\text{H}_2\text{O}) \cdot (\text{RX}) \quad (2)$$

Poiché l'acqua è presente in grande eccesso rispetto alla sostanza RX, la relazione (2) è normalmente descritta come «reazione di pseudo primo ordine», la relativa costante di velocità osservata è espressa dalla relazione

$$k_{\text{oss}} = k \cdot (\text{H}_2\text{O}) \quad (3)$$

Questa costante può essere ricavata, per un dato valore di pH e della temperatura, T, dall'espressione

$$k_{\text{oss}} = \frac{2,303}{t} \log \frac{C_0}{C_t} \quad (4)$$

dove

t = tempo,

$C_0$  = concentrazione di RX al tempo 0,

$C_t$  = concentrazione di RX al tempo t,

2.303 = fattore di conversione tra logaritmi naturali e decimali.

Le concentrazioni sono espresse in g/l o mol/l.

La dimensione della costante  $k_{\text{oss}}$  è (tempo)<sup>-1</sup>.

Il «tempo di dimezzamento»,  $t_{1/2}$ , è definito come il tempo necessario affinché la concentrazione di RX sia ridotta del 50 %, cioè affinché

$$C_t = \frac{1}{2} C_0 \quad (5)$$

Dalle espressioni (4) e (5) deriva che

$$t_{1/2} = 0,693/k_{\text{oss}} \quad (6)$$

L'uso di solventi organici miscibili con l'acqua è raccomandato solamente nel caso di sostanze a bassa solubilità in acqua

La quantità del solvente dovrebbe essere minore dell'1 %, e tale da non interferire con il processo idrolitico

#### 1.6.2 Apparecchiature

Si dovrebbero utilizzare recipienti di vetro muniti di tappo evitando comunque l'uso di grasso negli smerigli

Qualora il composto chimico o il sistema tampone siano volatili, ovvero qualora la sperimentazione sia effettuata a temperature elevate, saranno da preferirsi contenitori saldati o provvisti di chiusura a tenuta e sarà da evitare la presenza di spazio di testa

#### 1.6.3 Metodo analitico

Il metodo deve essere specifico per permettere di determinare la sostanza in esame alle concentrazioni della soluzione su cui viene eseguito il saggio e può senz'altro essere costituito da una combinazione di tecniche analitiche adatte

Il metodo analitico usato dipenderà dalla natura della sostanza e deve essere sufficientemente preciso e sensibile da rivelare una riduzione pari al 10 % della concentrazione iniziale

#### 1.6.4 Condizioni del saggio

Il saggio sarà eseguito utilizzando un ambiente termostato regolato alla temperatura prescelta per la reazione,  $\pm 0,5^\circ\text{C}$ . La temperatura dovrà essere mantenuta costante entro  $\pm 0,1^\circ\text{C}$  e misurata con precisione pari a  $\pm 0,1^\circ\text{C}$ . Mediante misure adeguate, deve essere evitata l'interferenza fotolitica

Per le sostanze facilmente ossidabili, sarà necessario escludere la presenza di ossigeno disciolto (per esempio gorgogliando azoto o argon per 5 minuti prima di preparare la soluzione)

#### 1.6.5 Procedimento

##### 1.6.5.1 Saggio preliminare

Per tutte le sostanze si deve effettuare un saggio preliminare a  $50^\circ\text{C} \pm 0,5^\circ\text{C}$  e ai tre valori di pH 4,0, 7,0 e 9,0. A tal fine un numero sufficiente di misure deve essere fatto in modo che si possa valutare se, a ciascun valore di pH e a  $50^\circ\text{C}$ , il tempo di dimezzamento ( $t_{1/2}$ ) sia minore di 2,4 ore, oppure se la quantità di sostanza idrolizzata dopo 5 giorni sia meno del 10 %. Si può ritenere che questi valori corrispondano rispettivamente a tempi di dimezzamento minori di 1 giorno e maggiori di 1 anno in condizioni ambientali ( $25^\circ\text{C}$ )

Se il test preliminare indica che il 50 % della sostanza (o più del 50 %) è idrolizzata in 2,4 ore a  $50^\circ\text{C}$ , oppure che meno del 10 % è idrolizzata dopo 5 giorni a ciascuno dei valori di pH (4, 7 e 9) nessun altro saggio deve essere eseguito

Diversamente, e per quei valori di pH in cui non si verifica questa condizione, si esegue il test n° 1

##### 1.6.5.2 Test n° 1

Il test n° 1 viene eseguito ad una temperatura, preferibilmente a  $50 \pm 0,5^\circ\text{C}$  in condizioni sterili se la sostanza è biodegradabile, a quei valori di pH in cui il saggio preliminare ha mostrato la necessità di ulteriore sperimentazione

Un numero sufficiente, non inferiore a 4, di campioni deve essere prelevato dopo tempi di reazione tali che la quantità di sostanza idrolizzata sia compresa nell'intervallo da 20 a 70 %, ciò al fine di verificare se la reazione ai valori di pH in esame sia di *pseudo* prim'ordine

Per ciascun pH si determina l'ordine di reazione

## 1.3 SOSTANZE DI RIFERIMENTO

Quando si esamini una nuova sostanza, non è sempre necessario fare uso di sostanze di riferimento, che andrebbero soprattutto utilizzate per controllare saltuariamente il funzionamento del metodo e per rendere possibile il confronto con risultati ottenuti impiegando un altro metodo.

Come sostanze di riferimento sono state usate le seguenti sostanze (1):

acido acetilsalicilico (aspirina)

0,0-dicil-0-(6-metil-2-(1-metiletil)-4-pirimidinil)-fosfotioato (dimpilato, diazinone)

## 1.4 PRINCIPIO DEL METODO

Si prepara una soluzione diluita della sostanza in acqua, si controllano pH e temperatura.

La diminuzione della concentrazione della sostanza in funzione del tempo viene seguita mediante una adeguata metodologia analitica.

I valori del logaritmo delle concentrazioni vengono riportati in un grafico in funzione del tempo; qualora si ottenga una linea retta, la costante di idrolisi viene calcolata dalla pendenza della retta (vedi paragrafo 2).

Può verificarsi il caso in cui la costante di velocità non sia, in pratica, misurabile direttamente ad una particolare temperatura; in tal caso può essere ricavata indirettamente applicando la relazione di Arrhenius che esprime la dipendenza delle costanti di velocità dalla temperatura. La costante non direttamente misurabile può cioè essere ottenuta per estrapolazione, utilizzando la retta che esprime la variazione del logaritmo della costante di velocità, misurata ad opportune temperature, in funzione dell'inverso della temperatura assoluta (K):

## 1.5 CRITERI DI QUALITÀ

Dal riferimento bibliografico (2) risulta che misure di velocità di idrolisi, quali quelle eseguite su 13 classi di strutture organiche, possono avere un'elevata precisione. La ripetibilità dipende in particolare dal controllo del pH e della temperatura e può essere influenzata dalla presenza di microorganismi e, in casi particolari, dalla concentrazione dell'ossigeno disciolto.

## 1.6 DESCRIZIONE DEL METODO

## 1.6.1 Reagenti

## 1.6.1.1 Soluzioni tampone

La sperimentazione deve essere eseguita ai valori di pH: 4,0, 7,0 e 9,0.

A tale scopo si devono preparare soluzioni tampone impiegando reagenti puri di grado analitico ed acqua distillata o deionizzata e sterile. Nell'appendice sono presentati alcuni esempi di sistemi tampone.

È opportuno osservare che il sistema tampone impiegato può influenzare la velocità d'idrolisi; in tal caso, si utilizzerà un altro sistema tampone. Nel riferimento bibliografico (2) si consiglia l'uso di tamponi borato o acetato anziché fosfato.

Qualora il pH di una soluzione tampone alla temperatura di sperimentazione non sia noto, esso deve essere determinato, alla temperatura prescelta, con precisione pari a  $\pm 0,1$  unità di pH mediante un pHmetro tarato.

## 1.6.1.2 Soluzioni in esame

La sostanza in esame va disciolta nella soluzione tampone. La sua concentrazione non dovrebbe essere maggiore di 0,01 M o della metà della concentrazione di saturazione (la concentrazione da utilizzare è, tra le due, quella che risulta più bassa).



#### Valutazione della costante di velocità a 25 °C

La decisione su come procedere sperimentalmente dipende dall'ordine di reazione determinato mediante il test n. 1: la reazione può essere di *pseudo*-prim'ordine, oppure no.

Se non è possibile concludere con certezza che la reazione è di prim'ordine, si prosegue la sperimentazione secondo quanto descritto nel test n. 2.

Se invece si può senza incertezze concludere, in base al test n. 1, che la reazione è di *pseudo*-prim'ordine, si prosegue la sperimentazione come descritto nel test n. 3. Alternativamente, in particolari circostanze, potrebbe essere possibile calcolare la costante di velocità a 25 °C in base al valore della costante a 50 °C ottenuta mediante i risultati del test n. 1 (vedi paragrafo 3.2).

#### 1.6.5.3 Test n. 2

Questo saggio viene eseguito a ciascuno dei valori di pH indicati dai risultati del test n. 1:

- o ad una temperatura minore di 40 °C,
- oppure a due temperature maggiori di 50 °C e che differiscano tra di loro di almeno 10 °C.

Per ciascun valore di pH e di temperatura in cui si esegue il test n. 2 si dovranno prelevare almeno 6 campioni della soluzione tali che si possa disporre di 6 valori di concentrazione opportunamente distanziati e relativi a stadi di avanzamento dell'idrolisi compresi tra il 20 e il 70 %.

Per un valore di pH ed una temperatura, si dovrà effettuare una determinazione in doppio. Qualora il test n. 2 sia fatto a due temperature, la determinazione in doppio dovrà essere fatta per la minore delle due.

Per ciascun valore di pH e della temperatura in cui è stato eseguito il test n. 2, sarà dato, se possibile, una valutazione grafica del tempo di dimezzamento.

#### 1.6.5.4 Test n. 3

Questo saggio viene eseguito a ciascuno dei valori di pH indicati dai risultati del test n. 1:

- o ad una temperatura minore di 40 °C,
- oppure a due temperature maggiori di 50 °C e che differiscano tra loro di almeno 10 °C.

Per ciascun valore di pH e di temperatura in cui si esegue il test n. 3 si dovranno prelevare 3 campioni: il primo relativo al tempo 0 e il secondo e il terzo dopo tempi di reazione tali che lo stato di avanzamento dell'idrolisi superi il 30 %. Si calcolano infine, se è possibile, la costante  $k_{\text{oss}}$  e il tempo di dimezzamento ( $t_{1/2}$ ).

## 2 DATI

Per le reazioni di *pseudo*-prim'ordine, i valori di  $k_{\text{oss}}$  per ciascun valore di pH e della temperatura possono essere ottenuti dal grafico del logaritmo della concentrazione in funzione del tempo usando l'espressione

$$k_{\text{oss}} = - \text{pendenza} \times 2,303 \quad (7)$$

Il tempo di dimezzamento può essere calcolato usando l'equazione (6)

La costante di velocità a 25 °C,  $k_{25\text{ °C}}$ , può essere calcolata, ove necessario, mediante l'equazione di Arrhenius

Per le reazioni che non sono di *pseudo* prim'ordine vedi paragrafo 3.1

## 3 RELAZIONE

## 3.1 RELAZIONE SUL SAGGIO

La relazione di prova deve, se possibile, includere le seguenti informazioni:

- descrizione precisa della sostanza,
- ogni risultato ottenuto con sostanze di riferimento,
- il principio e i dettagli del metodo analitico usato,
- per ciascun saggio: temperatura, pH, composizione del tampone e una tabella di tutte le coppie di valori concentrazione-tempo,
- per le reazioni di *pseudo*-prim'ordine: i valori di  $k_{\text{oss}}$ ,  $t_{1/2}$  e la procedura di calcolo,
- per le reazioni non di *pseudo*-prim'ordine: i grafici dei risultati sotto forma di logaritmo della concentrazione in funzione del tempo,
- tutte le informazioni ed osservazioni necessarie per la valutazione dei risultati.

## 3.2 INTERPRETAZIONE DEI RISULTATI

Può essere possibile calcolare un valore accettabile della costante di velocità (a 25 °C) della sostanza in esame, ammesso che già esistano valori sperimentali dell'energia di attivazione per sostanze omologhe alla sostanza in esame e ammesso che sia ragionevole assumere che l'energia di attivazione della sostanza in esame sia dello stesso ordine di grandezza delle energie d'attivazione sperimentali prese come riferimento.

## 4 RIFERIMENTI BIBLIOGRAFICI

- (1) OECD, Paris, 1981, Test Guideline 111, Decision of the Council C(81) 30 final
- (2) W. Mabey and T. Mill, «Critical Review of Hydrolysis of Organic Compounds in Water Under Environmental Conditions», J. Phys. Chem. Ref. Data, 1978, vol. 7 (2), 383-415

## Appendice

## Miscela tampone

## A CLARK E LUBS

I valori del pH riportati in queste tabelle sono stati calcolati da misure di potenziale utilizzando le equazioni standard di Sorensen. I valori effettivi del pH sono maggiori di 0,04 unità rispetto a quelli delle tabelle.

Composizione	pH
Ftalato acido di potassio 0,1 M + HCl 0,1 N a 20 °C	
2,63 ml 0,1 N HCl + 50 ml ftalato a 100 ml	3,8
Ftalato acido di potassio 0,1 M + NaOH 0,1 N a 20 °C	
0,40 ml 0,1 N NaOH + 50 ml ftalato a 100 ml	4,0
3,70 ml 0,1 N NaOH + 50 ml ftalato a 100 ml	4,2
Fosfato monopotassico 0,1 M + NaOH 0,1 N a 20 °C	
23,45 ml 0,1 N NaOH + 50 ml fosfato a 100 ml	6,8
29,63 ml 0,1 N NaOH + 50 ml fosfato a 100 ml	7,0
35,00 ml 0,1 N NaOH + 50 ml fosfato a 100 ml	

$H_3BO_3$  0,1 M in KCl 0,1 M + NaOH 0,1 N a 20 °C

16,30 ml 0,1 N NaOH + 50 ml acido borico a 100 ml 8,8

21,30 ml 0,1 N NaOH + 50 ml acido borico a 100 ml 9,0

26,70 ml 0,1 N NaOH + 50 ml acido borico a 100 ml 9,2

#### B KOLTHOFF E VLEESCHOUWER

Composizione pH

Citrato monopotassico 0,1 M e NaOH 0,1 N a 18 °C (aggiungere un cristallino di timolo per prevenire la crescita di muffe)

2,0 ml NaOH 0,1 N + 50 ml citrato a 100 ml 3,8

9,0 ml NaOH 0,1 N + 50 ml citrato a 100 ml 4,0

16,3 ml NaOH 0,1 N + 50 ml citrato a 100 ml 4,2

#### C SØRENSEN

Borace 0,05 M + HCl 0,1 N

Composizione		pH			
Borax (ml)	HCl (ml)	Sørensen 18 °C	Walbum		
			10 °C	40 °C	70 °C
8,0	2,0	8,91	8,96	8,77	8,59
8,5	1,5	9,01	9,06	8,86	8,67
9,0	1,0	9,09	9,14	8,94	8,74
9,5	0,5	9,17	9,22	9,01	8,80
10,0	0,0	9,24	9,30	9,08	8,86

Borace 0,05 M + NaOH 0,1 N

Composizione		pH			
Borax (ml)	NaOH (ml)	Sørensen 18 °C	Walbum		
			10 °C	40 °C	70 °C
10,0	0,0	9,24	9,30	9,08	8,86
9,0	1,0	9,36	9,42	9,18	8,94
8,0	2,0	9,50	9,57	9,30	9,02
7,0	3,0	9,68	9,76	9,44	9,12

## C.8. TOSSICITÀ PER I LOMBRICHI

## SAGGIO SU TERRENO ARTIFICIALE

## 1 METODO

## 1.1 Introduzione

In questo saggio di laboratorio la sostanza in esame viene aggiunta ad un terreno artificiale dove si pongono i lombrichi per quattordici giorni. Dopo tale periodo (facoltativamente dopo sette giorni) si esamina l'effetto letale della sostanza sui lombrichi. Il saggio fornisce un metodo di valutazione, a termine relativamente breve, dell'effetto sui lombrichi di sostanze chimiche assunte per via cutanea e alimentare.

## 1.2 Definizioni e unità

LC<sub>50</sub>: concentrazione di una sostanza capace di uccidere il 50% degli animali in esame entro il periodo del saggio.

## 1.3 Sostanza di riferimento

Una sostanza di riferimento viene usata periodicamente per dimostrare che la sensibilità del sistema (di saggio) non è cambiata in modo significativo.

Come sostanza di riferimento si raccomanda cloroacetammide di grado analitico.

## 1.4 Principio del saggio

Il terreno è un elemento variabile; si usa pertanto, per questo saggio, un terreno fertile artificiale definito accuratamente. Lombrichi adulti della specie *Eisenia foetida* (vedi nota in appendice) vengono tenuti in un determinato terreno artificiale, trattato con diverse concentrazioni della sostanza in esame. Quattordici giorni (facoltativamente sette giorni) dopo l'inizio della prova, si sparge il contenuto dei recipienti su un vassoio e per ciascuna concentrazione si contano i lombrichi sopravvissuti.

## 1.5 Criteri di qualità

Il saggio è programmato in modo da essere il più possibile riproducibile per quanto concerne il substrato e gli organismi in esame. Alla fine del saggio, la mortalità fra gli animali di controllo non deve superare il 10%, altrimenti la prova non è valida.

## 1.6 Descrizione del metodo

## 1.6.1 Materiali

## 1.6.1.1 Substrato per il saggio

Come substrato di base per il saggio si usa un ben determinato terreno artificiale.

## a) Substrato di base (percentuali espresse in peso secco)

- 10% di torba di stagno (con pH più vicino possibile a 5,5-6,0, priva di residui visibili di piante e finemente macinata);
- 20% di argilla caolinica preferibilmente con più del 50% di caolinite;
- circa 69% di sabbia quarzosa industriale (sabbia a grana prevalentemente fine con oltre il 50% dei granuli di dimensioni comprese fra 0,05 e 0,2 mm). Qualora la sostanza in esame non possa essere sufficientemente dispersa in acqua, per ogni recipiente (di saggio) andrebbero messi da parte 10 g di tale sabbia da mescolare successivamente con la sostanza stessa;
- circa 1% di carbonato di calcio (CaCO<sub>3</sub>) in polvere, chimicamente puro, aggiunto per portare il pH a 6,0 ± 0,5.

## b) Substrato per il saggio

Il substrato per il saggio contiene il substrato di base, la sostanza in esame e acqua deionizzata.

Il contenuto in acqua è circa dal 25 al 42% del peso secco del substrato di base.

Il contenuto in acqua del substrato si determina per essiccamento di un campione fino a peso costante, a 105 °C. Il criterio base è che il terreno artificiale deve essere addizionato con acqua fino al punto in cui non vi sia acqua stagnante. Nel mescolare si dovrebbe fare attenzione ad ottenere una distribuzione uniforme della sostanza in esame e del substrato. Il procedimento seguito per addizionare la sostanza in esame al substrato deve essere riportato.

## c) Substrato di controllo

Il substrato di controllo contiene il substrato di base e l'acqua. Se si usa un additivo, un ulteriore controllo dovrebbe contenere la stessa quantità di additivo.

**1.6.1.2. Recipienti per il saggio**

Recipienti di vetro della capacità di circa un litro (adeguatamente coperti con coperchi di plastica, piatti o con una pellicola di plastica muniti di fori di ventilazione) vengono riempiti, sia per il saggio che per il controllo, con una quantità di substrato umido equivalente a 500 g di peso secco di substrato.

**1.6.2. Condizioni della prova**

I recipienti dovrebbero essere tenuti in camere climatizzate a 20 °C ( $\pm 2$  °C) ed illuminate in continuazione. L'intensità luminosa dovrebbe essere compresa fra 400 e 800 lux.

La durata della prova è di quattordici giorni, ma è facoltativo fare una prima determinazione della mortalità a sette giorni dall'inizio del saggio.

**1.6.3. Procedimento del saggio****Concentrazioni del saggio**

Le concentrazioni della sostanza in esame sono espresse in peso della sostanza per peso secco del substrato di base (mg/kg).

**Saggio orientativo**

L'intervallo delle concentrazioni che causano una mortalità variabile fra lo 0 ed il 100 % può essere determinato con un saggio orientativo che fornisca informazioni sull'intervallo di concentrazioni da impiegare nel saggio definitivo.

Si dovrebbe esaminare la sostanza alle seguenti concentrazioni: 1 000, 100, 10, 1, 0,1 mg di sostanza/kg di substrato in esame (peso secco).

Se si deve effettuare un saggio definitivo completo, per ogni prova orientativa e per il controllo non trattato, potrebbe essere sufficiente un gruppo di dieci lombrichi per ciascuna concentrazione.

**Saggio definitivo**

I risultati del saggio orientativo vengono impiegati per scegliere almeno 5 concentrazioni in serie geometrica, che causino una mortalità variabile fra lo 0 ed il 100 % e che differiscano fra loro per un fattore costante non superiore a 1,8.

Con questa serie di concentrazioni, il saggio dovrebbe consentire una stima la più precisa possibile del valore della  $LC_{50}$  e dei suoi limiti di confidenza.

Nella prova definitiva si usano almeno quattro gruppi di saggio per concentrazione e quattro per controlli non trattati, ciascuno con dieci lombrichi. I risultati ottenuti con questi gruppi saggiati in replicato vengono espressi con il valore medio e con la deviazione standard relativa.

Quando due concentrazioni consecutive, nel rapporto 1,8, danno una mortalità pari allo 0 ed al 100 %, questi due valori sono sufficienti ad indicare l'intervallo entro il quale è compresa la  $LC_{50}$ .

**Miscela del substrato di base per il saggio e della sostanza in esame**

Se possibile, il substrato per il saggio dovrebbe essere preparato senza alcun additivo che non sia acqua. Subito prima dell'inizio del saggio, si mescola con il substrato di base, oppure vi si sparge sopra uniformemente, con uno spruzzatore da cromatografia o dispositivo simile, un'emulsione o dispersione in acqua deionizzata o in altro solvente della sostanza da esaminare.

Se insolubile in acqua, la sostanza in esame può essere disciolta nel minor volume possibile di un idoneo solvente organico (per esempio esano, acetone, cloroformio).

Per solubilizzare, disperdere o emulsionare la sostanza in esame, si possono impiegare soltanto agenti che volatilizzano rapidamente. Prima dell'uso occorre ventilare il substrato per il saggio. Si deve aggiungere una quantità di acqua pari a quella evaporata. Il controllo dovrebbe contenere la stessa quantità di tutti gli additivi.

Se la sostanza in esame non è solubile, disperdibile o emulsionabile in solventi organici, 10 g di una miscela costituita da sabbia fine quarzosa e dalla quantità di sostanza in esame necessaria per trattare 500 g di peso secco di terreno artificiale, vengono mescolate con 490 g di peso secco del substrato per il saggio.

Per ciascun gruppo di saggio, si riempie ogni recipiente di vetro con una quantità di substrato umido equivalente a 500 g di peso secco, e sulla superficie del substrato si collocano 10 lombrichi precedentemente condizionati per 24 ore in un simile substrato umido e quindi lavati rapidamente ed asciugati dell'acqua in eccesso per assorbimento su carta da filtro.

I recipienti vengono coperti con coperchi, piatti o pellicole di plastica perforati per impedire l'essiccamento del substrato e sono mantenuti nelle condizioni sperimentali per quattordici giorni.

Le valutazioni andrebbero effettuate quattordici giorni (facoltativamente sette giorni) dopo l'inizio del saggio. Si sparge il substrato su un piatto di vetro o di acciaio inossidabile. Si esaminano i lombrichi e si determina il numero di quelli sopravvissuti. I lombrichi sono considerati morti se non reagiscono ad un leggero stimolo meccanico sull'estremità anteriore.

Se l'esame è effettuato dopo sette giorni, il recipiente è riempito di nuovo con lo stesso substrato ed i lombrichi sopravvissuti vengono collocati sulla sua superficie.

1.6.4. *Organismi per il saggio*

Gli organismi per il saggio dovrebbero essere individui adulti di *Eisenia foetida* (vedi la nota dell'allegato) (di almeno due mesi con clitella) del peso umido di 300-600 mg. (Per il metodo di allevamento vedi allegato).

## 2 DATI

## 2.1 Trattamento e valutazione dei risultati

Si riportano le concentrazioni della sostanza esaminata con le rispettive percentuali di lombrichi morti.

Quando i dati sono affidabili si dovrebbero determinare il valore della  $LC_{50}$  e i limiti di confidenza ( $P = 0,05$ ) utilizzando metodi standard (Litchfield e Wilcoxon, 1949 o un metodo equivalente). Il valore della  $LC_{50}$  dovrebbe essere espresso in mg di sostanza in esame per kg di substrato per il saggio (peso secco).

Nei casi in cui la pendenza della curva di concentrazione sia troppo elevata per consentire il calcolo della  $LC_{50}$ , è sufficiente una stima grafica di tale valore.

Quando due concentrazioni consecutive, nel rapporto di 1,8, danno mortalità pari allo 0 % ed al 100 %, questi due valori sono sufficienti per indicare l'intervallo entro il quale è situata la  $LC_{50}$ .

## 3 RELAZIONE

## 3.1 Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- la dichiarazione che la prova è stata eseguita conformemente ai criteri di qualità sopra riportati,
- il saggio effettuato (saggio orientativo e/o saggio definitivo),
- l'esatta descrizione delle condizioni in cui è stato effettuato il saggio o la dichiarazione che il saggio è stato condotto conformemente al metodo, qualsiasi modifica del procedimento deve essere riportata,
- l'esatta descrizione del procedimento seguito per mescolare la sostanza in esame con il substrato di base,
- informazioni sugli organismi impiegati per il saggio (specie, età, media ed intervallo di variazione del peso, condizioni di mantenimento e di allevamento fornite),
- il metodo seguito per la determinazione della  $LC_{50}$ ,
- i risultati del saggio comprensivi di tutti i dati utilizzati,
- la descrizione dei sintomi e dei cambiamenti osservati nel comportamento degli organismi per il saggio,
- la mortalità nei controlli,
- la  $LC_{50}$  oppure la più elevata concentrazione saggiata che non provoca mortalità e la più bassa concentrazione saggiata che provoca il 100 % di mortalità, a quattordici giorni (facoltativamente a sette giorni) dopo l'inizio della prova,
- il grafico della curva concentrazione/risposta,
- i risultati ottenuti con la sostanza di riferimento, specificando se siano stati ottenuti in associazione con il saggio in questione o da precedenti saggi di controllo di qualità.

## 4 BIBLIOGRAFIA

- (1) OCSE, Parigi 1981, *Linea Guida 207*, decisione C(81) 30 def. del Consiglio
- (2) Edwards, C. A. e Lofty, 1977, *Biology of Earthworms*, Londra: Chapman and Hall, 331 pagine.
- (3) Bouche, M. B., 1972, *Lombriciens de France. Écologie et Systématique*, Institut National de la Recherche Agronomique, 671 pagine.
- (4) Litchfield, J. T. e Wilcoxon, F., A simplified method of evaluating dose-effect experiments. *J. Pharm. Exp. Therap.*, vol. 96, pagine 99.
- (5) Commissione delle Comunità europee 1983, *Development of a standardized laboratory method for assessing the toxicity of chemical substances to earthworms*. Report EUR 8714 EN.
- (6) Umweltbundesamt/Biologische Bundesanstalt für Land- und Forstwirtschaft, Berlino 1984, *Verfahrensvorschlag »Toxizitätstest am Regenwurm Eisenia foetida in künstlichem Boden«*, in: Rudolph/Boje: *Ökotoxikologie*, ecomed, Landsberg, 1986.

## Appendice

## Allevamento e mantenimento dei lombrichi prima del saggio

Per l'allevamento si pongono gli animali, da 30 a 50 lombrichi adulti, in una scatola di allevamento con substrato fresco e si rimuovono dopo 14 giorni. Questi animali possono essere utilizzati per ulteriori gruppi di allevamento. I lombrichi nati dalle zooteche vengono impiegati per i saggi quando sono maturi (nelle condizioni prescritte, dopo 2-3 mesi).

## Condizioni di allevamento e mantenimento

Camera climatizzata: temperatura di 20 °C ( $\pm 2$  °C), di preferenza illuminata ininterrottamente (intensità da 400 a 800 lux).

Scatole di allevamento: idonei contenitori poco profondi del volume da 10 a 20 litri.

Substrato: *Eisenia foetida* può essere allevata in diversi escrementi animali. Come terreno per l'allevamento si raccomanda l'uso di una miscela costituita dal 50 % in volume di torba e dal 50 % di sterco di mucca o di cavallo. Il terreno dovrebbe avere un pH di circa 6-7 (corretto con carbonato di calcio) ed una bassa conduttività ionica (meno di 6 mmhos o 0,5 % di concentrazione salina).

Il substrato dovrebbe essere umido ma non troppo bagnato.

Oltre al metodo sopra esposto si possono impiegare con buoni risultati anche altri procedimenti.

*Nota:* Esistono due varietà di *Eisenia foetida* che alcuni tassonomi hanno separato in specie (Bouche, 1972). Queste sono morfologicamente simili ma una, la *Eisenia foetida foetida*, ha delle tipiche strisce o fasce trasversali sui segmenti mentre l'altra, la *Eisenia foetida andrei*, ne è priva ed ha un colore rossiccio screziato. Ove possibile si dovrebbe usare la *Eisenia foetida andrei*. Se è disponibile la metodologia necessaria, si possono usare altre specie.

## C.9. BIODEGRADAZIONE

## ZAHN-WELLENS TEST

## 1. METODO

## 1.1. Introduzione

Il metodo è destinato a valutare la potenziale biodegradabilità ultima <sup>(1)</sup> delle sostanze organiche idrosolubili e non volatili esposte a concentrazioni relativamente elevate di microorganismi nel corso di un saggio statico.

Può verificarsi un assorbimento chimico-fisico della sostanza in esame sui solidi sospesi, di ciò si dovrà tener conto nell'interpretare i risultati (vedi punto 3.2).

Le sostanze da studiare vengono impiegate a concentrazioni corrispondenti a valori del DOC compresi fra 50 e 400 mg/l o a valori del COD compresi fra 100 e 1 000 mg/l (DOC = carbonio organico disciolto; COD = domanda chimica di ossigeno). Dette concentrazioni, relativamente elevate, hanno il vantaggio dell'attendibilità analitica. I composti dotati di proprietà tossiche possono ritardare o inibire il processo di degradazione.

In questo metodo, la misura della concentrazione del carbonio organico disciolto o la richiesta chimica di ossigeno vengono impiegate per valutare la biodegradazione ultima della sostanza in esame.

L'impiego simultaneo di un metodo di analisi specifico può permettere di valutare la biodegradazione primaria della sostanza (modifica della struttura chimica della sostanza in esame).

Il metodo può essere applicato soltanto all'esame di quelle sostanze organiche le quali, alle concentrazioni impiegate per la prova:

- sono solubili in acqua nelle condizioni sperimentali;
- hanno una tensione di vapore trascurabile nelle condizioni sperimentali;
- non esercitano effetti inibitori sui batteri;
- sono assorbite soltanto in misura limitata nel sistema sperimentale;
- non vanno perdute per effetto della formazione di schiume nella soluzione in esame.

La disponibilità di dati sulle proporzioni relative dei principali componenti del materiale da esaminare sarà utile per interpretare i risultati, particolarmente nei casi in cui i risultati sono bassi o trascurabili.

Per poter interpretare i risultati più bassi e per poter scegliere le opportune concentrazioni sperimentali sarà altresì utile disporre di dati sulla tossicità della sostanza nei confronti dei microorganismi.

## 1.2. Definizioni ed unità

Il livello di degradazione raggiunto alla fine dell'esperimento, denominato «biodegradabilità nel Zahn-Wellens Test», è dato dall'espressione:

$$D_T (\%) = \left[ 1 - \frac{(C_T - C_B)}{(C_A - C_{BA})} \right] \times 100$$

$D_T$  = biodegradazione (%) al tempo T

$C_A$  = valori del DOC (o del COD) della miscela in esame, espressi in mg/l e misurati tre ore dopo l'inizio della prova (DOC = carbonio organico disciolto, COD = domanda chimica di ossigeno)

$C_T$  = valori del DOC o del COD nella miscela in esame al momento del prelievo (mg/l)

$C_B$  = valori del DOC o del COD relativi al «bianco» al momento del prelievo (mg/l)

$C_{BA}$  = valori del DOC o del COD del «bianco», misurati tre ore dopo l'inizio della prova (mg/l)

L'entità della degradazione dev'essere arrotondata all'unità percentuale.

La degradazione percentuale si esprime come eliminazione percentuale del DOC (o del COD) della sostanza sperimentata.

La differenza tra il valore misurato dopo tre ore e il valore calcolato, o preferibilmente misurato inizialmente, può fornire informazioni utili in merito all'eliminazione della sostanza (vedi punto 3.2: «Interpretazione dei risultati»).

<sup>(1)</sup> I termini «ultima» e «primaria», riferiti alla biodegradazione, sono traduzioni dei termini inglesi «ultimate» e «primary», rispettivamente.



**1.3. Sostanze di riferimento**

In taluni casi, quando vengono studiate sostanze nuove, può essere utile l'impiego di sostanze di riferimento. Tuttavia, non possono ancora essere raccomandate specifiche sostanze di riferimento.

**1.4. Principio del metodo**

In un recipiente di vetro da 1 a 4 litri, provvisto di agitatore e aereatore, vengono introdotti contemporaneamente il fango attivo, le sostanze nutritive minerali e il materiale da esaminare, quale unica fonte di carbonio, in soluzione acquosa. La miscela viene agitata ed aereata alla temperatura di 20-25 °C, sotto illuminazione diffusa o in camera oscura, per la durata massima di 28 giorni. Il processo di degradazione viene seguito mediante determinazione dei valori del COD o del DOC nella soluzione filtrata, eseguita giornalmente o comunque ad intervalli appropriati e regolari. Il rapporto fra il DOC (o il COD) eliminato dopo ciascun intervallo ed il valore a tre ore dall'inizio viene espresso come biodegradazione percentuale e serve per misurare l'entità della degradazione in quel momento. Diagrammando tale valore in funzione del tempo si costruisce la curva di biodegradazione. Impiegando un metodo analitico specifico è possibile misurare le variazioni di concentrazione della sostanza in esame dovute alla biodegradazione (biodegradabilità primaria).

**1.5. Criteri di qualità**

Prove d'intercalibrazione tra laboratori hanno dimostrato che la riproducibilità di questo metodo è soddisfacente.

La sensibilità del metodo è determinata principalmente dalla variabilità del «bianco» e, in misura minore, dalla precisione con cui è possibile determinare il carbonio organico disciolto e la quantità del composto da esaminare contenuto nel mezzo.

**1.6. Descrizione del metodo****1.6.1. Preparazioni****1.6.1.1. Reattivi**

- Acqua per il saggio: acqua potabile a contenuto di carbonio organico inferiore a 5 mg/l. La concentrazione globale degli ioni calcio e magnesio non deve superare 2,7 mmol/l; in caso contrario sarà necessaria un'opportuna diluizione con acqua deionizzata o distillata
- Acido solforico, p.a., 50 g/l
- Soluzione di idrossido di sodio, p.a., 40 g/l
- Soluzione nutritiva minerale: sciogliere in 1 litro d'acqua deionizzata:
  - cloruroammonico,  $\text{NH}_4\text{Cl}$ , p.a. 38,5 g
  - ortofosfato monosodico diidrato  $\text{NaH}_2\text{PO}_4 \cdot 2\text{H}_2\text{O}$ , p.a. 33,4 g
  - ortofosfato monopotassico,  $\text{KH}_2\text{PO}_4$ , p.a. 8,5 g
  - ortofosfato dipotassico,  $\text{K}_2\text{HPO}_4$ , p.a. 21,75 g

La miscela serve contemporaneamente da sostanza nutritiva e da tampone.

**1.6.1.2. Apparecchiatura**

Recipienti cilindrici di vetro, del volume da 1 a 4 litri

Dispositivo di agitazione. L'agitatore vero e proprio, di vetro o metallo, dev'essere sostenuto da un albero adatto e deve girare a 5-10 cm circa dal fondo del recipiente. Si può anche impiegare un agitatore magnetico, con barretta da 7 a 10 cm di lunghezza

Tubo di vetro, del diametro interno di 2-4 mm, per l'introduzione dell'aria. L'apertura del tubo deve trovarsi a 1 cm circa sopra il fondo del recipiente

Centrifuga (3 550 giri circa)

pH-metro

Misuratore dell'ossigeno disciolto

Filtri di carta

Apparecchiatura per filtrazione su membrana

Filtri a membrana, porosità 0,45  $\mu\text{m}$ . I filtri a membrana sono adatti solo a condizione che non cedano carbonio organico e non assorbano la sostanza durante la filtrazione

Apparecchiatura analitica per la determinazione del contenuto in carbonio organico e della domanda chimica di ossigeno

## 1.6.1.3 Preparazione dell'inoculo

Lavare il fango attivo proveniente da un impianto di trattamento biologico centrifugando o lasciando sedimentare ripetutamente con l'acqua per il saggio (vedi sopra).

Il fango attivo deve trovarsi in idonee condizioni. Esso può essere prelevato da un impianto di trattamento di acque di scarico in buone condizioni di funzionamento. Per ottenere il maggior numero possibile di specie o ceppi differenti di batteri è preferibile mescolare gli inoculi provenienti da varie fonti (per esempio: vari impianti di trattamento, estratti di suoli, acque di fiume, ecc.). La miscela deve essere trattata come descritto sopra.

Per controllare l'attività del fango attivo vedi oltre il paragrafo «Controllo funzionale».

## 1.6.1.4 Preparazione delle soluzioni da esaminare

Nel recipiente per il saggio, introdurre 500 ml dell'acqua per il saggio, insieme alla soluzione nutritiva minerale in quantità pari a 2,5 ml/l e al fango attivo in quantità corrispondente a 0,2-1,0 g/l di materiale secco nella miscela finale. Aggiungere la soluzione madre della sostanza da esaminare in quantità tale da ottenere un DOC da 50 a 400 mg/l nella miscela finale. I corrispondenti valori del COD saranno da 100 a 1.000 mg/l. Portare con l'acqua di cui sopra al volume totale da 1 a 4 litri. Il volume totale da scegliere dipende dal numero dei campioni da prelevare per le determinazioni del DOC o del COD, nonché dai volumi necessari per il procedimento analitico.

Normalmente, un volume di 2 litri può essere considerato soddisfacente.

Per ciascuna serie di saggi va preparato almeno un recipiente di controllo (bianco): esso deve contenere soltanto il fango attivo e la soluzione nutritiva minerale portata allo stesso volume totale dei recipienti per il saggio.

## 1.6.2. Esecuzione del saggio

Si agita il contenuto dei recipienti per il saggio con agitatori magnetici od a spirale, sotto illuminazione diffusa o in camera oscura e alla temperatura di 20-25 °C. L'aerazione dev'essere ottenuta insufflando aria compressa purificata facendola passare attraverso un tampone di cotone e, se necessario, una bottiglia di lavaggio. Si farà in modo che il fango non si depositi e che la concentrazione dell'ossigeno non scenda al di sotto di 2 mg/l.

Il valore del pH deve essere controllato ad intervalli regolari (ad esempio quotidianamente) e regolato se necessario sul valore di 7-8.

Le perdite dovute all'evaporazione andranno compensate immediatamente prima di ogni prelievo aggiungendo acqua deionizzata o distillata nelle quantità richieste. Sarà particolarmente utile segnare il livello del liquido sul recipiente prima di avviare la prova. Dopo ogni campionamento (in assenza di aerazione e agitazione) si apporranno nuovi contrassegni. I primi campioni dovranno sempre essere prelevati tre ore dopo l'inizio della prova per verificare se ha luogo un assorbimento del materiale in esame da parte del fango attivo.

L'eliminazione della sostanza in esame dev'essere seguita mediante determinazioni del DOC e del COD, effettuate quotidianamente o ad intervalli comunque regolari. I campioni prelevati dal recipiente di saggio e dal «bianco» devono essere filtrati su carta accuratamente lavata. I primi 5 ml del filtrato della soluzione devono essere scartati. I fanghi difficilmente filtrabili possono essere eliminati in precedenza centrifugando per 10 minuti. Le determinazioni del COD e del DOC devono essere effettuate almeno in doppio. L'esperimento deve proseguire per la durata di 28 giorni.

*Nota:* I campioni che rimangono torbidi devono essere filtrati attraverso filtri a membrana. Questi ultimi non devono cedere od assorbire materiale organico.

## Controllo funzionale del fango attivo

In parallelo a ciascuna serie di esperimenti, deve essere saggiata una sostanza nota, destinata a controllare la capacità funzionale del fango attivo. A questo scopo si è mostrato utile il glicoldietilenico.

## Adattamento

Qualora si eseguano analisi ad intervalli relativamente brevi (ad esempio quotidianamente), l'adattamento può essere chiaramente controllato dalla curva di degradazione (vedi figura 2). Il saggio, pertanto, non deve essere avviato immediatamente prima dell'interruzione di fine settimana.

Qualora l'adattamento si verifichi verso la fine del periodo di saggio, il saggio stesso può essere prolungato fino al momento in cui la degradazione è terminata.

*Nota:* Se è necessaria una conoscenza più vasta del comportamento dei fanghi adattati, lo stesso fango attivo deve essere posto nuovamente a contatto con lo stesso materiale di prova, procedendo come segue:

arrestare l'agitatore e l'aeratore e lasciar sedimentare il fango attivo; eliminare il surnatante, riempire fino a 2 litri con acqua per il saggio, agitare per 15 minuti e lasciare nuovamente sedimentare; eliminare nuovamente il surnatante e impiegare il fango rimanente per ripetere il saggio con gli stessi materiali conformemente a quanto indicato ai precedenti punti 1.6.1.4 e 1.6.2. Il fango attivo può essere isolato anche per centrifugazione anziché per sedimentazione.

Il fango adattato può essere mescolato con fango fresco, fino ad una quantità totale di 0,2-1 g di sostanza secca per litro.

**Mezzi analitici**

Normalmente i campioni vengono filtrati attraverso un filtro di carta accuratamente lavato (per il lavaggio, impiegare acqua deionizzata)

I campioni che restano torbidi devono essere filtrati con filtri a membrana (0,45 µm)

La concentrazione del DOC dev'essere determinata in doppio sul campione filtrato (scartando i primi 5 ml) con apparecchiatura per la determinazione del TOC. Se il filtrato non può essere analizzato lo stesso giorno, esso va conservato in frigorifero fino al giorno successivo. Una conservazione più lunga non è da raccomandarsi.

La concentrazione del COD va determinata sul campione filtrato con il procedimento analitico descritto nel riferimento (bibliografico 2).

**2 DATI E VALUTAZIONE**

Le concentrazioni del DOC e del COD devono essere determinate almeno in doppio in ogni campione secondo quanto indicato al punto 1.6.2. La degradazione al momento T viene calcolata mediante la formula riportata (insieme alle definizioni) al punto 1.2.

La misura della degradazione dev'essere arrotondata all'unità percentuale. L'entità della degradazione raggiunta, alla fine dell'esperimento, viene definita come «biodegradabilità secondo Zahn-Wellens».

*Nota.* Qualora la degradazione completa venga raggiunta prima che il tempo necessario per il saggio sia terminato e questo risultato sia confermato da una seconda analisi effettuata il giorno successivo, il saggio può essere considerato concluso.

**3 RELAZIONE****3.1 Relazione sul saggio**

Nella relazione sul saggio devono figurare, se possibile:

- la concentrazione iniziale della sostanza,
- tutte le altre informazioni e risultati sperimentali concernenti la sostanza esaminata, la sostanza di riferimento (se impiegata) e il «bianco»,
- la concentrazione dopo tre ore,
- la curva di biodegradazione con la relativa descrizione,
- la data e la località di prelievo dei microorganismi usati per l'esperimento, lo stato di adattamento, la concentrazione impiegata, ecc.
- le giustificazioni scientifiche per qualsiasi modifica apportata al procedimento sperimentale.

**3.2 Interpretazione dei risultati**

La rimozione del DOC (o del COD) che si verifica gradualmente entro giorni o settimane indica che la sostanza in esame sta subendo biodegradazione.

In taluni casi può comunque entrare in gioco l'assorbimento chimico-fisico, denotato dal fatto che lo scompositivo si verifica in modo completo o parziale fin dall'inizio, entro le prime tre ore e che la differenza di risposta tra i surnatanti del controllo e del saggio rimane a livelli inaspettatamente bassi.

Se si vuole distinguere fra la biodegradazione (o biodegradazione parziale) e l'assorbimento, sono necessari ulteriori saggi.

Ciò può essere fatto in numerosi modi, ma il metodo più convincente consiste nell'impiegare il surnatante quale inoculo in una prova del dossier di base (preferibilmente un saggio respirometrico).

Le sostanze che, nel corso di questo saggio, mostrano un'elevata eliminazione del DOC (o del COD) non dovuta ad assorbimento devono essere considerate potenzialmente biodegradabili. Una rimozione parziale, non dovuta ad assorbimento, indica che il prodotto chimico è soggetto almeno in parte alla biodegradazione.

Una rimozione bassa o nulla del DOC (o del COD) può essere dovuta all'inibizione dei microorganismi da parte delle sostanze in esame: ciò può anche essere rivelato dalla lisi e dalla perdita di fango, accompagnata dalla formazione di surnatanti torbidi. In questo caso il saggio deve essere ripetuto impiegando la sostanza in esame a concentrazione minore.

L'impiego di un metodo di analisi specifico per la sostanza in esame o della sostanza marcata con  $^{14}\text{C}$  può consentire una maggiore sensibilità. Nel caso di composto marcato al  $^{14}\text{C}$ , il recupero di  $^{14}\text{CO}_2$  confermerà che la biodegradazione è avvenuta.

Quando i risultati sono espressi in termini di biodegradazione primaria, dovrà essere fornita, possibilmente, una spiegazione della modifica di struttura chimica che conduce alla diminuzione di risposta della sostanza in esame.

Si deve dimostrare la validità del metodo analitico e fornire la risposta ottenuta sul «bianco».

#### BIBLIOGRAFIA

- 1) OCSE - Parigi 1981, *Linea Guida 302 B*, decisione C(81) 30 del Consiglio.
- 2) C. 6. Degradazione. Domanda chimica di ossigeno.

## Appendice

## ESEMPIO DI VALUTAZIONI

Composto organico:	acido 4-etossibenzoico
Concentrazione teorica della sostanza:	600 mg/l
DOC teorico:	390 mg/l
Inoculo:	impianto di trattamento delle acque fognarie di . .
Concentrazione	1 g di sostanza secca
Stato di adattamento	non adattato
Analisi:	determinazione DOC
Quantità del campione	3 ml
Sostanza di controllo	glicoldietilenico
Tossicità del composto	nessun effetto tossico al di sotto di 1 000 mg/l (metodo utilizzato: saggio in tubi di fermentazione)

Tempi di analisi	Sostanza di riferimento				Sostanza in esame		
	Bianco DOC <sup>(1)</sup> mg/l	DOC <sup>(1)</sup> mg/l	DOC netto mg/l	Degradazione %	DOC <sup>(1)</sup> mg/l	DOC netto mg/l	Degradazione %
0	—	—	300,0	—	—	390,0	—
3 ore	4,0	298,0	294,0	2	371,6	367,6	6
1 giorno	6,1	288,3	282,2	6	373,3	367,2	6
2 giorni	5,0	281,2	276,2	8	360,0	355,0	9
5 giorni	6,3	270,5	264,2	12	193,8	187,5	52
6 giorni	7,4	253,3	245,9	18	143,9	136,5	65
7 giorni	11,3	212,5	201,2	33	104,5	93,2	76
8 giorni	7,8	142,5	134,7	55	58,9	51,1	87
9 giorni	7,0	35,0	28,0	91	18,1	11,1	97
10 giorni	18,0	37,0	19,0	94	20,0	2,0	99

<sup>(1)</sup> Valore medio di tre determinazioni.

Figura 1

Esempio di curve di biodegradazione

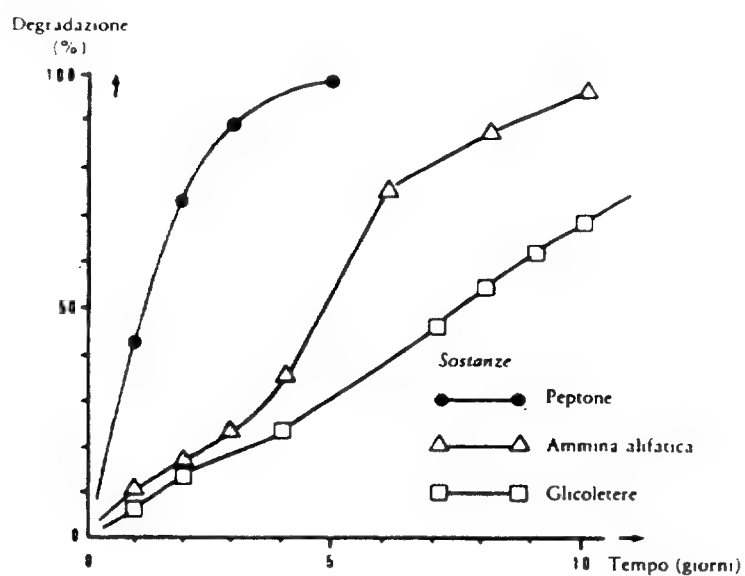
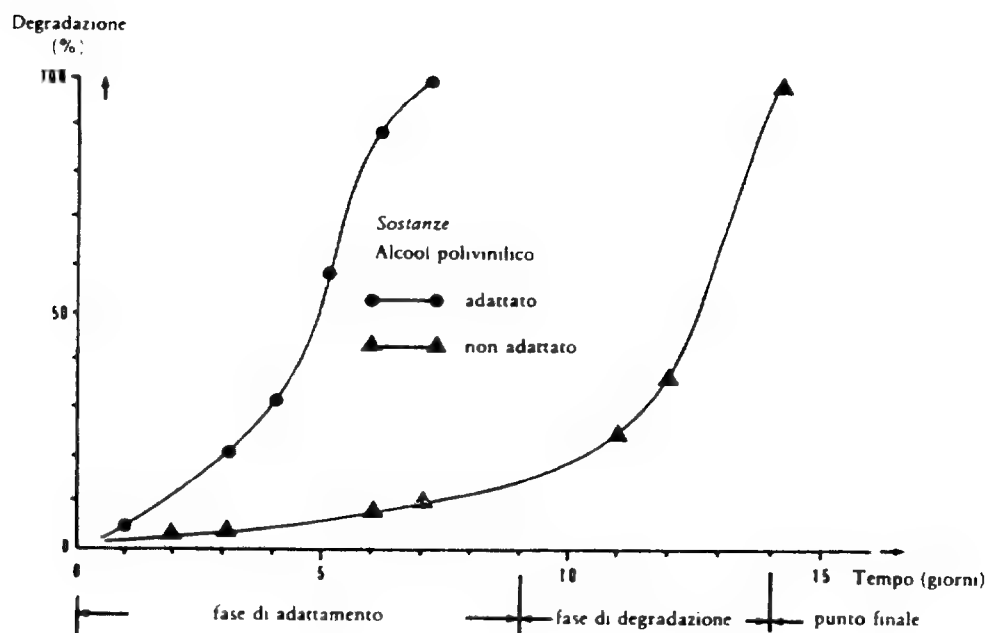


Figura 2

Esempio di adattamento dei fanghi



## C.10. BIODEGRADAZIONE

## SAGGIO DI SIMULAZIONE CON FANGHI ATTIVI

## 1 METODO

## 1.1 Introduzione

## 1.1.1 Osservazioni generali

Il metodo può essere applicato esclusivamente a quelle sostanze organiche che, alle concentrazioni impiegate per il saggio,

- sono solubili in acqua nella misura necessaria per la preparazione delle soluzioni per il saggio,
- hanno, nelle condizioni del saggio, una tensione di vapore trascurabile,
- non esercitano effetti inibitori sui batteri

La disponibilità di dati sulle proporzioni relative dei principali componenti del prodotto da esaminare sarà utile per interpretare i risultati ottenuti, in particolare in quei casi in cui i valori trovati sono bassi o non significativi.

È auspicabile poter disporre di dati sulla tossicità della sostanza nei confronti dei microorganismi per l'interpretazione di eventuali bassi valori e per la scelta delle concentrazioni sperimentali appropriate.

1.1.2 Determinazione della biodegradabilità ultima (analisi DOC/COD) <sup>(1)</sup>

Scopo del metodo è la determinazione della biodegradabilità ultima mediante misura della rimozione della sostanza e di qualsiasi metabolita in un impianto modello a fanghi attivi, ad una concentrazione > 12 mg DOC/l (o a circa 40 mg COD/l). Sembrano ottimali 20 mg DOC/l (DOC = carbonio organico disciolto/litro, COD = domanda chimica di ossigeno).

Si deve determinare il contenuto di carbonio organico (o la domanda chimica di ossigeno) del materiale in esame.

1.1.3 Determinazione della biodegradabilità primaria (analisi specifica) <sup>(1)</sup>

Scopo del metodo è la determinazione della biodegradabilità primaria di una sostanza in un impianto pilota a fanghi attivi, a una concentrazione di circa 20 mg/l, con l'impiego di un metodo analitico specifico (se il metodo analitico e la tossicità della sostanza lo consentono, si può usare una concentrazione più bassa o più elevata). Questo consente la valutazione della biodegradabilità primaria della sostanza (modifica della struttura chimica della sostanza in esame).

Il metodo non è destinato alla determinazione della mineralizzazione della sostanza esaminata.

Per la determinazione della sostanza esaminata occorre disporre di un metodo analitico adeguato.

## 1.2 Definizioni e unità

## 1.2.1 Analisi DOC/COD

Il grado di rimozione della sostanza è dato da

$$DR = \frac{T - (E - E_0)}{T} \times 100\% \quad [1a)]$$

dove

DR = grado di rimozione percentuale del DOC (o del COD) relativo alla sostanza in esame entro il tempo medio di ritenzione fissato

T = concentrazione della sostanza in esame nell'affluente in mg DOC/litro (o mg COD/litro)

E = concentrazione del DOC (o del COD) nell'effluente dell'unità per il saggio in mg DOC/litro (o mg COD/litro)

E<sub>0</sub> = concentrazione del DOC (o del COD) nell'effluente dell'unità per il «bianco» in mg DOC/litro (o mg COD/litro)

La degradazione si definisce come la rimozione percentuale di DOC (o di COD), nel tempo di ritenzione fissato, relativo alla sostanza in esame.

<sup>(1)</sup> I termini «ultima» e «primaria», riferiti alla biodegradazione, sono traduzioni dei termini inglesi «ultimate» e «primary», rispettivamente.

1.2.2. *Analisi specifica*

L'eliminazione percentuale della sostanza esaminata dalla fase acquosa ( $R_w$ ), nel tempo medio di ritenzione fissato, si ricava da

$$R_w = \frac{C_i - C_o}{C_i} \times 100\% \quad [1 \text{ h}]$$

dove

$C_i$  = concentrazione della sostanza nell'affluente dell'unità per il saggio (mg di sostanza/litro, determinati con l'analisi specifica)

$C_o$  = concentrazione della sostanza nell'effluente dell'unità per il saggio (mg di sostanza/litro, determinati con l'analisi specifica)

1.3. *Sostanze di riferimento*

In alcuni casi, quando si esamina una nuova sostanza, possono essere utili delle sostanze di riferimento, ciò nonostante, non è attualmente possibile indicare sostanze di riferimento specifiche

1.4. *Principio del metodo*

Per la determinazione della biodegradabilità ultima si fanno funzionare in parallelo due unità pilota a fanghi attivi (saggio di conferma dell'OCSE o unità a vaso poroso). La sostanza in esame viene addizionata all'affluente (liquame sintetico o domestico) di una delle unità, mentre l'altra riceve soltanto liquame. Per la determinazione della biodegradazione primaria con l'analisi specifica dell'affluente e dell'effluente si impiega soltanto una unità.

Si misurano le concentrazioni di DOC (o di COD) negli effluenti, oppure si determinano con l'analisi specifica le concentrazioni della sostanza.

Il DOC dovuto alla sostanza in esame non viene misurato ma soltanto specificato. Quando si effettuano le misurazioni del DOC (e del COD), si assume che la differenza fra le concentrazioni medie degli effluenti del saggio e del controllo sia dovuta alla sostanza in esame non degradata.

Quando vengono effettuate analisi specifiche è possibile misurare la variazione della concentrazione della sostanza in esame (biodegradazione primaria).

Si possono fare funzionare le unità seguendo il sistema delle unità accoppiate, con il procedimento della transinoculazione.

1.5. *Criteri di qualità*

La concentrazione di partenza della sostanza dipende dal tipo di analisi effettuata e dalle sue limitazioni.

1.6. *Descrizione del metodo*1.6.1. *Preparazione*1.6.1.1. *Apparecchiatura*

A parte il caso delle analisi specifiche, è necessaria una coppia di unità dello stesso tipo. Possono essere impiegati due sistemi:

## Saggio di conferma OCSE

L'apparecchiatura (allegato I) è costituita da un serbatoio (A) per il liquame sintetico, da una pompa di dosaggio (B), da una vasca di aerazione (C), da un sedimentatore (D), una pompa ad aria compressa (E) per riciclare i fanghi attivi e una vasca (F) per raccogliere l'effluente trattato.

I serbatoi (A) e (F) devono essere di vetro o di idoneo materiale plastico, e della capacità di almeno 24 litri. La pompa (B) alimenta con un flusso costante di liquame sintetico la vasca di aerazione; si può impiegare qualsiasi sistema idoneo purché sia in grado di assicurare il flusso e la concentrazione di alimentazione.



Durante il normale funzionamento, l'altezza del sedimentatore (D) è fissata in modo che il volume della soluzione chiarificata contenuto nella vasca di aerazione sia di tre litri. Un diffusore di materiale sinterizzato (G) è sospeso nel recipiente (C) al vertice del cono. La quantità di aria insufflata attraverso l'aeratore può essere determinata con un flussometro. La pompa ad aria compressa (E) è regolata in modo che il fango attivo sia riciclato con continuità e regolarità dal sedimentatore al recipiente di aerazione (C).

«Vaso poroso»

Il vaso poroso è realizzato con fogli di polietilene poroso (spessore 2 mm, dimensione massima dei pori 95 µm), a forma cilindrica del diametro di 14 cm e con una base conica a 45° (figure 1 e 2 dell'allegato II). Il vaso poroso è contenuto in un recipiente impermeabile di plastica idonea del diametro di 15 cm, con una luce sulla parte cilindrica ad una altezza di 17,2 cm che determina il volume (tre litri) del vaso. Nella parte superiore del recipiente interno si trova un anello rigido di sostegno in plastica idonea in modo da avere un'intercapedine di efflusso di 0,5 cm fra il recipiente interno e quello esterno.

I vasi porosi possono essere montati sul fondo di un bagnomaria controllato termostaticamente. Alla base del recipiente interno, dove sono collocati idonei diffusori, si ha un'alimentazione di aria.

I recipienti (A) ed (E) debbono essere di vetro o di plastica idonea ed avere una capacità di almeno 24 litri. La pompa (B) alimenta, con un flusso costante di liquame sintetico, il recipiente di aerazione; si può impiegare qualsiasi sistema atto ad assicurare il flusso e la concentrazione di alimentazione.

Sono necessari dei vasi porosi interni di riserva per sostituire quelli che possono ostruirsi durante l'uso, i vasi ostruiti vengono puliti mediante immersione per 24 ore in una soluzione di ipoclorito seguita da un lavaggio accurato con acqua di rubinetto.

#### 1.6.1.2. Filtrazione

Apparecchiatura per filtrazione su membrana e membrane filtranti con pori da 0,45 µm. Le membrane filtranti sono adatte soltanto se non cedono carbonio organico e non assorbono la sostanza durante la filtrazione.

#### 1.6.1.3. Liquame

Si possono impiegare sia un'idonea alimentazione sintetica, sia liquame domestico.

Esempio di alimentazione sintetica

Sciogliere in un litro di acqua di rubinetto i seguenti composti:

Peptone:	160 mg
Estratto di carne:	110 mg
Urea:	30 mg
NaCl:	7 mg
CaCl <sub>2</sub> · 2H <sub>2</sub> O:	4 mg
MgSO <sub>4</sub> · 7H <sub>2</sub> O:	2 mg
K <sub>2</sub> HPO <sub>4</sub> :	28 mg

Liquame domestico

Dovrebbe essere raccolto fresco ogni giorno dallo stramazzo della vasca di sedimentazione primaria di un impianto che tratta in prevalenza liquami domestici.

#### 1.6.1.4. Soluzione madre della sostanza in esame

Si dovrebbe preparare una soluzione della sostanza in esame, ad esempio all'1 %, da aggiungere nell'unità di prova. È necessario fissare la concentrazione della sostanza in modo tale che si conosca il volume necessario per ottenere la concentrazione di prova da aggiungere al liquame o direttamente nell'unità per mezzo di una seconda pompa.

#### 1.6.1.5. Inoculo

*Osservazione:* Usando liquami domestici, sarebbe superfluo l'impiego di un inoculo a bassa concentrazione batterica, ma si possono usare fanghi attivi.

Possono essere usati svariati inoculi, se ne danno tre esempi adatti.

##### a) Inoculo da effluente secondario

Si dovrebbe ricavare l'inoculo da un effluente secondario di buona qualità raccolto da un impianto che tratta in prevalenza liquami domestici. Nel periodo compreso fra il campionamento e l'impiego, l'effluente deve essere tenuto in condizioni aerobiche. Per preparare l'inoculo, si filtra il campione su filtro a elevata porosità, scartando i primi 200 ml. Il filtrato è mantenuto in condizioni aerobiche sino al momento dell'uso. L'inoculo deve essere impiegato il giorno stesso del prelievo. Per l'inoculazione occorre impiegarne almeno 3 ml.

## b) Inoculo composito

Inoculo da un effluente secondario:

vedi descrizione precedente.

Inoculo da terreno:

si sospendono 100 grammi di terreno (fertile, non sterile) in 1 000 ml di acqua potabile esente da cloro (terreni con un contenuto eccessivo di argilla, sabbia o humus non sono adatti). Dopo agitazione, si lascia riposare la sospensione per 30 minuti. Si filtra il surnatante su carta a elevata porosità, scartando i primi 200 ml. Si sottopone immediatamente il filtrato ad aerazione prolungandola fino al momento dell'uso. L'inoculo deve essere utilizzato il giorno stesso del prelievo.

Inoculo da acque superficiali:

un altro inoculo parziale può ottenersi da acque superficiali semiputride (mesosaprobiche). Si filtra il campione su carta ad elevata porosità, scartando i primi 200 ml. Si mantiene in condizioni aerobiche fino al momento dell'impiego. L'inoculo va utilizzato il giorno stesso del prelievo.

Si mettono insieme i volumi dei tre campioni parziali di inoculo, si mescolano bene e si preleva dal miscuglio ottenuto l'inoculo finale. Per l'inoculazione occorre che esso sia di almeno 3 ml.

## c) Inoculo da un fango attivo

Si può usare come inoculo un volume (non più di tre litri) di fango attivo (contenuto in solidi sospesi fino a 2,5 g/l) prelevato dalla vasca di aerazione di un impianto che tratta prevalentemente liquami domestici.

## 1.6.2. Procedimento

Il saggio viene eseguito a temperatura ambiente; questa dovrebbe essere mantenuta fra 18 e 25 °C.

Se è il caso, il saggio può essere condotto a una temperatura più bassa (fino a 10 °C): se la sostanza viene degradata, allora non occorrono, di solito, altre operazioni. In caso contrario il saggio deve essere condotto ad una temperatura costante compresa fra 18 e 25 °C.

## 1.6.2.1. Periodo di avviamento: formazione/stabilizzazione del fango delle unità

Il periodo di formazione/stabilizzazione del fango è il periodo necessario perché la concentrazione dei solidi sospesi del fango attivo ed il funzionamento delle unità pervengano allo stato di regime nelle condizioni operative volute.

Il periodo di avviamento è quello che va dall'istante in cui la sostanza in esame è aggiunta per la prima volta fino all'istante in cui la sua rimozione si stabilizza (valore relativamente costante). Questo periodo non deve superare le sei settimane.

Il periodo di valutazione è di tre settimane a partire dall'istante in cui la rimozione della sostanza in esame raggiunge un valore relativamente costante che è di solito elevato. Per tutte le sostanze che, nelle prime sei settimane, mostrano una degradazione limitata o nulla, si prendono, come periodo di valutazione, le successive tre settimane.

All'inizio si riempie la (le) unità necessaria(e) per una prova con l'inoculo mescolato con l'affluente.

Si mettono allora in funzione l'aeratore [nel caso della unità del saggio di conferma OCSE la pompa ad aria compressa (E)] ed il meccanismo di dosaggio (B).

L'affluente, privo della sostanza da esaminare, deve attraversare il recipiente di aerazione (C) alla velocità di 1 l/h oppure 0,5 l/h; ciò comporta un tempo medio di ritenzione di tre o di sei ore.

La velocità di aerazione dovrebbe essere regolata in modo che il contenuto del recipiente (C) sia mantenuto costantemente in sospensione ed il volume di ossigeno disciolto sia di almeno 2 mg/l.

Va evitata, con mezzi adeguati, la formazione di schiuma. Non si devono usare agenti antischiumogeni che inibiscano il fango attivo.

Il fango accumulatosi nella parte superiore del recipiente di aerazione (C) [per le unità del saggio di conferma OCSE alla base del recipiente di sedimentazione (D) e nel circuito di circolazione] deve essere riportato nella soluzione chiarificata almeno una volta al giorno con l'uso di una spazzola o di qualche altro mezzo appropriato.

Quando il fango ha difficoltà a sedimentare, se ne può aumentare la densità aggiungendo delle porzioni di 2 ml di una soluzione al 5% di cloruro ferrico e ripetendo l'operazione quando necessario.

Si raccoglie l'effluente nel recipiente (E o F) per 20-24 ore e si preleva un campione dopo un'accurata miscelazione. Il recipiente (E o F) deve essere pulito molto bene.

Per poter determinare e controllare l'efficienza del processo, si misurano almeno due volte alla settimana la domanda chimica di ossigeno (COD) o il carbonio organico disciolto (DOC) del filtrato dell'effluente raccolto, come pure del filtrato dell'affluente (usando una membrana con pori di 0,45 µm e scartando i primi 20 ml circa di filtrato).

La riduzione del COD o DOC dovrebbe annullarsi quando si ottiene una degradazione giornaliera abbastanza regolare

Due volte alla settimana si dovrebbe determinare la quantità (in g/l) di sostanza secca del fango attivo nel recipiente di aerazione. Le unità possono funzionare in due modi: o due volte per settimana si determina la quantità di sostanza secca presente nel fango attivo e se essa supera i 2,5 g/l si deve togliere quella in eccesso; oppure si eliminano giornalmente da ciascun vaso 500 ml di soluzione mista per avere un tempo di ritenzione medio del fango di 6 giorni.

Quando i parametri misurati e calcolati (efficienza del processo (nella rimozione COD o DOC), concentrazione del fango, capacità di sedimentazione del fango, torbidità degli effluenti, ecc.) delle due unità sono sufficientemente stazionari, la sostanza in esame può essere introdotta nell'affluente di una delle unità, secondo il punto 1.6.2.2.

In alternativa, la sostanza in esame può essere introdotta all'inizio del periodo di formazione del fango, specialmente quando come inoculo si aggiunge fango.

#### 1.6.2.2. Procedimento

Si mantengono le condizioni di funzionamento del periodo di avviamento e si aggiunge all'affluente dell'unità di prova una quantità sufficiente (circa l'1%) di soluzione madre del prodotto in esame, in modo da ottenere nel liquame la concentrazione voluta del prodotto (circa 10-20 mg DOC/l o 40 mg COD/l). Ciò si può effettuare o miscelando giornalmente il liquame con la soluzione madre, oppure con un sistema separato di pompaggio. Detta concentrazione può essere raggiunta progressivamente. Se non si hanno effetti tossici della sostanza in esame sul fango attivo, possono essere provate anche concentrazioni più elevate.

L'unità «in bianco» è alimentata soltanto con l'affluente senza aggiunta di sostanze. Per l'analisi si prendono adeguate quantità di effluenti e si filtrano con filtri a membrana (0,45 µm) scartando i primi 20 ml (circa) di filtrato.

I campioni filtrati devono essere analizzati il giorno stesso, in caso contrario vanno opportunamente conservati, per esempio mediante l'aggiunta di 0,05 ml di una soluzione all'1% di cloruro mercurico ( $\text{HgCl}_2$ ) per ogni 10 ml di campione filtrato, oppure mantenendoli alla temperatura da 2 a 4 °C per 24 ore al massimo, oppure al di sotto di -18 °C per periodi più lunghi.

Il periodo di sperimentazione, a partire dall'aggiunta della sostanza in esame, non dovrebbe superare le sei settimane ed il periodo di valutazione dovrebbe durare almeno tre settimane; per il calcolo del risultato finale dovrebbero potersi effettuare da 14 a 20 determinazioni.

##### Processo a unità accoppiate

L'accoppiamento delle unità si ottiene scambiando, una volta al giorno, fra le due unità, 1,5 litri di soluzione chiarificata (fango incluso) proveniente dalle vasche di aerazione del fango attivo. Nel caso di prodotti in esame fortemente assorbenti, si prelevano dalle vasche di sedimentazione 1,5 litri del solo liquido surnatante e si versano nella vasca di fango attivo dell'altra unità.

#### 1.6.2.3. Analisi

Per seguire il comportamento della sostanza si possono effettuare due tipi di analisi:

##### — DOC e COD:

le concentrazioni di DOC sono determinate in doppio con l'analizzatore di carbonio e quelle di COD (assieme o in alternativa) col sistema indicato nel riferimento bibliografico (2);

##### — analisi specifica:

le concentrazioni della sostanza esaminata si determinano con un metodo analitico idoneo. Se possibile, si dovrebbe effettuare una determinazione specifica della sostanza assorbita sul fango.

## 2. DATI E VALUTAZIONE

### 2.1. Processo ad unità accoppiate

Quando si impiega il «processo ad unità accoppiate», il grado giornaliero di rimozione DR viene calcolato come indicato al punto 1.2.1. Il valore DR viene quindi corretto in DRc, per tener conto del trasferimento di sostanza dovuto al procedimento di transinoculazione, mediante l'equazione (2) e l'equazione (3) per tempi medi di ritenzione rispettivamente di tre e di sei ore.

$$DR_c = \frac{8}{7} DR - \frac{100}{7} \quad [2]$$

$$DR_c = \frac{4}{3} DR - \frac{100}{3} \quad [3]$$

Si calcola la media della serie di valori di  $DR_c$  ed inoltre la deviazione standard con l'equazione [4]

$$S_{DR_c} = \sqrt{\frac{\sum_{i=1}^n (\overline{DR_c} - DR_{c,i})^2}{n-1}} \quad [4]$$

dove:

$S_{DR_c}$  = deviazione standard della serie di valori di  $DR_c$

$\overline{DR_c}$  = media dei valori di  $DR_c$

$n$  = numero di determinazioni

Si eliminano i valori anomali della serie di  $DR_c$  secondo un opportuno procedimento statistico, ad esempio Nalimov (6), con un livello di probabilità del 95 % e si ricalcolano la media e la deviazione standard della serie di  $DR_c$  priva di valori anomali (outliers).

Si calcola quindi il risultato finale con l'equazione (5):

$$DR_c = \overline{DR_c} \pm \frac{t_{n-1, \alpha}}{\sqrt{n}} S_{DR_c} \quad [5]$$

dove:

$t_{n-1, \alpha}$  = valore tabulato di  $t$  per  $n$  coppie di valori di  $E$  ed  $E_0$  e l'intervallo fiduciario  $P$  ( $P = 1 - \alpha$ ) è stimato al 95 % (1)

Il risultato viene espresso come media con limiti di tolleranza al 95 %, relativa deviazione standard e numero di dati della serie  $DR_c$  priva di «outliers» e numero di valori anomali, ad esempio:

$DR_c = 98,6 \pm 2,3$  % della rimozione del DOC

$s = 4,65$  % della rimozione del DOC

$n = 18$

$x$  = numero degli «outliers»

## 2.2 Processo ad unità non accoppiate

Il funzionamento delle unità può essere verificato come segue:

$$\text{percentuale di rimozione del COD o del DOC} = \frac{\text{COD o DOC del liquame} - \text{COD o DOC dell'effluente}}{\text{COD o DOC del liquame}} \times 100$$

Questa rimozione giornaliera può essere riportata in grafico per evidenziare eventuali andamenti, per esempio, verso l'acclimatazione.

### 2.2.1 Determinazioni attraverso il COD/DOC

Il grado giornaliero di rimozione  $DR$  è calcolato come indicato al punto 1.2.1.

Si calcola la media della serie di valori  $DR$  ed inoltre la sua deviazione standard con l'equazione:

$$S_{DR} = \sqrt{\frac{\sum_{i=1}^n (\overline{DR} - DR_i)^2}{n-1}} \quad [6]$$

dove

$S_{DR}$  = deviazione standard della serie di valori di  $DR_i$

$\overline{DR}$  = media dei valori  $DR_i$

$n$  = numero delle determinazioni

Si eliminano gli «outliers» della serie di DR secondo un opportuno procedimento statistico, ad esempio Nalimov (6), con un livello di probabilità del 95 % e si ricalcolano la media e la deviazione standard della serie di DR così epurata.

Il risultato finale è quindi calcolato con l'equazione:

$$DR = \overline{DR} \pm \frac{t_{n-1;\alpha}}{\sqrt{n}} S_{DR} \quad (7)$$

dove,

$t_{n-1;\alpha}$  = valore tabulato di  $t$  per  $n$  coppie di valori di  $E$  ed  $E_0$  e l'intervallo fiduciario  $P$  ( $P = 1 - \alpha$ ) dove  $P$  è stimato al 95 % (1)

Come risultato vengono presi la media, con limiti di tolleranza ad un livello di probabilità del 95 %, la relativa deviazione standard, il numero di dati della serie DR epurata ed il numero di valore anomali, ad esempio

DR = (98,6 ± 2,3 %) della rimozione del DOC

s = 4,65 % della rimozione del DOC

n = 18

x = numero di «outliers»

### 2.2.2. Determinazione attraverso l'analisi specifica

La percentuale di eliminazione della sostanza in esame dalla fase acquosa ( $R_w$ ) è calcolata come indicato al punto 1.2.2

## 3. RELAZIONE

### 3.1. Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- la scheda fornita nell'allegato III, che mostra le condizioni operative del saggio,
- l'apparecchiatura scelta (prova di conferma OCSE o vaso poroso),
- il procedimento scelto: unità accoppiate o meno,
- il liquame impiegato: sintetico o domestico (nel caso di liquame domestico, data e provenienza del campione),
- tipo di inoculo, con data e provenienza del campione,
- una descrizione del metodo analitico, se sono state effettuate analisi specifiche,
- grafico della rimozione di COD o DOC in funzione del tempo, comprensivo dei periodi di avviamento e di valutazione,
- recupero analitico della sostanza in esame come COD o DOC nella soluzione madre,
- nel caso siano state effettuate analisi specifiche, grafico della rimozione percentuale della sostanza esaminata dalla fase acquosa in funzione del tempo (periodo di avviamento e di valutazione),
- la rimozione media di DOC, COD o della sostanza in esame e la deviazione standard sono calcolate dai risultati del periodo di valutazione, cioè quando si ha una rimozione stazionaria della sostanza in esame o un periodo di funzionamento a regime,
- grafico della concentrazione del fango attivo in funzione del tempo,
- osservazioni riguardanti il fango attivo (scarto di fanghi in eccesso, presenza di rigonfiamenti,  $FeCl_3$ , ecc.),
- concentrazione della sostanza usata nel saggio,
- tutti i risultati relativi all'analisi fatta sul fango,
- tutti i dati ed i risultati sperimentali relativi alla sostanza in esame e a quella di riferimento, se impiegata,
- motivazioni scientifiche per eventuali modifiche nel procedimento

## Interpretazione dei risultati

Una bassa rimozione della sostanza esaminata dalla fase acquosa può essere dovuta all'inibizione dei microorganismi da parte della sostanza in esame. Ciò può anche essere evidenziato da lisi e perdita di fango, che produce un surnatante torbido e da un abbassamento dell'efficienza di rimozione COD (o DOC) dell'impianto pilota.

A volte può svolgere un ruolo l'assorbimento fisico-chimico. Le differenze fra l'azione biologica sulla molecola e l'assorbimento chimico-fisico possono essere rivelati da un'analisi condotta sul fango dopo un adeguato desorbimento.

Se si deve fare la distinzione fra biodegradazione (o parziale biodegradazione) ed assorbimento, sono necessarie ulteriori prove. Ciò si può effettuare in diversi modi, ma il più convincente è usare il surnatante come inoculo in un saggio del dossier di base (preferibilmente un saggio respirometrico).

Se si osservano elevate rimozioni DOC o COD, ciò è dovuto alla biodegradazione, mentre a basse rimozioni la biodegradazione non si può distinguere dall'eliminazione. Ad esempio, se un composto solubile manifesta una elevata costante di assorbimento del 98 % ed il tasso di eliminazione giornaliero del surplus di fango è del 10 %, è possibile un'eliminazione sino al 40 %; con un tasso di eliminazione del surplus di fango del 30 %, l'eliminazione dovuta all'assorbimento ed alla rimozione attraverso il surplus di fango può arrivare fino al 65 % (4).

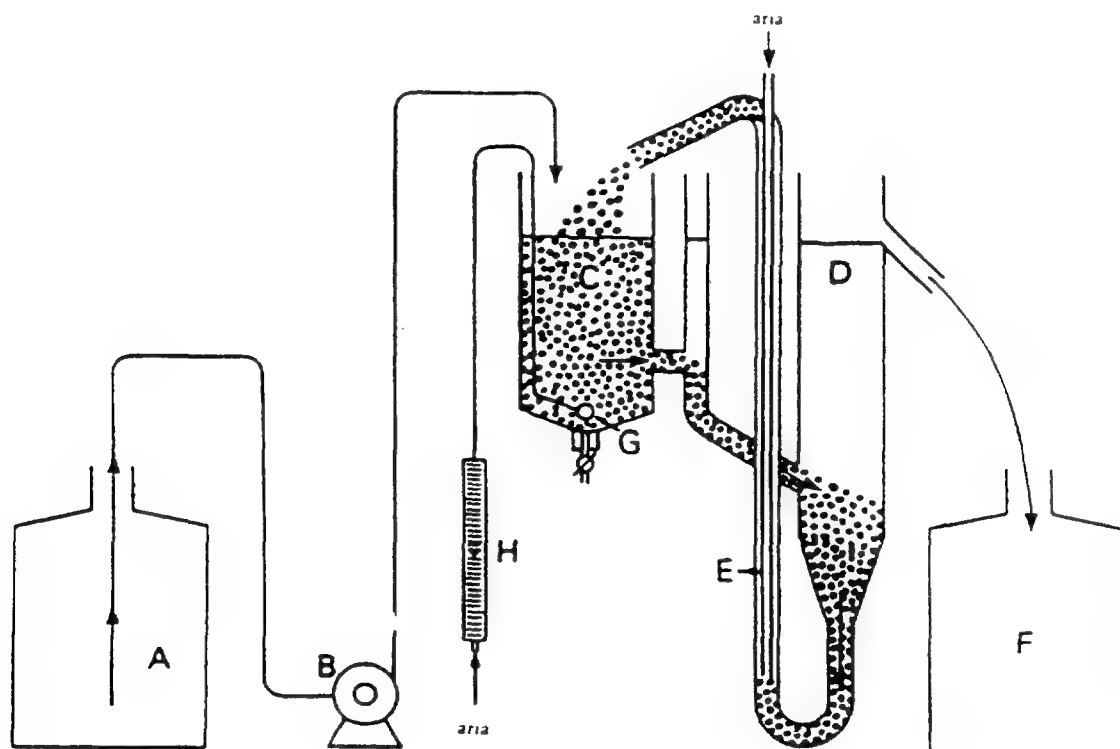
Quando si effettuano analisi specifiche, occorrerebbe fare attenzione alla relazione fra la struttura della sostanza e l'analisi specifica impiegata. In questo caso il fenomeno osservato non può essere interpretato come una mineralizzazione della sostanza.

## BIBLIOGRAFIA

- (1) OCSE, Parigi 1981, *Linea Guida 303 A*, decisione C(81) 30 def. del Consiglio.
- (2) C.6. Degradation — Chemical Oxygen Demand, —
- (3) Painter, H. A., King, E. F., *WRC Porous-Pot method for assessing biodegradability* Technical Report TR70, giugno 1978, Water Research Center, Regno Unito.
- (4) Wierich, P., Gerike, P., «The fate of soluble, recalcitrant, and adsorbing compounds in activated sludge plants», *Ecotoxicology and Environmental Safety*, Vol. 5, n. 2, giugno 1981, pagine da 161 a 171.
- (5) Direttive 82/242/CEE e 82/243/CEE del Consiglio (*Gazzetta ufficiale delle Comunità europee* n. L 109 del 22 aprile 1982), modificate delle direttive 73/404/CEE e 73/405/CEE del Consiglio, Biodegradability of detergents, *Gazzetta ufficiale delle Comunità europee* n. L 347 del 17 dicembre 1973.
- (6) Streuli, H., Fehlerhafte Interpretation und Anwendung von Ausreissertests, insbesondere bei Ringversuchen zur Überprüfung analytischer-chemischer Untersuchungsmethoden, *Fresenius-Zeitschrift für Analytische Chemie*, 303 (1980) pagine da 406 a 408.

## Appendice I

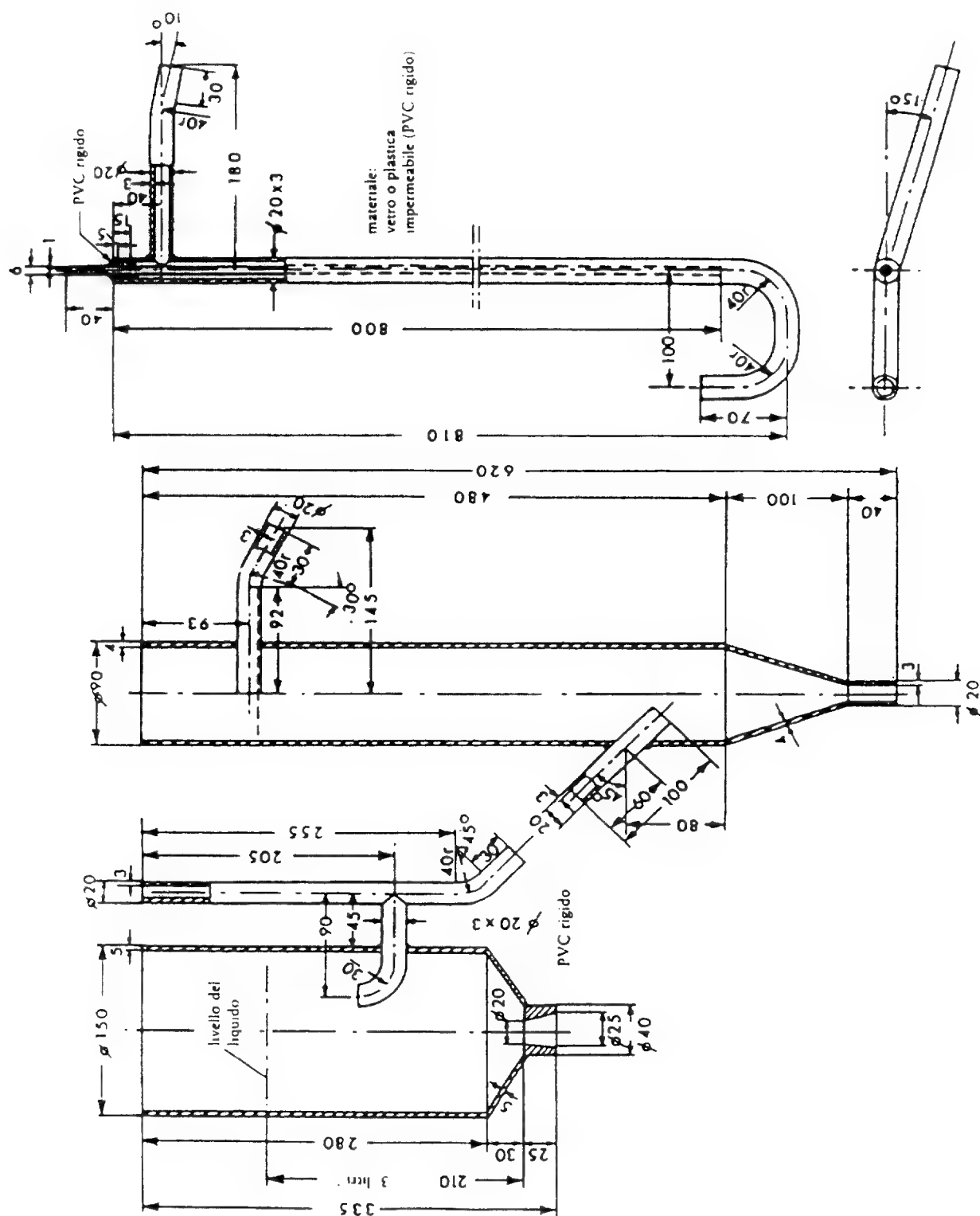
Figura I



A = serbatoio;  
B = pompa di dosaggio;  
C = vasca di aerazione (capacità 3 litri);  
D = vasca di sedimentazione;

E = pompa ad aria compressa;  
F = recipiente di raccolta;  
G = aeratore;  
H = flussometro (facoltativo)

Figura 2





## Appendice 3

Condizioni operative per la prova di simulazione con fanghi attivi

Controllo in ciascun gruppo

*Attrezzatura*di conferma OCSE  
vaso poroso


*Funzionamento*singola unità  
unità accoppiate  
unità non accoppiate


*Transinoculazione*nessuna  
fango attivo  
surnatante


*Tempo medio di ritenzione*tre ore  
sei ore


*Base nutritiva*liquame domestico  
liquame sintetico


*Inoculo*effluente secondario  
composito  
fango attivo

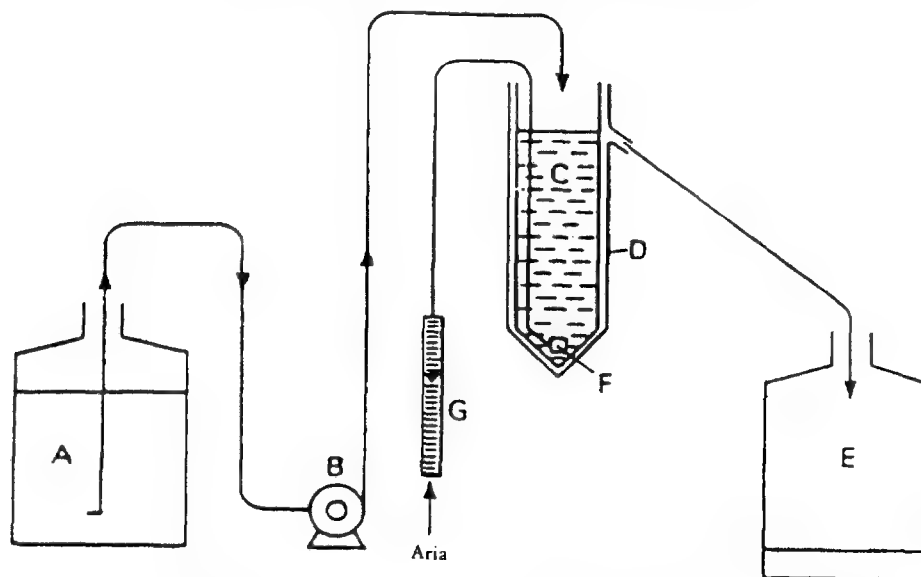

*Addizione del materiale da esaminare*dall'avviamento  
addizione graduale  
a formazione del fango avvenuta


*Analisi*specificità  
COD  
DOC


## Appendice 2

Figura 1

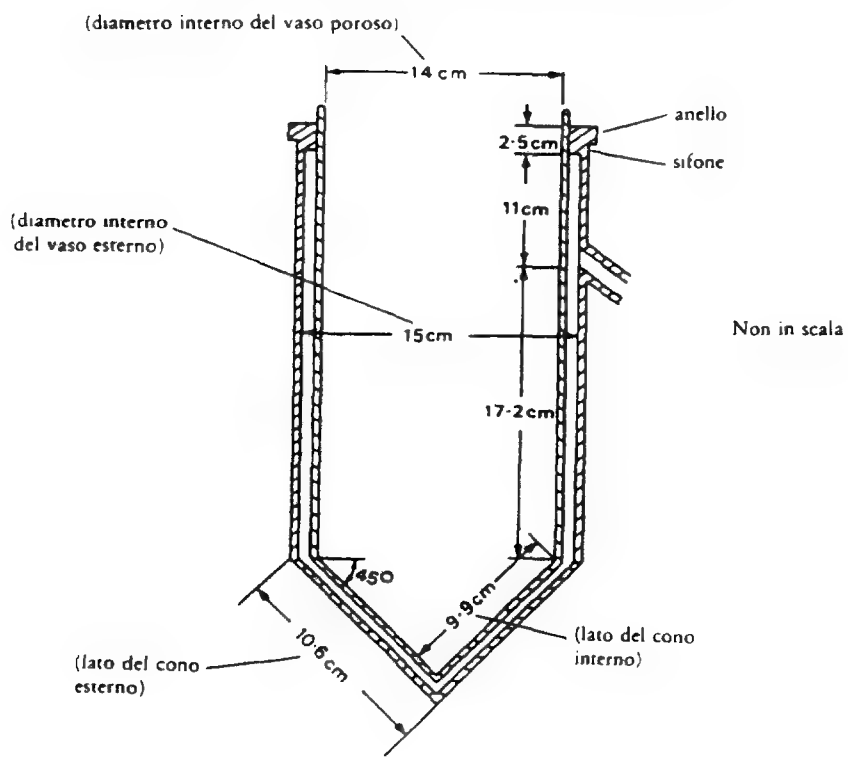
Attrezzatura per la determinazione della biodegradabilità



- A = serbatoio;  
 B = pompa di dosaggio;  
 C = recipiente poroso di aerazione;  
 D = recipiente esterno impermeabile;  
 E = recipiente di raccolta dell'effluente;  
 F = diffusore/aeratore;  
 G = flussometro (facoltativo).

Figura 2

Dettagli del recipiente di aerazione a vaso poroso di 3 litri



## C.11. BIODEGRADAZIONE

## FANGHI ATTIVI: SAGGIO DI INIBIZIONE DELLA RESPIRAZIONE

## 1. METODO

## 1.1. Introduzione

Con il metodo qui descritto si valuta l'effetto della sostanza in esame sui microorganismi misurando la velocità di respirazione in determinate condizioni alla presenza di diverse concentrazioni della sostanza stessa.

Il metodo ha lo scopo di fornire un procedimento rapido di «screening» per l'identificazione delle sostanze che possono avere effetti nocivi sugli impianti di trattamento batterico aerobio e per indicare le concentrazioni della sostanza in esame, che non provocano effetti inibitori, da usare nei saggi di biodegradabilità.

Si può fare precedere la prova definitiva da una prova orientativa che consenta di avere delle informazioni sull'intervallo di concentrazioni da usare nel saggio.

Nel programma del saggio vengono inclusi due controlli senza la sostanza da esaminare, da utilizzare uno all'inizio e l'altro alla fine della serie di saggi. Ciascun gruppo di fanghi attivi dovrebbe essere anche controllato con una sostanza di riferimento.

Il presente metodo si applica più facilmente a quelle sostanze che grazie alla loro idrosolubilità ed alla loro bassa volatilità, permangono prevalentemente in acqua.

Per le sostanze che hanno invece una limitata solubilità nei mezzi di trattamento, può non essere possibile determinare la  $EC_{50}$ .

Quando la sostanza in esame ha tendenza a disaccoppiare la fosforilazione ossidativa, i risultati basati sull'assunzione di ossigeno possono condurre ad errate conclusioni.

Per eseguire il saggio è utile disporre delle seguenti informazioni:

- idrosolubilità,
- tensione di vapore,
- formula di struttura,
- grado di purezza della sostanza in esame.

*Raccomandazione:*

I fanghi attivi possono contenere organismi potenzialmente patogeni e dovrebbero perciò essere maneggiati con cautela.

## 1.2. Definizioni e unità

La velocità di respirazione è il consumo di ossigeno da parte di microorganismi del fango aerobio di acque reflue ed è espresso generalmente in mg di  $O_2$  per mg di fango per ora.

Per calcolare l'effetto inibitorio della sostanza in esame ad una data concentrazione, la velocità di respirazione si esprime come percentuale della media delle velocità di respirazione dei due controlli:

$$\left(1 - \frac{2 R_s}{R_{C_1} + R_{C_2}}\right) \times 100 = \text{percentuale di inibizione}$$

dove:

$R_s$  = velocità di consumo di ossigeno alla concentrazione saggiata della sostanza in esame

$R_{C_1}$  = velocità di consumo di ossigeno nel controllo 1,

$R_{C_2}$  = velocità di consumo di ossigeno nel controllo 2.

$EC_{50}$  è, in questo metodo, la concentrazione della sostanza in esame alla quale la velocità di respirazione risulta pari al 50 % di quella rilevata nel controllo nelle condizioni qui descritte

## 1.3. Sostanze di riferimento

Per controllare che la sensibilità del fango sia normale si raccomanda di usare come sostanza di riferimento il 3,5-diclorofenolo, noto come inibitore della respirazione, e di sottoporlo a determinazione della  $EC_{50}$  in ciascun gruppo di fanghi attivi

**1.4. Principio del metodo**

La velocità di respirazione di un fango attivo, alimentato con una quantità standard di liquame sintetico, è misurato dopo un tempo di contatto di 30 minuti o/e di 3 ore. Si misura anche la velocità di respirazione dello stesso fango attivo in presenza di diverse concentrazioni della sostanza in esame in condizioni per il resto identiche. L'effetto inibitorio della sostanza in esame ad una data concentrazione è espresso come percentuale delle velocità medie di respirazione dei due controlli. Dalle determinazioni a diverse concentrazioni si calcola un valore della  $EC_{50}$ .

**1.5. Criteri di qualità**

I risultati del saggio sono validi se:

- la velocità di respirazione dei controlli differiscono entro il 15 %;
- la  $EC_{50}$  (30 minuti e/o 3 ore) del 3,5-diclorofenolo cade nell'intervallo accettato compreso fra 5 e 30 mg/l.

**1.6. Descrizione del metodo****1.6.1. Reagenti****1.6.1.1. Soluzioni della sostanza in esame**

Le soluzioni della sostanza in esame vengono preparate all'inizio dello studio impiegando una soluzione madre. Se si segue il procedimento di cui sotto, è opportuno che la concentrazione della soluzione madre sia di 0,5 g/l.

**1.6.1.2. Soluzione della sostanza di riferimento**

Si può preparare ad esempio una soluzione di 3,5-diclorofenolo sciogliendone 0,5 g in 10 ml di NaOH 1M, diluendo quindi con acqua distillata sino a circa 30 ml, aggiungendo (mentre si agita)  $H_2SO_4$  0,5M sino al punto di precipitazione incipiente — occorreranno circa 8 ml di  $H_2SO_4$  0,5M — e diluendo infine la miscela con acqua distillata sino al volume di 1 litro. Il pH dovrebbe allora avere un valore compreso fra 7 e 8.

**1.6.1.3. Liquame sintetico**

Una alimentazione di liquame sintetico si ottiene sciogliendo in un litro di acqua le seguenti sostanze nelle quantità precisate:

- 16 g di peptone,
- 11 g di estratto di carne,
- 3 g di urea,
- 0,7 g di NaCl,
- 0,4 g di  $CaCl_2 \cdot 2H_2O$ ,
- 0,2 g di  $MgSO_4 \cdot 7H_2O$ ,
- 2,8 g di  $K_2HPO_4$ .

*Nota 1:* Questo liquame sintetico è 100 volte più concentrato di quello descritto in OECD Technical Report, «Metodo proposto per la determinazione della biodegradabilità dei tensioattivi impiegati nei detersivi sintetici» (11 giugno 1976), con l'aggiunta di fosfato acido di potassio.

*Nota 2:* La soluzione preparata, se non viene utilizzata subito, dovrà essere conservata al buio a temperature comprese tra 0 °C e 4 °C per non oltre una settimana, in condizioni tali da non subire alterazioni nella composizione. Inoltre, prima della conservazione la soluzione potrà essere sterilizzata oppure si potranno aggiungere il peptone e l'estratto di carne solo poco prima di effettuare l'analisi. Prima dell'uso la soluzione dovrà essere agitata ed il suo pH dovrà essere corretto.

**1.6.2. Apparecchiatura**

Apparecchiatura di misurazione: non è importante che l'apparecchio abbia una forma precisa. Comunque, la bottiglia di misurazione dovrebbe essere completamente piena e la sonda dovrebbe aderire ermeticamente al collo.

È necessaria la normale dotazione di laboratorio ed in particolare:

- apparecchio di misurazione,
- sistema di aerazione,
- elettrodo per pH e relativa apparecchiatura di misurazione,
- elettrodo ad ossigeno.

**1.6.3. Preparazione dell'inoculo**

Come inoculo batterico per il saggio si impiega fango attivo proveniente da un impianto di trattamento di liquami prevalentemente domestici.

Se necessario, al ritorno in laboratorio, si possono rimuovere le particelle grossolane mediante sedimentazione per un breve periodo ad esempio per 15 minuti, e, quindi, decantare, per l'uso, lo strato superficiale contenente le particelle solide più piccole. In alternativa il fango può essere miscelato per pochi secondi con un agitatore.

Inoltre, ove si presume la presenza di materiali inibenti, il fango dovrebbe essere lavato con acqua di rubinetto o con soluzione isotonica. Dopo centrifugazione si decanta il surnatante (questo procedimento si ripete per tre volte).

Una piccola quantità di fango umido viene pesata, essiccata e ripesata. In questo modo si può calcolare la quantità di fango umido da sospendere in acqua per ottenere un fango attivo con una quantità di solidi sospesi nel liquido chiarificato compresa tra 2 e 4 gr/l. Questa quantità dà una concentrazione compresa tra 0,8 e 1,6 g/l nel mezzo utilizzato per il saggio, se si segue la procedura raccomandata più sotto.

Se il fango non può essere utilizzato il giorno stesso del prelievo, ad ogni litro del fango attivo preparato come sopra si aggiungono 50 ml di liquame sintetico; il fango viene quindi aerato per tutta la notte a 20 °C ( $\pm 2$  °C). L'aerazione viene mantenuta anche durante la giornata in attesa dell'uso prima del quale si controlla e, se necessario, si tampona il pH fra 6 e 8. I solidi sospesi nel liquido chiarificato si dovrebbero determinare come descritto nel precedente paragrafo.

Se si deve impiegare lo stesso gruppo di fanghi nei giorni successivi (quattro giorni al massimo), alla fine di ogni giornata di lavoro occorrerà aggiungere altri 50 ml di liquame sintetico, per litro di fango.

#### 1.6.4. *Esecuzione del saggio*

Durata/tempo di contatto:	30 minuti e/o 3 ore, sotto aerazione;
Acqua:	acqua potabile (se necessario dechlorata);
Alimentazione di aria:	aria pulita, esente da oli; flusso da 0,5 a 1 l/min;
Apparecchiatura di misurazione:	bottiglia a fondo piatto del tipo della bottiglia per la determinazione del BOD;
Ossimetro:	idoneo elettrodo ad ossigeno con registratore;
Soluzione nutritiva:	liquame sintetico (vedi sopra);
Sostanza in esame:	la soluzione in esame è preparata in concomitanza all'inizio del saggio;
Sostanza di riferimento:	ad esempio 3,5-diclorofenolo (almeno tre concentrazioni);
Controlli:	campioni inoculati esenti dalla sostanza in esame;
Temperatura:	20 °C ( $\pm 2$ °C).

Si descrive in seguito un procedimento sperimentale che può essere seguito sia per la sostanza in esame che per quella di riferimento durante il periodo di contatto di tre ore.

Occorrono diversi recipienti (ad esempio becher da 1 litro). Si dovrebbe impiegare una serie di almeno cinque concentrazioni che differiscano tra di loro di un fattore costante di preferenza non superiore a 3,2.

Al tempo «0», si portano 16 ml di liquame sintetico a 300 ml con acqua. Si aggiungono 200 ml di inoculo batterico e si versa la miscela totale (500 ml) in un primo recipiente (primo controllo  $C_1$ ).

I recipienti in esame dovrebbero essere aerati continuativamente in modo da impedire che il livello di  $O_2$  disciolto scenda al di sotto di 2,5 ml/l ed in modo che, subito prima di misurare la velocità di respirazione, la concentrazione di  $O_2$  sia almeno uguale a 6,5 mg/l.

Al tempo «15 minuti» (15 minuti è un intervallo arbitrario ma adeguato) si ripete la stessa operazione salvo che 100 ml della soluzione madre della sostanza in esame vengono aggiunti ai 16 ml di liquame sintetico prima di aggiungere l'acqua sino a 300 ml e l'inoculo batterico sino al volume di 500 ml. Questa miscela viene quindi versata in un secondo recipiente ed aerata come sopra. Si ripete questo procedimento ad intervalli di 15 minuti con differenti volumi della soluzione madre della sostanza in esame, in modo da disporre di una serie di recipienti contenenti diverse concentrazioni della sostanza in esame. Infine si prepara un secondo controllo ( $C_2$ ).

Dopo tre ore si determina il pH e si versa un'aliquota ben miscelata del contenuto del primo recipiente nell'apparecchio di misurazione e si misura la velocità di respirazione per un tempo fino a 10 minuti.

Questa determinazione viene ripetuta sul contenuto di ciascun recipiente ad intervalli di 15 minuti, in modo che il tempo di contatto per ogni recipiente sia di tre ore.

La sostanza di riferimento viene saggiata nello stesso modo su ciascun gruppo di inoculi batterici.

Quando si devono effettuare misurazioni dopo 30 minuti di contatto, occorre un procedimento diverso (ad esempio con più di un ossimetro).

Se si richiede la misura del consumo di ossigeno, si preparano altre bottiglie contenenti la sostanza in esame, il liquame sintetico ed acqua ma non fango attivo.

Il consumo di ossigeno si misura e registra dopo un periodo di aerazione di 30 minuti e/o 3 ore (tempo di contatto).

## 2. DATI E VALUTAZIONE

La velocità di respirazione si calcola dal tracciato del registratore nell'intervallo che va da circa 2,5 a 6,5 mg O<sub>2</sub>/l, oppure, se la velocità di respirazione è bassa, per un periodo di 10 minuti. Il tratto di curva di respirazione in cui si misura la velocità di respirazione dovrebbe essere lineare.

Se le velocità di respirazione dei due controlli differiscono tra loro di più del 15% o se la EC<sub>50</sub> (30 minuti e/o 3 ore) della sostanza di riferimento non cade nell'intervallo ammesso (da 5 a 30 mg/l per il 3,5-diclorofenolo), la prova non è valida e deve essere ripetuta.

Per ogni concentrazione in esame si calcola la percentuale di inibizione (vedi paragrafo 1.2). Quest'ultima viene riportata in grafico, su carta lognormale (o logprobit), in funzione della concentrazione e si ricava un valore di EC<sub>50</sub>.

Usando procedimenti standard si possono determinare i limiti di confidenza al 95% per i valori della EC<sub>50</sub>.

## 3. RELAZIONE

### 3.1. Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- Sostanza in esame: dati di identificazione chimica.
- Sistema di saggio: origine, concentrazione ed eventuali trattamenti preliminari del fango attivo.
- Condizioni del saggio:
  - pH della miscela in esame prima di determinare la respirazione;
  - temperatura;
  - durata;
  - sostanza di riferimento e relativa EC<sub>50</sub> misurata;
  - eventuale assunzione abiotica di ossigeno.
- Risultati:
  - tutti i dati misurati;
  - curva di inibizione e metodo per il calcolo della EC<sub>50</sub>.
  - EC<sub>50</sub> e, se possibile, limiti di confidenza al 95%, EC<sub>20</sub> ed EC<sub>80</sub>.
  - tutte le osservazioni e le eventuali deviazioni dal presente metodo che potrebbero aver condizionato il risultato.

### 3.2. Interpretazione dei dati

Dal momento che le complesse interazioni che si hanno nell'ambiente non possono essere fedelmente riprodotte in un saggio di laboratorio, il valore della EC<sub>50</sub> dovrebbe essere considerato semplicemente come una indicazione della probabile tossicità della sostanza in esame per il fango attivo usato nel trattamento dei liquami o per i microorganismi delle acque reflue.

Inoltre, le sostanze in esame aventi effetto inibitorio sull'ossidazione dell'ammoniaca possono anche causare curve di inibizione atipiche. Di conseguenza tali curve dovranno essere interpretate con cautela.

## 4. BIBLIOGRAFIA

- (1) International Standard ISO/8192 — 1986.
- (2) Broecker, B. e Zahn, R., *Water Research* 11, (1977), pagina 165.
- (3) Brown, D., Hutz, H. R. e Schaefer, L., *Chemosphere* 10, (1981), pagina 245.
- (4) ETAD (Ecological and Toxicological Association of Dyestuffs Manufacturing Industries) *Recommended Method N. 103*, descritto anche in:
- (5) Robra, B., *Wasser/Abwasser* 117, (1976), pagina 80.
- (6) Schefer, W., *Textilveredlung* 6, (1977), pagina 247.
- (7) OCSE, Parigi 1981, *Linea Guida* 209, decisione C(81) 30 def. del Consiglio.

## C.12. BIODEGRADAZIONE

## SAGGIO SCAS MODIFICATO

## 1. METODO

## 1.1. Introduzione

Scopo del metodo è quello di valutare la potenziale biodegradabilità ultima di sostanze organiche solubili in acqua e non volatili, esposte per un lungo periodo a concentrazioni relativamente elevate di microorganismi. La vitalità dei microorganismi viene mantenuta per tutto il periodo aggiungendo giornalmente liquami decantati. (Per l'intervallo di fine settimana, i liquami possono essere conservati a 4 °C. In alternativa si può usare il liquame sintetico del saggio di conferma OCSE.)

Nell'interpretazione dei risultati occorre tenere conto dell'eventuale assorbimento fisico-chimico della sostanza in esame sui solidi in sospensione (vedi paragrafo 3.2).

A causa del lungo periodo di ritenzione della fase liquida (36 ore) e dell'aggiunta, intermittente di nutrienti, la prova non riproduce le stesse condizioni che si hanno in un impianto per il trattamento dei liquami. I risultati ottenuti con diverse sostanze indicano che il sistema ha un elevato potenziale di biodegradazione.

Le condizioni sperimentali sono estremamente favorevoli alla selezione e/o all'adattamento di microorganismi capaci di degradare il composto in esame (si può seguire questo procedimento anche per produrre inoculi acclimatati da utilizzare in altri saggi).

Nel presente metodo la biodegradabilità ultima delle sostanze in esame viene determinata attraverso la misura della concentrazione del carbonio organico disciolto (DOC) (è preferibile determinare il DOC dopo acidificazione e deaerazione anziché dalla differenza  $C_{\text{totale}} - C_{\text{inorganico}}$ ).

L'impiego simultaneo di un metodo analitico specifico consente di determinare la degradazione primaria della sostanza (modifica della struttura chimica della sostanza in esame).

Il metodo può essere applicato soltanto alle sostanze organiche che alle concentrazioni impiegate per il saggio:

- sono solubili in acqua (almeno 20 mg/l di carbonio organico disciolto),
- hanno una tensione di vapore trascurabile,
- non esercitano effetti inibitori sui batteri,
- non vengono assorbite in modo significativo dal sistema sperimentale,
- non vengono sottratte alla soluzione in esame mediante formazione di schiume.

Occorre determinare il contenuto di carbonio organico della sostanza in esame.

Per l'interpretazione dei risultati ottenuti, in particolare nei casi in cui i valori siano bassi o trascurabili, sarà utile disporre di informazioni sulle proporzioni relative dei principali componenti della sostanza in esame.

Per l'interpretazione di eventuali valori bassi e per la scelta di una concentrazione adeguata al saggio, può essere utile disporre di informazioni sulla tossicità della sostanza per i microorganismi.

## 1.2. Definizioni e unità

$C_T$  = concentrazione della sostanza in esame espressa come carbonio organico presente o addizionato al liquame sedimentato all'inizio del periodo di aerazione (mg/l)

$C_r$  = concentrazione del carbonio organico disciolto rinvenuto nel surnatante del saggio alla fine del periodo di aerazione (mg/l)

$C_c$  = concentrazione del carbonio organico disciolto rinvenuto nel surnatante del controllo alla fine del periodo di aerazione (mg/l)

Nel presente metodo la biodegradazione è definita come eliminazione del carbonio organico. La biodegradazione può essere espressa come:

1) la rimozione percentuale  $D_{da}$  della sostanza aggiunta giornalmente.

$$D_{da} = \frac{C_T - (C_i - C_e)}{C_T} \times 100 \quad [1]$$

dove

$D_{da}$  = degradazione/aggiunta giornaliera

2) la rimozione percentuale  $D_{std}$  di sostanza rispetto a quella presente all'inizio di ogni giorno

$$D_{std} = \frac{2C_T + C_n - C_{e1} - 3C_{t(i+1)} + 3C_{e(i+1)}}{2C_T + C_{i1} - C_{e1}} \times 100 \quad [2 a)]$$

$$= \frac{2C_T - 2C(C_i - C_e)}{2C_T + (C_i - C_e)} \times 100 \quad [2 b)]$$

dove:

$D_{std}$  = degradazione/sostanza iniziale giornaliera

Gli indici  $i$  e  $(i + 1)$  si riferiscono al giorno in cui si effettua la misurazione. L'equazione (2 a) è consigliata se il DOC dell'effluente varia giornalmente mentre l'equazione (2 b) può essere usata quando il DOC dell'effluente rimane relativamente costante da un giorno all'altro.

### 1.3 Sostanze di riferimento

In alcuni casi quando si esamina una nuova sostanza, possono essere utili delle sostanze di riferimento; ciò nonostante non si propogano qui sostanze di riferimento specifiche.

Nell'allegato I vengono forniti dati relativi a numerosi composti analizzati in un saggio interlaboratorio soprattutto per consentire di tanto in tanto la calibrazione del metodo e per rendere possibile il confronto dei risultati quando se ne adotta un altro.

### 1.4 Principio del metodo

I fanghi attivi provenienti da un impianto di trattamento dei liquami vengono posti in una unità semicontinua per fanghi attivi (SCAS). Si aggiungono il composto in esame e liquame domestico sedimentato; si effettua l'aerazione della miscela per 23 ore. Quindi si interrompe l'aerazione, si lasciano decantare i fanghi e si rimuove il surnatante.

I fanghi che rimangono nella camera di aerazione vengono quindi mescolati con un'altra aliquota del composto in esame e del liquame, e si ripete il ciclo.

La biodegradazione si ricava determinando la quantità di carbonio organico disciolto nel surnatante. Tale valore viene confrontato con quello trovato nel surnatante del controllo contenente soltanto liquame decantato.

Se si utilizza un metodo analitico specifico si possono determinare le variazioni di concentrazione della sostanza in esame dovute alla biodegradazione (biodegradabilità primaria).

### 1.5 Criteri di qualità

La riproducibilità di questo metodo basato sulla rimozione di carbonio organico disciolto non è stata ancora dimostrata. (Se si prende in considerazione la biodegradazione primaria si ottengono dati molto precisi per sostanze che siano estesamente degradate.)

La sensibilità del metodo dipende soprattutto dalla variabilità del bianco ed in minor misura dalla precisione della determinazione del carbonio organico disciolto e dalla quantità del composto in esame presente nel liquido all'inizio di ogni ciclo.

### 1.6 Descrizione del metodo

#### 1.6.1 Preparazioni

Per ciascuna sostanza in esame e per i controlli si collega un numero sufficiente di unità di aerazione pulite (in alternativa si può usare l'unità originale per il saggio SCAS da 1,5 litri) con i tubi di presa dell'aria (figura 1). L'aria compressa inviata nelle unità di saggio, purificata con un filtro di cotone grezzo, deve essere esente da carbonio organico e satura di acqua per ridurre le perdite per evaporazione.

Da un impianto di trattamento a fanghi attivi adibito prevalentemente a liquami domestici si preleva un campione di liquido chiarificato, contenente da 1 a 4 g/l di solidi sospesi. Per ciascuna unità di aerazione occorrono circa 150 ml di liquido chiarificato.



Si preparano con acqua distillata le soluzioni madri della sostanza in esame, di solito è richiesta una concentrazione di 400 mg/l di carbonio organico che, se non ha luogo biodegradazione, corrisponde ad una concentrazione di sostanza in esame pari a 20 mg/l di carbonio all'inizio di ogni ciclo di aerazione.

Se la tossicità per i microorganismi lo consente si possono avere concentrazioni più elevate. Si misura la concentrazione di carbonio organico nelle soluzioni madri.

#### 1.6.2 Condizioni del saggio

Il saggio va effettuato da 20 a 25 °C. Si utilizza un'elevata concentrazione di microorganismi aerobici (da 1 a 4 g/l di solidi sospesi) ed il periodo di ritenzione effettivo è di 36 ore. In genere, otto ore dopo l'avvio di ciascun ciclo di aerazione, il carbonio organico contenuto nei liquami immessi è ampiamente ossidato. Dopo ha inizio la respirazione endogena del fango che si manterrà per tutto il rimanente periodo di aerazione, durante il quale il solo substrato disponibile è la sostanza in esame a meno che non venga anch'essa metabolizzata rapidamente. Questi fattori, unitamente alla reinoculazione giornaliera del sistema (vedi paragrafo 1.4), nel caso in cui si usino come mezzo liquami domestici, crea condizioni estremamente favorevoli sia per l'acclimatazione, sia per ottenere elevati valori di biodegradazione.

#### 1.6.3 Esecuzione del saggio

Si preleva un campione del liquido chiarificato da un idoneo impianto a fanghi attivi per il trattamento di liquami in prevalenza domestici oppure da un impianto di laboratorio e si mantiene in condizioni aerobiche sino all'impiego in laboratorio. Si riempie ciascuna unità di aerazione e l'unità di controllo con 150 ml (se si utilizza l'unità originale per il saggio SCAS, moltiplicare i volumi per 10) di liquido chiarificato e si avvia l'aerazione. Dopo 23 ore si interrompe l'aerazione e si lasciano decantare i fanghi per 45 minuti. Si apre, a turno, il rubinetto di ogni recipiente e si prelevano aliquote da 100 ml di surnatante. Si prepara, immediatamente prima dell'impiego, un campione di liquami domestici decantati e se ne aggiungono 100 ml al fango che rimane in ciascuna unità di aerazione. Si avvia nuovamente l'aerazione. A questo punto non si aggiunge la sostanza da esaminare e si alimentano giornalmente le unità con liquami domestici fino a quando si forma per decantazione un surnatante chiaro. In genere questa fase richiede al massimo due settimane e nel frattempo il carbonio organico disciolto nel surnatante raggiunge alla fine di ogni ciclo di aerazione un valore costante.

Terminata questa fase, i singoli fanghi sedimentati vengono mescolati tra loro e 50 ml di tale miscela vengono introdotti in ciascuna unità.

95 ml di liquame sedimentato e 5 ml di acqua vengono aggiunti all'unità di controllo, e 95 ml di liquame sedimentato più 5 ml della soluzione madre della sostanza in esame (400 mg/l) vengono aggiunti alle unità di saggio. Si riavvia l'aerazione e si protrae per 23 ore. Si lasciano quindi sedimentare i fanghi per 45 minuti, si preleva il surnatante e se ne analizza il contenuto di carbonio organico disciolto.

Le suddette operazioni di riempimento e di prelievo, vengono ripetute ogni giorno per tutta la durata del saggio.

Prima della sedimentazione può essere necessario pulire le pareti delle unità per evitare che si accumulino solidi al di sopra del livello del liquido. Per evitare contaminazioni incrociate si utilizza un raschiatore o una spazzola diversa per ciascuna unità.

Idealmente, il carbonio organico disciolto nei surnatanti dovrebbe essere determinato ogni giorno anche se si può consentire una minore frequenza delle analisi. Prima delle analisi i liquidi vengono filtrati mediante filtri a membrana con pori da 0,45 µm lavati oppure vengono centrifugati. I filtri a membrana sono idonei se durante la filtrazione non liberano carbonio organico né assorbono la sostanza in esame. Nella centrifuga la temperatura del campione non deve superare i 40 gradi centigradi.

La durata del saggio per i composti che mostrano una biodegradazione limitata o nulla non è fissata, ma l'esperienza suggerisce che la durata dovrebbe essere, in generale, di almeno 12 settimane, ma non più lunga di 26 settimane.

## 2 DATI E VALUTAZIONE

I valori del carbonio organico disciolto rilevati nei surnatanti delle unità di saggio e delle unità di controllo vengono riportati in grafico in funzione del tempo.

Con il procedere della biodegradazione i valori determinati nel saggio si avvicinano a quelli del controllo. Quando la differenza tra i due livelli si mantiene costante per oltre tre misurazioni consecutive, si esegue un numero di ulteriori misurazioni, tale da effettuare una elaborazione statistica dei dati e da calcolare la biodegradazione percentuale subita dalla sostanza in esame ( $D_{st}$ , oppure  $D_{\infty}$ , vedi paragrafo 1.2).

## 3 RELAZIONE

## 3.1 Relazione sul saggio

Nella relazione sul saggio devono figurare, se possibile:

- tutte le informazioni sul tipo di liquame, sul tipo di unità usata e sui risultati sperimentali concernenti le sostanze esaminate, la sostanza di riferimento, se usata, ed il bianco,
- la temperatura,
- la curva di rimozione, nonché descrizione e metodo di calcolo relativi (vedi paragrafo 1.2),
- date e luogo di prelievo dei fanghi attivi e del liquame, stato di adattamento, concentrazione, ecc.,
- motivazioni scientifiche di eventuali modifiche del procedimento,
- firma e data.

## 3.2 Interpretazioni dei risultati

Dato che le sostanze esaminate con il presente metodo non sono facilmente biodegradabili, qualsiasi rimozione del DOC imputabile esclusivamente alla biodegradazione avviene in genere gradualmente nel corso di giorni o settimane, ad eccezione di quei casi in cui avviene una improvvisa acclimatazione indicata da una brusca scomparsa che si verifica dopo alcune settimane.

In ogni caso l'assorbimento chimico-fisico può a volte giocare un ruolo importante; ciò si verifica quando all'inizio della prova si riscontra una parziale o completa rimozione del DOC aggiunto. Ciò che accade successivamente, dipende da fattori quali il grado di assorbimento e la concentrazione di solidi sospesi nell'effluente di scarico. Di solito la differenza tra concentrazione del DOC nel controllo e nei surnatanti del saggio aumenta gradualmente rispetto al basso valore iniziale e tale differenza si mantiene quindi al nuovo valore per il resto della prova a meno che non si verifichi l'acclimatazione.

Se si vuole distinguere nel grafico la biodegradazione (o la parziale biodegradazione) dall'assorbimento, sono necessari ulteriori saggi. Questi possono essere effettuati in diversi modi: il più convincente è quello di usare il surnatante o i fanghi come inoculo in un saggio del dossier di base (preferibilmente il saggio respirometrico).

Le sostanze che in questo saggio mostrano un'elevata rimozione del DOC, non dovuta ad assorbimento, devono essere considerate potenzialmente biodegradabili. Un'eliminazione parziale non dovuta ad assorbimento indica che la sostanza è almeno in parte biodegradabile.

Valori bassi o nulli di rimozione del DOC possono essere dovuti ad un effetto inibente della sostanza in esame sui microorganismi, il che può anche essere evidenziato da lisi o da riduzione dei fanghi con formazione di surnatanti torbidi. Il saggio deve essere ripetuto a concentrazione più bassa della sostanza in esame.

Il ricorso a un metodo analitico specifico o alla marcatura della sostanza in esame con il  $^{14}\text{C}$  può permettere una maggiore sensibilità. Nel caso di composti marcati con  $^{14}\text{C}$  lo sviluppo di  $^{14}\text{CO}_2$  confermerà che la biodegradazione ha avuto luogo.

Quando i risultati vengono presentati anche come biodegradazione primaria occorre dare, se possibile, una spiegazione del cambiamento di struttura chimica che causa la diminuzione di risposta della sostanza in esame.

Si deve dimostrare la validità del metodo analitico e riportare la risposta fornita dal bianco.

## 4 BIBLIOGRAFIA

- (1) OCSE, Parigi 1981, *Linea Guida 302 B*, decisione C(81) 30 def. del Consiglio.

## Appendice 1

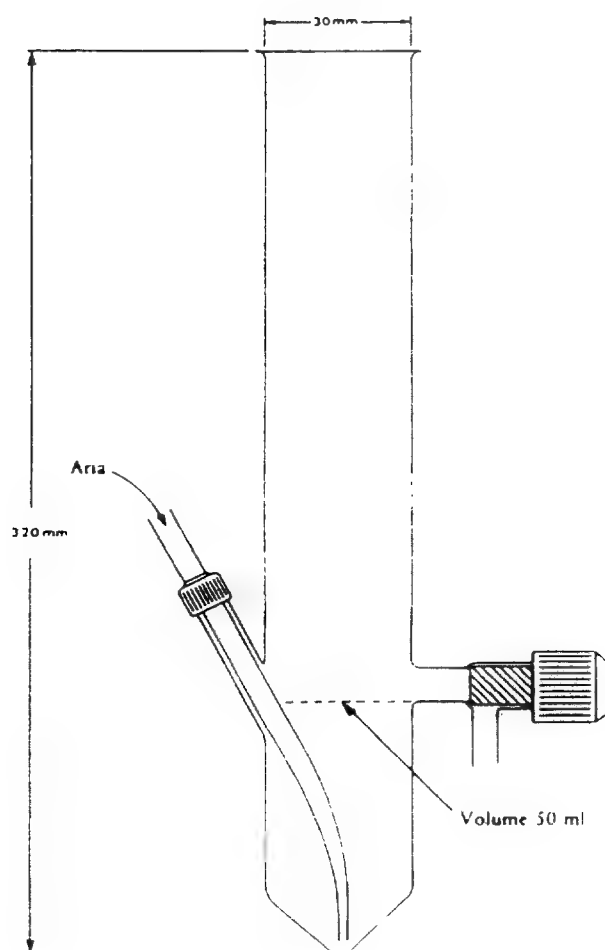
## Saggio SCAS: Esempio di risultati

Sostanza	$C_T$ (mg/l)	$C_i - C_f$ (mg/l)	Bio-degrada- zione percentuale $D_{40}$	Durata del saggio (giorni)
4-acetil aminobenzen sulfonato	17,2	2,0	85	40
Tetrapropilene benzen sulfonato	17,3	8,4	51,4	40
4-nitrofenolo	16,9	0,8	95,3	40
Glicol dietilenico	16,5	0,2	98,8	40
Anilina	16,9	1,7	95,9	40
Ciclopentano tetra carbossilato	17,9	3,2	81,1	120

## Appendice 2

## Esempio di apparecchiatura per il saggio

Figura 1



## ALLEGATO VI

**REQUISITI GENERALI PER LA CLASSIFICAZIONE E L'ETICHETTATURA DI SOSTANZE E PREPARATI PERICOLOSI**

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## 1. INTRODUZIONE GENERALE

1.1 L'obiettivo della classificazione è l'identificazione di tutte le proprietà fisico-chimiche, tossicologiche ed eco-tossicologiche delle sostanze e le proprietà tossicologiche e fisico-chimiche dei preparati che possono comportare dei rischi all'atto della normale manipolazione o utilizzazione. Dopo l'identificazione delle proprietà pericolose, la sostanza o il preparato devono essere etichettati per indicare il pericolo o i pericoli al fine di proteggere l'utilizzatore, il pubblico e l'ambiente.

1.2 Il presente allegato presenta i criteri generali di classificazione e di etichettatura delle sostanze e dei preparati di cui all'articolo 4 del decreto legislativo 3 febbraio 1997, n. 52 e all'articolo 3 del decreto ministeriale 28 gennaio 1992, nonché ad altre normative sui preparati pericolosi. Il presente allegato è destinato a tutti gli interessati (fabbricanti, importatori, autorità nazionali) con metodi di classificazione e di etichettatura delle sostanze e dei preparati pericolosi.

1.3. Le presenti disposizioni e quelle del decreto ministeriale 28 gennaio 1992 hanno lo scopo di mettere a disposizione della popolazione e dei lavoratori informazioni essenziali sulle sostanze e sui preparati pericolosi. L'etichetta richiama l'attenzione di coloro che manipolano o utilizzano dette sostanze o preparati sui pericoli insiti in alcuni di essi. L'etichetta può inoltre richiamare l'attenzione su informazioni più complete in materia di precauzioni e di utilizzazione del prodotto, disponibili sotto altra forma.

1.4 L'etichetta tiene conto di tutti i pericoli potenziali connessi con la normale manipolazione ed utilizzazione delle sostanze e dei preparati pericolosi nella forma in cui vengono commercializzati, ma non necessariamente nelle altre possibili forme di utilizzazione finale, ad esempio allo stato diluito. I pericoli più gravi sono segnalati da simboli; questi pericoli e quelli causati da altre proprietà pericolose sono precisati in frasi standard di rischio, mentre altre frasi, relative ai consigli di prudenza, presentano le precauzioni che occorre prendere.

Nel caso delle sostanze, l'informazione è completata dalla denominazione della sostanza secondo una nomenclatura chimica riconosciuta a livello internazionale, preferibilmente quella utilizzata dallo "European Inventory of Existing Commercial Chemical Substances (EINECS)" o dalla "European List of Notified Chemical Substances (ELINCS)", dal numero CEE e da nome, indirizzo e numero di telefono del responsabile dell'immissione della sostanza sul mercato avente sede nella Comunità.

Nel caso di preparati, l'informazione è completata dalla designazione o nome commerciale del preparato, dalla denominazione chimica delle sostanze presenti nel preparato in conformità dell'articolo 7(1)(c) del decreto ministeriale 28 gennaio 1992 e dal nome, indirizzo e numero di telefono del responsabile dell'immissione sul mercato del preparato avente sede nella Comunità.

1.5 L'articolo 6 del decreto legislativo 3 febbraio 1997, n. 52 stabilisce che i fabbricanti distributori e importatori di sostanze pericolose che non figurano ancora nell'allegato I, ma che sono incluse nell'EINECS, sono obbligati ad effettuare una ricerca per conoscere i dati pertinenti ed accessibili esistenti per quanto riguarda le proprietà di tali sostanze. In base a tali informazioni essi devono imballare e provvisoriamente etichettare tali sostanze conformemente alle regole stabilite negli articoli da 19 a 22 del citato decreto legislativo ed ai criteri enunciati nell'allegato VI.

1.6 Nel caso delle sostanze i dati per la classificazione e l'etichettatura sono ottenuti come segue:

a) per le sostanze per le quali occorre fornire le informazioni specificate nell'allegato VII la maggior parte dei dati necessari per la classificazione e l'etichettatura è contenuta nel "fascicolo di base". La classificazione e l'etichettatura verranno rivedute, se necessario, quando si disporrà di nuove informazioni (allegato VIII)

b) per quanto riguarda le altre sostanze, ad esempio quelle di cui al punto 1.5 precedente) i dati necessari per la classificazione e l'etichettatura potranno ottenersi, eventualmente, da

numerose altre fonti, ad esempio risultati di precedenti prove, informazioni richieste in applicazione delle norme internazionali sui trasporti di sostanze pericolose, informazioni ricevute da opere di consultazione, da pubblicazioni specializzate, informazioni basate sull'esperienza.

Per i preparati, i dati per la classificazione e l'etichettatura sono ottenuti come segue.

a) i dati fisico-chimici si ottengono applicando i metodi specificati nell'allegato V del decreto legislativo 3 febbraio 1997, n. 52. Per i preparati gassosi si può impiegare un metodo di calcolo delle proprietà di comburenza ed infiammabilità (vedere capitolo 9).

b) i dati concernenti gli effetti sulla salute si ottengono:

- applicando i metodi specificati nell'allegato V del decreto legislativo 3 febbraio 1997, n. 52 e/o applicando il metodo convenzionale di cui all'articolo 3, paragrafo 5, lettere da a) a i) del decreto ministeriale. 28 gennaio 1992;
- per quanto concerne la valutazione degli effetti cancerogeni, mutageni e di tossicità per la riproduzione, invece, applicando il metodo convenzionale di cui all'articolo 3, paragrafo 5, lettere da a) a i) del decreto ministeriale. 28 gennaio 1992.

#### *Nota relativa alle prove sugli animali*

L'esecuzione di prove sugli animali per determinare dati sperimentali è soggetta alle disposizioni del decreto legislativo 27 gennaio 1992, n. 116

### 1.7. Applicazione dei criteri guida

La classificazione deve basarsi sulle proprietà tossicologiche e fisico-chimiche delle sostanze e dei preparati, nonché sulle proprietà ecotossicologiche delle sostanze

La classificazione delle sostanze e dei preparati è fatta sulla base dei criteri di cui ai capitoli 2-4 e inoltre, per le sostanze, di quelli di cui al capitolo 5 del presente allegato. Si devono prendere in considerazione tutti i tipi di pericolo. Ad esempio, la classificazione di cui al punto 3.2.1 non significa che si possono ignorare i punti come il 3.2.2 o il 3.2.4.

L'obiettivo della scelta del/i simbolo/i e della/e frase/i di rischio è di illustrare sull'etichetta la natura specifica dei potenziali pericoli identificati nella classificazione

In deroga ai criteri di cui ai punti 2.2.3, 2.2.4 e 2.2.5, le sostanze e i preparati sotto forma di aerosol saranno soggetti ai criteri di infiammabilità di cui ai punti 1.8 e 2.2, lettera c) dell'allegato al decreto del Presidente della Repubblica 21 luglio 1982, n. 741

#### 1.7.1. Definizioni

<Sostanze>: gli elementi chimici ed i loro composti, allo stato naturale o ottenuti mediante qualsiasi procedimento di produzione, contenenti gli additivi necessari per preservare la stabilità del prodotto e le impurezze derivanti dal procedimento impiegato, esclusi i solventi che possono essere separati senza incidere sulla stabilità della sostanza e senza modificare la sua composizione.

Una sostanza può essere ben definita chimicamente (ad esempio acetone) o una miscela complessa di costituenti di varia composizione (ad esempio distillati aromatici). In quest'ultimo caso sono stati identificati alcuni costituenti

<Preparati>: le miscele o soluzioni composte da due o più sostanze

### 1.7.2. Applicazione dei criteri guida per le sostanze

I criteri guida illustrati nel presente allegato sono direttamente applicabili nel caso in cui i dati in questione siano stati ottenuti mediante metodi di prova comparabili a quelli descritti nell'allegato V. Negli altri casi i dati disponibili devono essere valutati confrontando i metodi di prova utilizzati con quelli indicati nell'allegato V e con le norme contenute nel presente allegato, in modo da determinare la classificazione e l'etichettatura.

#### 1.7.2.1. Classificazione di sostanze contenenti impurezze o additivi o singoli costituenti

Si deve tener conto delle impurezze, degli additivi o singoli costituenti delle sostanze complesse eventualmente identificate se le concentrazioni sono:

- 0.1% per le sostanze classificate molto tossiche, tossiche, cancerogene di categoria 1 o 2, mutagene di categoria 1 o 2, tossiche per la riproduzione di categoria 1 o 2.
- 1% per le sostanze classificate nocive, corrosive, irritanti, sensibilizzanti, cancerogene di categoria 3, mutagene di categoria 3, tossiche per la riproduzione di categoria 3, a meno che nell'allegato I al decreto legislativo 3 febbraio 1997, n. 52 siano stati specificati valori più bassi.

Ad eccezione delle sostanze specificatamente elencate nell'allegato I, la classificazione in base alle proprietà fisico-chimiche e per i pericoli per la salute deve essere effettuata conformemente ai requisiti dell'articolo 3 e l'etichettatura deve corrispondere ai requisiti dell'articolo 7 del decreto ministeriale 28 gennaio 1992

La classificazione in base alle proprietà fisico-chimiche deve essere effettuata conformemente ai criteri di cui al capitolo 2; in base agli effetti sull'ambiente deve essere effettuata conformemente ai criteri del capitolo 5 del presente allegato.

Nel caso dell'amianto (650-013-00-6) questa regola generale non si applica sino a quando non sarà fissato un limite di concentrazione nell'allegato I. Le sostanze contenenti tracce di amianto devono essere classificate ed etichettate conformemente ai principi dell'articolo 6 del decreto legislativo 3 febbraio 1997, n. 52.

### 1.7.3. Applicazioni dei criteri guida per i preparati

I criteri guida illustrati nel presente allegato sono direttamente applicabili nel caso in cui i dati in questione siano stati ottenuti mediante metodi di prova comparabili a quelli descritti nell'allegato V, ad eccezione dei criteri di cui al capitolo 4 per i quali è possibile applicare soltanto il metodo convenzionale. Negli altri casi, i dati disponibili devono essere valutati confrontando i metodi di prova utilizzati con quelli indicati nell'allegato V e con norme contenute nel presente allegato, in modo da applicare la classificazione e l'etichettatura appropriate.

Se i pericoli per la salute sono valutati applicando il metodo tradizionale di cui all'articolo 3, paragrafo 5, del decreto ministeriale 28 gennaio 1992, i singoli limiti di concentrazione da utilizzare sono quelli stabiliti:

- nell'allegato I del decreto legislativo 3 febbraio 1997, n. 52, o

nell'allegato I del decreto ministeriale 28 gennaio 1992, qualora la sostanza o le sostanze non figurino nell'allegato I del decreto legislativo 3 febbraio 1997, n. 52 o vi figurino senza limiti di concentrazione.

Nel caso di preparati che contengano miscele di gas, la classificazione relativa agli effetti sulla salute sarà stabilita con il metodo di calcolo in base ai singoli limiti di concentrazione fissati nell'allegato I del decreto legislativo 3 febbraio 1997, n. 52 o, qualora tali limiti non figurino nell'allegato I, in base ai criteri dell'allegato I del decreto ministeriale 28 gennaio 1992



1.7.3.1. *Preparati o sostanze descritte al punto 1.7.2.1, impiegati come costituenti di altri preparati*

L'etichettatura di tali preparati deve essere conforme alle disposizioni dell'articolo 7, alle condizioni previste dall'articolo 3 del decreto ministeriale 28 gennaio 1992. In alcuni casi, tuttavia, le informazioni contenute nell'etichetta del preparato o sostanza descritta al punto 1.7.2.1, non consentono ad altri fabbricanti che desiderino utilizzare il suddetto preparato come costituente dei loro preparati, di eseguire correttamente la classificazione e l'etichettatura dei preparati stessi.

In tal caso il responsabile dell'immissione sul mercato del preparato o della sostanza descritta al punto 1.7.2.1, avente sede nella Comunità, sia questi il fabbricante, l'importatore o il distributore, fornisce, appena possibile e su richiesta giustificata tutti i dati necessari relativi alle sostanze pericolose presenti per consentire la corretta classificazione ed etichettatura del nuovo preparato. Questi dati consentono anche al responsabile dell'immissione sul mercato del nuovo preparato di conformarsi agli altri requisiti previsti dal decreto ministeriale 28 gennaio 1992.

2. CLASSIFICAZIONE IN BASE ALLE PROPRIETA' FISICO-CHIMICHE

2.1. Introduzione

I metodi di prova per la determinazione delle proprietà esplosive, comburenti e di infiammabilità indicati nell'allegato V del decreto legislativo 3 febbraio 1997, n. 52 hanno lo scopo di precisare il significato delle definizioni generali contenute nell'articolo 2, paragrafo 2, lettere da a) a c). I criteri derivano direttamente dai metodi di prova di cui all'allegato V, quando sono menzionati.

Se sono disponibili informazioni adeguate che dimostrino in pratica che le proprietà fisico-chimiche delle sostanze e dei preparati (ad eccezione dei perossidi organici) sono diverse da quelle che si rilevano dai metodi di prova di cui all'allegato V, tali sostanze e preparati dovrebbero essere classificati in funzione del pericolo che eventualmente essi presentano per coloro che manipolano le sostanze ed i preparati o per altri.

2.2. **Criteri per la classificazione, la scelta dei simboli, l'indicazione di pericolo e la scelta delle frasi di rischio**

Nel caso dei preparati è necessario prendere in considerazione i criteri di cui all'articolo 3, paragrafo 2, del decreto ministeriale 28 gennaio 1992

2.2.1. Esplosivo

Le sostanze e i preparati saranno classificati come esplosivi e contrassegnati dal simbolo E e dall'indicazione di pericolo <esplosivo> in base ai risultati delle prove descritte nell'allegato V, e nella misura in cui le sostanze e i preparati sono esplosivi nella forma in cui sono commercializzati. E' obbligatoria una frase relativa ai rischi, da scegliere sulla base di quanto segue:

R2 Rischio di esplosione per urto, sfregamento, fuoco o altre sorgenti d'ignizione

- sostanze e preparati, esclusi quelli elencati in appresso

R3 Elevato rischio di esplosione per urto, sfregamento, fuoco o altre sorgenti d'ignizione

- sostanze e preparati particolarmente sensibili, come i sali dell'acido picrico e la pentrite

2.2.2 Comburente

Le sostanze ed i preparati saranno classificati come comburenti e contrassegnati dal simbolo <O> e dall'indicazione di pericolo <comburente> conformemente ai risultati delle prove

**R11 Facilmente infiammabile**

- Sostanze e preparati che possono facilmente infiammarsi in seguito a un breve contatto con una sorgente di accensione e che continuano a bruciare o a consumarsi anche dopo l'allontanamento di tale sorgente;
- Sostanze e preparati liquidi il cui punto di infiammabilità è inferiore a 21°C ma che non sono estremamente infiammabili.

**R15 A contatto con l'acqua libera gas estremamente infiammabili**

- Sostanze e preparati che, a contatto con l'acqua o l'aria umida, sprigionano gas estremamente infiammabili in quantità pericolose e almeno pari a 1 l/kg/h.

**R17 Spontaneamente infiammabile all'aria**

- Sostanze e preparati che a contatto con l'aria, a temperatura ambiente e senza apporto di energia, possono riscaldarsi e quindi infiammarsi.

**2.2.5. Infiammabile**

Le sostanze e i preparati saranno classificati come infiammabili in base ai risultati delle prove menzionate nell'allegato V. La frase indicante i rischi specifici sarà assegnata tenendo conto dei criteri sottoelencati:

**R10 Infiammabile**

- Sostanze e preparati liquidi il cui punto di infiammabilità è uguale o superiore a 21°C e minore o uguale a 55°C.

Tuttavia, l'esperienza ha dimostrato che un preparato che ha un punto di infiammabilità maggiore o uguale a 21°C e minore o uguale a 55°C può non essere classificato come infiammabile se non può in alcun modo alimentare una combustione e nella misura in cui non sussiste motivo per temere di esporre a pericolo coloro che manipolano i preparati in questione o altre persone.

**2.2.6. Altre proprietà fisico-chimiche**

Ulteriori frasi di indicazione dei rischi saranno assegnate alle sostanze e ai preparati classificati in base ai principi di cui ai punti da 2.2.1 a 2.2.5 (di cui sopra) o ai capitoli 3 e 4 in appresso, conformemente ai seguenti criteri (che si basano sulle esperienze raccolte durante l'elaborazione dell'allegato I).

**R1 Esplosivo allo stato secco**

Per le sostanze e i preparati esplosivi immessi sul mercato in soluzione o in forma umida; ad esempio nitrocellulosa con oltre il 12,6% di azoto.

**R4 Forma composti metallici esplosivi molto sensibili**

Per sostanze e preparati che possono dare luogo alla formazione di sensibili derivati metallici esplosivi, ad esempio acido picrico, acido stiftico.

**R5 Pericolo di esplosione per riscaldamento**

Per sostanze e preparati instabili al calore non classificati come esplosivi, ad esempio acido perclorico > 50%.

**R6 Esplosivo a contatto o senza contatto con l'aria**

Per sostanze e preparati instabili a temperatura ambiente, ad esempio acetilene.

menzionate nell'allegato V. E' obbligatoria una frase indicante i rischi specifici, da scegliere sulla base dei risultati delle prove e tenendo conto di quanto segue:

**R7 Può provocare un incendio**

- perossidi organici che possono infiammarsi anche quando non sono a contatto con altri materiali combustibili

**R8 Può provocare l'accensione di materie combustibili**

- altre sostanze e preparati comburenti, compresi i perossidi inorganici, che possono infiammarsi o aggravare il rischio di incendio quando sono a contatto con materiali combustibili.

**R9 Esplosivo in miscela con materiali combustibili**

- altre sostanze e preparati, compresi i perossidi inorganici, che diventano esplosivi se miscelati con materiali combustibili, ad esempio alcuni clorati.

**2.2.2.1. Osservazioni concernenti i perossidi organici**

Gli attuali metodi di cui all'allegato V non possono essere applicati ai perossidi organici per le proprietà comburenti.

Per le sostanze, i perossidi organici sono classificati come comburenti in base alla loro struttura (ad es. R-O-O-H; R1-O-O-R2).

I preparati sono classificati usando il metodo di calcolo basato sulla presenza dell'ossigeno attivo di cui al punto 9.3.

Ogni preparato contenente perossido organico è pertanto classificato come comburente se contiene:

- più del 5% di perossidi organici o
- più dello 0,5% di ossigeno disponibile dai perossidi organici e non più del 5% di perossido idrogeno.

**2.2.3. Estremamente infiammabile**

Le sostanze e i preparati saranno classificati come estremamente infiammabili e contrassegnati dal simbolo F+ e dall'indicazione di pericolo <estremamente infiammabile> in funzione dei risultati delle prove previste dall'allegato V. La frase indicante i rischi specifici viene assegnata in base ai seguenti criteri:

**R12 Estremamente infiammabili**

- sostanze e preparati liquidi che hanno un punto di infiammabilità inferiore a 0°C e un punto di ebollizione (o, nel caso di un intervallo di ebollizione, il punto iniziale di ebollizione) inferiore o uguale a 35°C
- sostanze e preparati gassosi che a temperatura e pressione ambiente si infiammano a contatto con l'aria

**2.2.4. Facilmente infiammabile**

Le sostanze e i preparati saranno classificati come facilmente infiammabili e contrassegnati dal simbolo F e dall'indicazione di pericolo <facilmente infiammabile> in funzione dei risultati delle prove contenute nell'allegato V. Le frasi indicanti i rischi specifici verranno assegnate in base ai seguenti criteri:

**R7 Può provocare un incendio**

Per sostanze e preparati reattivi, ad esempio fluoro, idrosolfato di sodio.

**R14 Reagisce violentemente con l'acqua**

Per sostanze e preparati che reagiscono violentemente con l'acqua, ad esempio cloruro di acetile, metalli alcalini e tetracloruro di titanio.

**R16 Pericolo di esplosione se mescolato con sostanze comburenti**

Per sostanze e preparati che reagiscono in modo esplosivo in presenza di comburenti, ad esempio fosforo rosso.

**R18 Durante l'uso può formare con aria miscele esplosive/infiammabili**

Per preparati che non sono classificati come infiammabili in quanto tali, ma che contengono componenti volatili infiammabili nell'aria.

**R19 Può formare perossidi esplosivi**

Per sostanze e preparati che durante il magazzinaggio possono dar luogo alla formazione di perossidi esplosivi, ad esempio etere dietilico, 1,4-diossano.

**R30 Può divenire facilmente infiammabile durante l'uso**

Per preparati non classificati come infiammabili in quanto tali ma che possono divenire infiammabili in seguito alla perdita di componenti volatili non infiammabili.

**R44 Rischio di esplosione per riscaldamento in ambiente confinato**

Per le sostanze e preparati che non sono classificati come esplosivi in base al punto 2.2.1 ma che presentano nondimeno proprietà esplosive se riscaldati in un contenitore chiuso. Ad esempio, alcune sostanze che esploderebbero se riscaldate in un fusto di acciaio ma che non presentano tali reazioni se riscaldate in contenitori meno robusti.

Per ulteriori frasi concernenti i rischi, vedere il paragrafo 3.2.7.

**3. CLASSIFICAZIONE IN BASE ALLE PROPRIETA' TOSSICOLOGICHE****3.1. Introduzione****3.1.1. La classificazione si basa sugli effetti acuti e su quelli a lungo termine delle sostanze e dei preparati, siano essi dovuti ad un'unica esposizione o ad un'esposizione ripetuta o prolungata.**

Se è possibile provare che l'effetto tossico sull'uomo delle sostanze e dei preparati è o potrebbe essere diverso da quello messo in evidenza dai risultati sperimentali ottenuti con le prove su animali o con l'applicazione del metodo convenzionale di cui all'articolo 3, paragrafo 5, del decreto ministeriale 28 gennaio 1992, le sostanze e i preparati vanno classificati in base alla tossicità per l'uomo. Tuttavia le prove sull'uomo dovrebbero essere scoraggiate e in nessun caso dovrebbero essere utilizzate per confutare i dati positivi riscontrati sugli animali.

**3.1.2. La classificazione delle sostanze deve essere eseguita sulla base dei dati sperimentali disponibili in conformità dei criteri elencati in appresso, che prendono in considerazione l'entità dei suddetti effetti:**

- a) per la tossicità acuta (effetti letali ed irreversibili dopo un'unica esposizione), i criteri di cui ai paragrafi dal 3.2.1 al 3.2.3;

- b) per la tossicità subacuta, subcronica o cronica, i criteri di cui ai paragrafi dal 3.2.2 al 3.2.4;
- c) per gli effetti corrosivi ed irritanti, i criteri di cui ai paragrafi dal 3.2.5 al 3.2.6;
- d) per gli effetti di sensibilizzazione, i criteri di cui al paragrafo 3.2.7;
- e) per gli effetti specifici sulla salute (effetti cancerogeni, mutageni e tossicità per la riproduzione), i criteri di cui al capitolo 4.

**3.1.3. Nel caso dei preparati, la classificazione relativa ai pericoli per la salute viene eseguita:**

- a) sulla base del metodo convenzionale di cui all'articolo 3, paragrafo 5 del decreto ministeriale 28 gennaio 1992 (in mancanza di dati sperimentali).

In tal caso, la classificazione si basa sui limiti di concentrazione specificati:

- nell'allegato 1 del decreto legislativo 3 febbraio 1997, n. 52;
- o nell'allegato 1 del decreto ministeriale 28 gennaio 1992, qualora la sostanza o le sostanze non figurino nell'allegato 1 del decreto legislativo 3 febbraio 1997, n. 52 o vi figurino senza limiti di concentrazione.
- b) o, qualora siano disponibili dati sperimentali, in conformità dei criteri di cui al punto 3.1.2, ad esclusione delle proprietà cancerogene, mutagene e tossiche per la riproduzione previste al punto 3.1.2, lettera e), che devono essere valutate con il metodo convenzionale di cui all'articolo 3 (5) da (j) a (q) del decreto ministeriale 28 gennaio 1992.

Qualunque sia il metodo utilizzato per valutare la pericolosità di un preparato, è necessario prendere in considerazione tutti gli effetti pericolosi per la salute definiti nell'allegato 1 del decreto ministeriale 28 gennaio 1992.

**3.1.4. Quando la classificazione deve basarsi sui risultati sperimentali ottenuti con prove su animali, i risultati debbono essere validi anche per l'uomo, cioè le prove devono riprodurre in maniera adeguata i rischi per l'uomo.**

**3.1.5. La tossicità acuta per via orale delle sostanze o dei preparati immessi sul mercato può essere determinata con un metodo che consenta di valutare il valore LD<sub>50</sub> oppure determinando la dose discriminante (metodo a dose fissa).**

La dose discriminante è quella che provoca tossicità evidente ma non la mortalità e deve essere uno dei quattro livelli di dose specificati nell'allegato V (5, 50, 500 o 2000 mg per kg di peso corporeo).

Il concetto di <tossicità evidente> serve a designare gli effetti tossici dopo esposizione alla sostanza sperimentata che sono così gravi che un'ulteriore esposizione alla successiva dose fissata provocherebbe probabilmente mortalità.

I risultati delle prove ad una dose particolare possono essere i seguenti:

- sopravvivenza inferiore al 100%
- sopravvivenza del 100%, ma con tossicità evidente
- sopravvivenza del 100%, senza nessuna tossicità evidente

Il metodo sperimentale in alcuni casi richiede prove a dosi superiori o inferiori se non sono ancora state effettuate prove al livello di dose pertinente. Vedi anche la tabella di valutazione del metodo di prova BI bis dell'allegato V.

Nei criteri di cui ai punti 3.2.1, 3.2.2 e 3.2.3 è indicato soltanto il risultato di prova finale. La dose 2000 mg/kg dovrebbe essere usata principalmente per ottenere informazioni sugli effetti tossici delle sostanze a bassa tossicità acuta e che non sono classificate in base al criterio di tossicità acuta.

**3.2. Criteri per la classificazione, la scelta dei simboli, l'indicazione di pericolo e la scelta delle frasi di rischio**

**3.2.1. Molto tossico**

Le sostanze e i preparati saranno classificati come molto tossici e contrassegnati dal simbolo T+ e dall'indicazione di pericolo <molto tossico> sulla base dei criteri qui di seguito specificati.

Le frasi indicanti i rischi saranno assegnate sulla base dei seguenti criteri:

**R28 Molto tossico per ingestione**

Risultati tossicità acuta:

- DL<sub>50</sub> per via orale, ratto:  $\leq 25$  mg/kg
- dose discriminante, per via orale, ratto 5 mg/kg: sopravvivenza inferiore al 100% (metodo a dose fissa)

**R27 Molto tossico a contatto con la pelle**

Risultati tossicità acuta:

- DL<sub>50</sub> per via cutanea, ratto o coniglio:  $\leq 50$  mg/kg

**R26 Molto tossico per inalazione**

Risultati tossicità acuta:

- CL<sub>50</sub> per inalazione, ratto, per aerosol o particelle:  $\leq 0,25$  mg/l/4 h
- CL<sub>50</sub> per inalazione, ratto, per gas e vapori:  $\leq 0,5$  mg/l/4 h

**R39 Pericolo di effetti irreversibili molto gravi**

- esistono valide indicazioni per ritenere che danni irreversibili, diversi da quelli esaminati nel capitolo 4 potrebbero essere causati da un'unica esposizione per via appropriata, in generale di dose compresa nella gamma di valori summenzionati.

Per indicare le modalità di somministrazione/esposizione, usare una delle combinazioni seguenti: R39/26, R39/27, R39/28, R39/26/27, R39/27/28, R39/26/27/28.

**3.2.2 Tossico**

Le sostanze e i preparati saranno classificati come tossici e contrassegnati dal simbolo T e dall'indicazione di pericolo <tossico> conformemente ai criteri sottoindicati. Le frasi indicanti rischi specifici saranno assegnate in base ai seguenti criteri:

**R25 Tossico per ingestione**

Risultati tossicità acuta:

- DL<sub>50</sub> per via orale; ratto:  $25 < DL_{50} \leq 200$  mg/kg
- dose discriminante, per via orale, ratto, 5 mg/kg: sopravvivenza del 100% ma tossicità evidente

**R42 Tossico a contatto con la pelle****Risultati tossicità acuta**

- $DL_{50}$  per via cutanea, ratto o coniglio:  $50 < DL_{50} \leq 400$  mg/kg

**R23 Tossico per inalazione****Risultati tossicità acuta:**

- $CL_{50}$  per inalazione, ratto, per aerosol o particelle:  $0,25 < CL_{50} \leq 1$  mg/l/4 h
- $CL_{50}$  per inalazione, ratto, per gas e vapori:  $0,5 < CL_{50} \leq 2$  mg/l/4 h

**R39 Pericolo di effetti irreversibili molto gravi**

- esistono valide indicazioni per ritenere che danni irreversibili, diversi da quelli presi in considerazione nel capitolo 4, potrebbero essere causati da un'unica esposizione per via appropriata, in generale di dose compresa nella gamma di valori summenzionata.

Per indicare le modalità di somministrazione/esposizione, usare una delle combinazioni seguenti: R39/23, R39/24, R39/25, R39/23/24, R39/23/25, R39/24/25, R39/23/24/25.

**R48 Pericolo di gravi danni per la salute in caso di esposizione prolungata**

- gravi danni (evidenti disturbi funzionali o mutamenti morfologici che abbiano rilevanza sul piano tossicologico) potrebbero essere causati da esposizioni ripetute o prolungate per via appropriata.

Le sostanze e i preparati sono classificati per lo meno come tossici qualora si osservino i suddetti effetti a livelli di intensità di un ordine di grandezza inferiore rispetto a quelli specificati al punto 3.2.3 per la frase R48 (ad esempio 10 volte).

Per indicare le modalità di somministrazione/esposizione, usare una delle combinazioni seguenti: R48/23, R48/24, R48/25, R48/23/24, R48/23/25, R48/24/25, R48/23/24/25.

**3.2.3. Nocivo**

Le sostanze e i preparati saranno classificati come nocivi e contrassegnati dal simbolo Xn e dall'indicazione di pericolo <nocivo> in base ai criteri indicati qui di seguito. Le frasi indicanti rischi specifici saranno assegnate secondo i seguenti criteri:

**R22 Nocivo per ingestione****Risultati tossicità acuta**

- $DL_{50}$  per via orale, ratto:  $200 < DL_{50} \leq 2000$  mg/kg
- dose discriminante, per via orale, ratto, 50 mg/kg sopravvivenza del 100%, ma tossicità evidente
- dose discriminante, per via orale, ratto, 500 mg/kg: sopravvivenza inferiore al 100%, vedi tabelle di valutazione del metodo BI bis dell'allegato V

**R21 Nocivo a contatto con la pelle****Risultati tossicità acuta**

- $DL_{50}$  per via cutanea, ratto o coniglio:  $400 < DL_{50} \leq 2000$  mg/kg

**R20 Nocivo per inalazione**

**Risultati tossicità acuta:**

- $CL_{50}$  per via inalazione; ratto per aerosol o particelle :  $1 < CL_{50} \leq 5 \text{ mg/l/4 h}$
- $CL_{50}$  per via inalazione; ratto per gas o vapori:  $2 < CL_{50} \leq 20 \text{ mg/l/4 h}$

**R65 Nocivo: può causare danni ai polmoni in caso di ingestione**

Le sostanze e i preparati liquidi che presentano per l'uomo un rischio di aspirazione data la loro ridotta viscosità:

a) le sostanze e i preparati liquidi che contengono idrocarburi alifatici, aliciclici e aromatici in una concentrazione totale uguale o superiore al 10% e caratterizzati da:

- un tempo di scorrimento inferiore a 30 secondi in una vaschetta ISO di 3 mm, conformemente alla norma EN 535, oppure
- una viscosità cinematica inferiore a  $7 \times 10^{-6} \text{ m}^2/\text{secondo}$  a  $40^\circ\text{C}$ , misurata in un viscosimetro a capillare calibrato in vetro conformemente alla norma ISO 3104/3105, oppure
- una viscosità cinematica inferiore a  $7 \times 10^{-6} \text{ m}^2/\text{secondo}$  a  $40^\circ\text{C}$ , dedotta dalla misurazione della viscosità di rotazione conformemente alla norma ISO 3219.

Nota: le sostanze e i preparati che rispettano questi criteri non devono essere classificati se la tensione superficiale media è superiore a  $25 \text{ mN/m}$  a  $40^\circ\text{C}$ .

b) altre sostanze e preparati che non rispondono ai suddetti criteri, sulla base di esperienze pratiche sull'uomo.

**R40 Possibilità di effetti irreversibili**

- esistono valide indicazioni per ritenere che danni irreversibili, diversi dagli effetti specificati nel capitolo 4, potrebbero essere causati da un'unica esposizione per via appropriata, in generale di dose compresa nella gamma di valori sopraindicata.

Per indicare le modalità di somministrazione/esposizione, usare una delle combinazioni seguenti: R40/20, R40/21, R40/22, R40/20/21, R40/20/22, R40/21/22, R40/20/21/22.

**R48 Pericolo di gravi danni per la salute in caso di esposizione prolungata**

- gravi danni (evidenti disturbi funzionali o mutamenti morfologici di rilevanza tossicologica) potrebbero essere causati da un'esposizione ripetuta o prolungata per via appropriata;

Le sostanze e i preparati sono classificati perlomeno come nocivi quando si osservano i suddetti effetti a livello dell'ordine di:

- per via orale, ratto  $\leq 50 \text{ mg/kg}$  (di peso corporeo)/giorno
- per via cutanea, ratto o coniglio  $\leq 100 \text{ mg/kg}$  (di peso corporeo)/giorno
- per inalazione, ratto,  $\leq 0,25 \text{ mg/l}$ , 6h/giorno

Questi valori guida possono applicarsi direttamente qualora nel corso di una prova di tossicità subcronica (90 giorni) siano state osservate gravi lesioni. Per l'interpretazione dei risultati di prove di tossicità subacuta (28 giorni), le suddette cifre sono circa 3 volte maggiori. Qualora esista una prova di tossicità cronica (2 anni), questa dovrebbe essere valutata caso per caso: Se esistono risultati di studi di diversa durata, generalmente si utilizzano quelli ricavati dallo studio di più lunga durata.

Per indicare le modalità di somministrazione/esposizione, usare una delle combinazioni seguenti: R48/20, R48/21, R48/22, R48/20/21, R48/21/22, R48/20/21/22.



### 3.2.3.1. Osservazioni riguardanti le sostanze molto volatili

Per alcune sostanze con una tensione di vapore molto elevata possono esservi dei segni che indicano gli effetti atti a suscitare preoccupazione. Tali sostanze possono non essere classificate in base ai criteri per gli effetti sulla salute di cui al punto 3.2.3. Se però si hanno delle prove del possibile rischio legato alla manipolazione e all'uso normali di tali sostanze, può essere necessario usare la classificazione <nocivo>, caso per caso, con una frase adeguata.

Tali sostanze saranno classificate nell'allegato I con gli opportuni limiti di concentrazione.

### 3.2.4. Osservazioni concernenti l'impiego della frase R48

Questa frase di rischio è utilizzata per la gamma specifica di effetti biologici secondo le definizioni fornite in appresso. Per l'applicazione di questa frase di rischio, la definizione di gravi danni per la salute comprende la morte, evidenti disturbi funzionali o mutamenti morfologici di rilevanza tossicologica, soprattutto qualora tali mutamenti siano irreversibili. E' altresì importante prendere in considerazione non solo specifici mutamenti gravi in un unico organo o sistema biologico, ma anche mutamenti generalizzati meno gravi in più organi, o mutamenti gravi nello stato generale di salute.

Le indicazioni fornite in appresso servono da riferimento per valutare l'esistenza dei suddetti effetti.

#### 1. Prove che determinano l'impiego della frase R48

##### a) Morte correlata a una sostanza

b) i) gravi mutamenti funzionali nel sistema nervoso centrale o periferico, inclusa la vista, l'udito e l'odorato, riscontrati tramite osservazioni cliniche o altri metodi adeguati (ad es. l'elettrofisiologia).

ii) gravi mutamenti funzionali in altri apparati (ad es. polmoni).

c) qualsiasi mutamento rilevante nei parametri clinici biochimici, ematologici e delle analisi delle urine che indicano gravi disfunzioni organiche. I disturbi a livello ematologico sono particolarmente importanti qualora esistano prove che questi sono dovuti ad una minore produzione di cellule ematiche da parte del midollo osseo

d) gravi danni organici riscontrati all'esame al microscopio a seguito di un'autopsia.

i) necrosi diffuse o gravi, formazione di fibrosi o di granulomi in organi vitali con capacità rigenerativa (ad esempio il fegato).

ii) gravi mutamenti morfologici potenzialmente reversibili, che indicano tuttavia un'evidente disfunzione organica (ad esempio una grave infiltrazione grassa nel fegato, una grave nefropatia tubulare acuta nel rene, una gastrite ulcerosa).

iii) prove di una estesa morte cellulare in organi vitali che non si rigenerano (ad esempio la fibrosi del miocardio o la degenerazione di un nervo, o nelle popolazioni di cellule staminali (ad esempio l'aplasia o l'ipoplasia del midollo osseo).

Le suddette prove sono generalmente ricavate da esperimenti su animali. Quando si valutano i dati ricavati dall'esperienza pratica, è necessario prestare particolare attenzione ai livelli di esposizione.

#### 2. Prove indicanti che la frase R48 non deve essere utilizzata.

L'impiego della suddetta frase di rischio è limitata ai casi di <gravi danni per la salute in caso di esposizione prolungata>. Sia negli esseri umani sia negli animali è possibile osservare un certo numero di effetti correlati alle sostanze che non giustificano l'impiego della frase R48 e che sono comunque rilevanti quando si voglia determinare un livello di <manca di effetto> di una

sostanza chimica. Segue un elenco di mutamenti ben documentati che, indipendentemente dalla loro rilevanza statistica, normalmente non richiedono l'impiego della frase R48.

- a) osservazioni o mutamenti clinici nell'aumento del peso, nel consumo di cibo o nell'assunzione di acqua che possono avere una certa rilevanza tossicologica ma che, di per se stessi, non sono indice di <gravi danni>.
- b) piccoli mutamenti nei parametri clinici biochimici, ematologici e delle analisi delle urine, di dubbia o minima importanza tossicologica.
- c) mutamenti di peso degli organi senza segni di disfunzioni organiche.
- d) risposte di adattamento (ad esempio migrazione di macrofagi nel polmone, ipertrofia epatica ed induzione enzimatica, risposte iperplastiche alle sostanze irritanti). Effetti locali sulla pelle dovuti all'applicazione cutanea ripetuta di una sostanza, classificati più propriamente con la frase R38 <Irritante per la pelle>.
- e) nei casi in cui si sia dimostrato un meccanismo di tossicità specifico di specie (ad esempio tramite <cicli metabolici specifici>).

### 3.2.5. Corrosivo

Una sostanza o un preparato sono considerati corrosivi se, applicati sulla pelle sana ed intatta di un animale, distruggono l'intero spessore del tessuto cutaneo in almeno un animale durante l'esecuzione della prova di irritazione cutanea di cui all'allegato V o di un metodo equivalente, ovvero se il risultato può essere previsto, ad esempio in base alle reazioni fortemente acide o alcaline (pH dimostrato di 2 o meno o 11,5 o superiore. Si deve tener conto anche della riserva alcalina o acidica). La classificazione può basarsi sui risultati di prove in vitro convalidate.

Le sostanze ed i preparati saranno classificati come corrosivi e contrassegnati dal simbolo C e dall'indicazione di pericolo <Corrosivo>. Le frasi di rischio verranno assegnate conformemente ai seguenti criteri:

#### R35 Provoca gravi ustioni

- se, in caso di applicazione sulla pelle sana ed intatta di un animale, distrugge l'intero spessore del tessuto cutaneo dopo un'esposizione di non oltre 3 minuti o se questo risultato può essere previsto.

#### R34 Provoca ustioni

- se, in caso di applicazione sulla pelle sana ed intatta di un animale, distrugge l'intero spessore del tessuto cutaneo dopo un'esposizione di non oltre 4 ore o se tale risultato può essere previsto.
- idroperossidi organici, tranne se si hanno prove del contrario.

### 3.2.6. Irritante

Le sostanze e i preparati saranno classificati come irritanti e contrassegnati con il simbolo Xi e l'indicazione di pericolo <Irritante> in conformità dei criteri qui di seguito.

#### 3.2.6.1 Infiammazione della pelle

Le seguenti frasi di rischio saranno assegnate conformemente ai criteri indicati:

#### R38 Irritante per la pelle

- Sostanze e preparati che provocano una significativa infiammazione della pelle che persista per almeno 24 ore dopo un periodo massimo di esposizione di 4 ore, determinati sul coniglio secondo il metodo di prova dell'irritazione cutanea di cui all'allegato V.

L'infiammazione della pelle è significativa se:

- il valore medio del conteggio per l'eritema e la formazione di escara o la formazione di edema, calcolato per tutti gli animali sottoposti a prova, pari o superiore a 2,
- ovvero, nello svolgimento della prova dell'allegato V su tre animali, quando si osservi in almeno due animali eritema e formazione di escara o formazione di edema di valore medio pari o superiore a 2 calcolato per ciascun animale separatamente.

In ambedue i casi tutti i risultati del conteggio per ciascuno dei tempi di rilevazione degli effetti (24, 48, 72 ore) vanno utilizzati per calcolare i rispettivi valori medi.

L'infiammazione della pelle è inoltre significativa se persiste in almeno due animali al termine del periodo di osservazione. Si dovranno prendere in considerazione effetti particolari, quali iperplasia, desquamazione, scolorimento, screpolature, croste e alopecia.

- Sostanze e preparati che provocano una significativa infiammazione della pelle, in base ad osservazioni pratiche sulle persone.
- Perossidi organici, tranne nei casi in cui si ha la prova del contrario.

Irritazione dovuta alle caratteristiche sgrassanti di una sostanza:

Se in base ai risultati di prove oppure all'esperienza pratica si riscontra irritazione in base ai criteri precedenti, usare frasi di rischio. Si devono tuttavia usare frasi S se vi sono motivi per sospettare che le caratteristiche sgrassanti della sostanza possono provocare irritazione nelle persone anche se non vi è rispondenza con i criteri di cui sopra oppure è stata utilizzata una prova inopportuna.

### 3.2.6.2. Lesioni oculari

Le seguenti frasi di rischio saranno assegnate anche conformemente ai criteri indicati:

#### R36 Irritante per gli occhi

- Sostanze e preparati che, se applicati sugli occhi dell'animale, provocano entro 72 ore dall'esposizione significative lesioni oculari che persistono per almeno 24 ore

Le lesioni oculari sono significative se i risultati medi della prova di irritazione oculare di cui all'allegato V corrispondono a uno dei seguenti valori:

- opacità della cornea pari o superiore a 2 ma inferiore a 3,
- lesione dell'iride pari o superiore a 1 ma non superiore a 1,5,
- arrossamento della congiuntiva pari o superiore a 2,5,
- edema della congiuntiva (chemosi) pari o superiore a 2

o quando, nel caso in cui la prova dell'allegato V sia effettuata su tre animali, le lesioni in due o più animali presentano valori equivalenti a quelli sopra indicati, salvo nel caso della lesione dell'iride il cui valore dovrebbe essere uguale o superiore a 1 ma inferiore a 2 e dell'arrossamento della congiuntiva il cui valore dovrebbe essere uguale o superiore a 2,5

In ambedue i casi tutti i risultati del conteggio per ciascuno dei tempi di rilevazione degli effetti (24, 48, 72 ore) vanno utilizzati per calcolare i rispettivi valori medi

- Sostanza o preparati che provocano significative lesioni oculari verificate attraverso osservazioni pratiche sulle persone.

- Perossidi organici tranne se si hanno prove del contrario.

#### R41 Rischio di gravi lesioni oculari

- Sostanze e preparati che se applicati nell'occhio di un animale, entro 72 ore dall'esposizione producono gravi lesioni che persistono per almeno 24 ore o più dopo l'istillazione del prodotto in esame.

Le lesioni oculari sono gravi se le medie dei valori della prova di irritazione oculare di cui all'allegato V sono pari a uno dei seguenti valori:

- opacità della cornea uguale o maggiore di 3;
- lesione dell'iride maggiore di 1,5.

Lo stesso vale nel caso in cui la prova sia stata eseguita su tre animali se le lesioni, in due o più animali, presentano uno dei seguenti valori:

- opacità della cornea uguale o maggiore di 3;
- lesione dell'iride uguale a 2.

In entrambi i casi tutti i risultati di ciascun tempo di rilevazione degli effetti (24, 48 e 72 ore) vanno utilizzati per calcolare i rispettivi valori medi.

Le lesioni oculari sono anche gravi se persistono alla fine del tempo di osservazione.

Le lesioni oculari sono anche gravi se la sostanza o il preparato provocano una colorazione irreversibile dell'occhio:

Sostanze e preparati che provocano gravi lesioni oculari, verificate attraverso osservazioni pratiche sulle persone.

Nota:

Se una sostanza o un preparato sono classificati come corrosivi e contrassegnati con R34 o R 35, il rischio di grave danno all'occhio va considerato implicito e R41 non figura sull'etichetta. Tuttavia nel caso di preparati nel calcolo del totale dei quozienti in base alla formula di cui ai punti 3.5 (f) (ii) e 3.5 (h) (ii) del decreto ministeriale 28 gennaio 1992, le sostanze classificate come corrosive devono essere considerate come se la frase R41 sia stata assegnata.

#### 3.2.6.3. Irritazione delle vie respiratorie

La seguente frase di rischio sarà assegnata conformemente ai suddetti criteri:

##### R37 Irritante per le vie respiratorie

Sostanze e preparati che causano gravi irritazioni del sistema respiratorio, verificate attraverso

- osservazioni pratiche nell'uomo
- reazioni positive negli esperimenti sugli animali.

Osservazioni concernenti l'impiego della frase R37

Nell'interpretare le osservazioni pratiche nell'uomo, occorre fare la distinzione tra gli effetti che determinano la classificazione con la frase R48 (cfr. sezione 3.2.4) e gli effetti che determinano la classificazione con la frase R37. Le condizioni che normalmente determinano la classificazione con R37 sono reversibili e solitamente limitate alle vie respiratorie superiori.

Risultati positivi ottenuti con prove adeguate su animali possono includere dei dati ottenuti in una prova di tossicità, in particolare dati istopatologici relativi al sistema respiratorio. Per valutare l'irritazione delle vie respiratorie si possono utilizzare dei dati ottenuti con la bradipnea provocata.

### 3.2.7. Sensibilizzazione

#### 3.2.7.1. Sensibilizzazione per inalazione

Le sostanze e i preparati sono classificati come sensibilizzanti e contrassegnati dal simbolo "Xn", dall'indicazione del pericolo "nocivo" e dalla frase di rischio R42 secondo i seguenti criteri:

R42 Può provocare sensibilizzazione per inalazione

- se esistono prove che dimostrano che le sostanze e i preparati possono provocare una ipersensibilità respiratoria specifica
- se gli esperimenti sugli animali hanno dato risultati positivi
- se la sostanza è un isocianato, a meno che non sia stato provato che essa non provochi un'ipersensibilità respiratoria.

Osservazioni concernenti l'impiego della frase R42

Effetti sull'uomo

Le prove che la sostanza può provocare un'ipersensibilità respiratoria specifica saranno in linea di massima basate sugli esperimenti pratici sull'uomo. In queste condizioni, l'asma viene considerata come manifestazione dell'ipersensibilità, ma si tiene conto di altre reazioni come la rinite e l'alveolite. La condizione osservata si presenterà come una reazione allergica, tuttavia non è necessario dimostrare la presenza di meccanismi immunologici.

Nei casi esaminare le prove risultanti dall'esposizione dell'uomo, oltre alle prove fornite dai casi considerati, occorre tener conto degli elementi seguenti:

- importanza della popolazione esposta
- grado di esposizione.

Le suddette prove possono essere:

- antecedenti medici e dati ottenuti con delle prove specifiche di funzionalità polmonare in relazione ad esposizioni alla sostanza, confermate da altre prove, ad esempio:
  - una struttura chimica associata a sostanze che notoriamente causano un'ipersensibilità respiratoria;
  - una prova immunologica in vivo (ad esempio, test cutaneo);
  - una prova immunologica in vitro (ad esempio, analisi sierologica);
- studi che possono evidenziare altri meccanismi specifici, non immunologici, ad esempio una leggera irritazione ricorrente o effetti indotti da un'azione farmacologica;
- dati ottenuti nel corso di prove positive di provocazione sui bronchi svolte secondo orientamenti comunemente accettati per la determinazione di una reazione specifica d'ipersensibilità

Gli antecedenti clinici devono includere sia gli antecedenti medici che quelli professionali, al fine di determinare la relazione tra l'esposizione ad una sostanza particolare e lo sviluppo di un'ipersensibilità respiratoria. Le informazioni di cui tener conto vertono in particolare sui fattori di aggravamento sia nel proprio domicilio che sul posto di lavoro, sulla comparsa e

l'evoluzione della malattia, sugli accertamenti familiari e medici del paziente esaminato. Gli antecedenti medici devono includere anche la menzione di altri disordini allergici o respiratori comparsi durante l'infanzia, nonché gli antecedenti legati al tabagismo.

I risultati delle prove positive di provocazione sui bronchi sono considerati prove sufficienti ai fini della classificazione. Si riconosce tuttavia che nella pratica molti dei suddetti esami saranno stati già effettuati.

Le sostanze che provocano sintomi di asma per irritazione solo nei soggetti che soffrono di iperreattività dei bronchi non devono essere caratterizzati con la frase R42.

#### Studi sugli animali

I dati ottenuti dalle prove che possono indicare la capacità di una sostanza di provocare una sensibilizzazione mediante inalazione nell'uomo possono essere in particolare:

- misurazione dell'IgE (per esempio sui topi)
- reazioni polmonari specifiche nelle cavie.

#### 3.2.7.2. Sensibilizzazione per contatto con la pelle

Le sostanze e i preparati saranno classificati come sensibilizzanti e contrassegnati dal simbolo "Xi", dall'indicazione di pericolo "Irritante" e dalla frase di rischio "R43", conformemente ai criteri seguenti:

**R43** Può comportare una sensibilizzazione per contatto con la pelle

- se l'esperienza dimostra che le sostanze e i preparati possono provocare una sensibilizzazione per contatto con la pelle in un numero significativo di persone;  
se delle prove adeguate sugli animali danno risultati positivi.

Osservazioni concernenti l'impiego della frase R43.

#### Prove degli effetti sull'uomo

Le prove seguenti (esperienza pratica) sono sufficienti per classificare una sostanza con la frase R43:

- dati positivi ottenuti con adeguati test cutanei, in linea di massima effettuati in più cliniche dermatologiche, o
- studi epidemiologici che dimostrino la comparsa di dermatosi allergiche da contatto causati dalla sostanza. Le situazioni in cui buona parte delle persone esposte manifestano sintomi caratteristici devono essere valutate con particolare attenzione, anche se in numero di casi è ridotto; o
- dati positivi ottenuti nel corso di studi sperimentali nell'uomo (cfr. il paragrafo 3.1.1).

Gli elementi sono sufficienti per classificare una sostanza con la frase R43 se sono corroborati da prove:

- episodi isolati di dermatite allergica da contatto, o
- studi epidemiologici in cui il caso, le distorsioni o i sintomi equivoci non sono stati esclusi con ragionevole certezza.

Le prove a sostegno possono essere in particolare:

- dati ottenuti nel corso di prove sugli animali realizzate sulla base di orientamenti noti, con risultati non conformi ai criteri illustrati nella sezione relativa agli studi sugli animali, ma sufficientemente vicini ai limiti per essere considerati significativi;

- dati ottenuti con metodi non normalizzati, o
- rapporti adeguati struttura-attività.

#### Studi sugli animali

Risultati positivi di prove pertinenti sugli animali sono:

nel caso del metodo di prova di tipo ausiliare per la sensibilizzazione della pelle di cui all'allegato V o nel caso di altri metodi di prova di tipo ausiliare, una reazione di almeno 30 % degli animali è considerata positiva. Per tutti gli altri metodi di prova, una reazione di almeno 15% degli animali è considerata positiva.

#### 3.2.7.3. *Orticaria immunologica da contatto*

Determinate sostanze che rispondono ai criteri della frase R42 possono inoltre provocare orticaria immunologica da contatto. In questo caso, occorre includere informazioni relative alle orticarie da contatto avvalendosi delle frasi S pertinenti (generalmente le frasi S24 e S36/37) e inserendole nella scheda dei dati relativi alla sicurezza.

Per le sostanze che provocano orticarie immunologiche da contatto e che non rispondono ai criteri corrispondenti alla frase R42, è opportuno prevedere la classificazione con la frase R43.

Non esistono modelli animali riconosciuti per individuare le sostanze che provocano delle orticarie da contatto. La classificazione pertanto si dovrà basare sui risultati ottenuti con le prove sull'uomo, simili a quelle relative alla sensibilizzazione cutanea (R43).

#### 3.2.7.4. E' opportuno rilevare che se si attribuisce il simbolo "Xn" e l'indicazione di pericolo "nocivo", il simbolo "Xi" e l'indicazione di pericolo "irritante" sono facoltativi.

#### 3.2.8. Altre proprietà tossicologiche

Ulteriori frasi di rischio saranno assegnate alle sostanze e preparati classificati in base ai principi di cui ai punti da 2.2.1 a 3.2.7, conformemente ai seguenti criteri (che si basano sulle esperienze raccolte durante l'elaborazione dell'allegato I):

##### R29 A contatto con l'acqua libera gas tossici

Per sostanze e preparati che a contatto con l'acqua o con l'aria umida sprigionano gas tossici o molto tossici in quantitativi potenzialmente pericolosi, ad esempio fosfuro di alluminio, pentasolfuro di fosforo.

##### R31 A contatto con acidi libera gas tossici

Per sostanze e preparati che reagiscono con acidi sprigionando gas tossici in quantità pericolose, ad esempio ipoclorito di sodio, polisolfuro di bario. Per le sostanze in vendita al dettaglio sarebbe più opportuno utilizzare la frase S50 [non mescolare con ... (da specificare da parte del fabbricante)].

##### R32 A contatto con acidi libera gas molto tossici

Per sostanze e preparati che reagiscono con acidi sprigionando gas molto tossici in quantità pericolosa, ad esempio sali dell'acido cianidrico, azoturo di sodio. Per le sostanze in vendita al dettaglio sarebbe più opportuno utilizzare la frase S50 [non mescolare con ... (da specificare da parte del fabbricante)].

##### R33 Pericolo di effetti cumulativi

Per sostanze e preparati il cui accumulo nell'organismo umano può apparire preoccupante, non però di gravità tale da indurre a utilizzare la frase R48.

**R64 Possibile rischio per i bambini allattati al seno**

Per le sostanze e i preparati, assorbiti dalle donne, che possono interferire con la lattazione o che possono essere presenti (metaboliti compresi) nel latte materno in quantità sufficienti a causare preoccupazioni per la salute dei bambini.

Per ulteriori frasi di rischio cfr. punto 2.2.6

**4. CLASSIFICAZIONE IN BASE AGLI EFFETTI SPECIFICI SULLA SALUTE****4.1. Introduzione****4.1.1. Procedura per la classificazione delle sostanze che possono presentare gli effetti menzionati nel presente capitolo.**

4.1.2 Se un fabbricante o il suo rappresentante dispone di informazioni secondo le quali una sostanza dovrebbe essere classificata ed etichettata in conformità dei criteri di cui ai punti 4.2.1, 4.2.2 o 4.2.3, la sostanza sarà temporaneamente etichettata conformemente ai suddetti criteri, a meno che dall'applicazione dei criteri di cui ai punti da 3.2.1 a 3.2.5 non sia risultata necessaria una classificazione più rigorosa.

4.1.3. Il fabbricante o il suo rappresentante dovrà presentare il più rapidamente possibile allo Stato membro nel quale la sostanza è immessa sul mercato un documento che contenga tutte le informazioni sull'argomento. Questo documento deve contenere una bibliografia, con tutti i necessari riferimenti e può includere dati non pubblicati.

4.1.4 Inoltre, il fabbricante o il suo rappresentante in possesso di nuovi dati relativi alla classificazione e all'etichettatura di una sostanza in conformità dei criteri di cui ai punti 4.2.1, 4.2.2 o 4.2.3, li presenterà il più rapidamente possibile allo Stato membro nel quale la sostanza è immessa sul mercato.

4.1.5 Affinchè la classificazione venga rapidamente armonizzata a livello comunitario, in conformità della procedura dell'articolo 28 della direttiva 67/548/CEE, gli Stati membri che dispongono di informazioni fornite o no dal fabbricante, secondo le quali sarebbe opportuno classificare una sostanza in una delle categorie anzidette, devono inviare senza indugio alla Commissione le informazioni in questione, corredate di proposte di classificazione ed etichettatura.

La Commissione comunica le proposte di classificazione e di etichettatura pervenute agli altri Stati membri. Gli Stati membri possono rivolgersi alla Commissione per ottenere le informazioni che le sono state presentate.

Qualsiasi Stato membro che abbia validi motivi per ritenere che le proposte di classificazione ed etichettatura siano inadeguate per quanto si riferisce agli effetti cancerogeni, mutageni o di tossicità riproduttiva dà comunicazione alla Commissione.

**4.2. Criteri per la classificazione, l'indicazione di pericolo e la scelta delle frasi di rischio****4.2.1. Sostanze cancerogene**

Ai fini della classificazione e dell'etichettatura e sulla base delle attuali conoscenze queste sostanze sono suddivise in tre categorie:

Categoria 1



Sostanze note per gli effetti cancerogeni sull'uomo. Esistono prove sufficienti per stabilire un nesso causale tra l'esposizione dell'uomo ad una sostanza e lo sviluppo di tumori.

**Categoria 2**

Sostanze che dovrebbero considerarsi cancerogene per l'uomo. Esistono elementi sufficienti per ritenere verosimile che l'esposizione dell'uomo ad una sostanza possa provocare lo sviluppo di tumori, in generale sulla base di:

- adeguati studi a lungo termine effettuati su animali,
- altre informazioni specifiche.

**Categoria 3**

Sostanze da considerare con sospetto per i possibili effetti cancerogeni sull'uomo per le quali tuttavia le informazioni disponibili non sono sufficienti per procedere ad una valutazione soddisfacente. Esistono alcune prove ottenute da adeguati studi sugli animali che non bastano tuttavia per classificare la sostanza nella categoria 2.

**4.2.1.1. I seguenti simboli e specifiche frasi di rischio vanno utilizzati:**

**Categorie 1 e 2:**

T ; R45 Può provocare il cancro

Tuttavia, per le sostanze ed i preparati che presentino un rischio cancerogeno soltanto per inalazione, ad esempio sotto forma di polveri, vapori o fumi (altre vie di esposizione, ad esempio per ingestione o a contatto con la pelle, non presentano alcun rischio cancerogeno), vanno utilizzati i seguenti simboli e le specifiche frasi di rischio:

T ; R49 Può provocare il cancro per inalazione

**Categoria 3:**

Xn ; R40 Possibilità di effetti irreversibili

**4.2.1.2. Osservazioni sulla classificazione delle sostanze cancerogene**

Una sostanza viene inserita nella categoria 1 in base ai dati epidemiologici; la collocazione nelle categorie 2 e 3 si basa fondamentalmente sugli esperimenti sugli animali.

Per classificare una sostanza come cancerogena della categoria 2, è necessario disporre di risultati positivi in due specie di animali, o di prove positive evidenti in una specie, nonché di altri elementi quali i dati sulla genotossicità, gli studi metabolici o biochimici, l'induzione di tumori benigni, la relazione strutturale con altre sostanze cancerogene note, o i dati derivanti da studi epidemiologici che mettano in relazione la sostanza con l'insorgenza della malattia.

La categoria 3 comprende due sottocategorie:

- a) sostanze oggetto di ricerche approfondite che non possono essere classificate nella categoria 2 per mancanza di prove sufficienti sui loro effetti cancerogeni. Si ritiene che nemmeno nuovi esperimenti possano fornire ulteriori informazioni determinanti in merito alla classificazione;
- b) sostanze oggetto di studi insufficienti. I dati disponibili sono ancora scarsi, ma si rilevano preoccupanti per gli esseri umani. Tale classificazione è provvisoria in quanto è necessario effettuare ulteriori esperimenti prima di prendere la decisione finale.

La distinzione tra le categorie 2 e 3 si fonda sulle informazioni elencate in appresso, che ridimensionano la rilevanza dei tumori indotti per via sperimentale in vista di una possibile esposizione degli esseri umani. Tali informazioni, soprattutto se combinate tra loro, porterebbero nella maggior parte dei casi alla classificazione della sostanza nella categoria 3, anche qualora vi sia stata un'insorgenza di tumori negli animali:

- effetti cancerogeni solo in presenza di dosi molto elevate, superiori alla <dose massima tollerata>. La dose massima tollerata si caratterizza per effetti tossici che, sebbene non riducano ancora la durata della vita, implicano tuttavia mutamenti fisici quali un rallentamento di circa il 10% nell'aumento del peso;
- comparsa di tumori, soprattutto per dosi massicce, solamente in determinati organi di alcune specie note per la loro propensione all'insorgenza spontanea di tumori;
- comparsa di tumori, solo nel punto di applicazione, con sistemi di prova molto sensibili (ad esempio la somministrazione intraperitoneale o sottocutanea di taluni composti attivi localmente), qualora il bersaglio specifico non sia rilevante per gli esseri umani;
- mancanza di genotossicità in prove a breve termine *in vivo* ed *in vitro*;
- esistenza di un meccanismo secondario di azione che comporta, per la sua attivazione, una soglia empirica al di sopra di una determinata dose (ad esempio, effetti ormonali sugli organi o sui meccanismi di regolazione fisiologica, o stimolazione cronica della proliferazione cellulare);
- esistenza di un meccanismo di formazione tumorale specifico di specie (ad esempio, determinato da particolari cicli metabolici), che risulta irrilevante per gli esseri umani.

La distinzione tra le sostanze da inserire nella categoria 3 e quelle non classificabili in alcuna categoria si basa su informazioni che escludano una eventuale pericolosità per gli esseri umani.

- una sostanza non dovrebbe essere classificata in alcuna delle categoria di cui sopra qualora il meccanismo che determina l'insorgenza tumorale per via sperimentale sia chiaramente identificato, ed esistano prove sufficienti che il suddetto processo non può svilupparsi negli esseri umani;
- una sostanza non può essere classificata in alcuna categoria se gli unici dati disponibili sono rappresentati dai tumori epatici in talune razze di topi sensibili, senza ulteriori prove;
- è necessario prestare particolare attenzione a tutti i casi dove gli unici dati disponibili sono quelli relativi all'insorgenza di neoplasmi in sedi e in razze che presentano un elevato tasso di insorgenza spontanea.

#### 4.2.2. Sostanze mutagene

##### 4.2.2.1. Ai fini della classificazione e dell'etichettatura e sulla base delle attuali conoscenze queste sostanze sono suddivise in tre categorie:

###### Categoria 1

Sostanze di cui si conoscono gli effetti mutageni sugli esseri umani.

Esistono prove sufficienti per stabilire un nesso causale tra l'esposizione degli esseri umani ad una sostanza e le alterazioni genetiche ereditarie.

###### Categoria 2

Sostanze che dovrebbero considerarsi mutagene per gli esseri umani.

Esistono prove sufficienti per ritenere verosimile che l'esposizione dell'uomo alla sostanza possa provocare lo sviluppo di alterazioni genetiche ereditarie, in generale sulla base di:

- adeguati studi su animali,
- altre informazioni rilevanti.

### Categoria 3

Sostanze da considerare con sospetto per possibili effetti mutageni. Esistono prove fornite da studi specifici sugli effetti mutageni, ma non sono sufficienti per classificare la sostanza nella categoria 2.

#### 4.2.2.2. *Vanno assegnati i seguenti simboli e le specifiche frasi di rischio*

##### Categoria 1:

T ; R46 Può provocare alterazioni genetiche ereditarie

##### Categoria 2

T ; R46 Può provocare alterazioni genetiche ereditarie

##### Categoria 3

Xn ; R40 Possibilità di effetti irreversibili

#### 4.2.2.3. *Osservazioni sulla classificazione delle sostanze mutagene*

##### Definizione dei termini:

Una mutazione è l'alterazione permanente di un tratto o della struttura del materiale genetico di un organismo, che provoca un mutamento delle caratteristiche fenotipiche dell'organismo stesso. Le alterazioni possono coinvolgere un unico gene, un raggruppamento di geni o un intero cromosoma. Gli effetti su singoli geni possono-essere la conseguenza degli effetti su singole basi del DNA (mutazioni puntiformi) o di alterazioni di tratti più ampi, incluse le delezioni, all'interno di un gene. Gli effetti su interi cromosomi possono comportare alterazioni della struttura o del numero dei cromosomi. Una mutazione delle cellule germinali degli organismi a riproduzione sessuata può essere trasmessa alla progenie. I mutageni sono agenti che aumentano la frequenza delle mutazioni.

E' necessario sottolineare che le sostanze sono classificate come mutagene con particolare riferimento alle alterazioni genetiche ereditarie. Tuttavia, il tipo di risultati che determinano la classificazione delle sostanze chimiche nella categoria 3, vale a dire <l'induzione di eventi rilevanti dal punto di vista genetico nelle cellule somatiche>, vengono generalmente considerati come indice di una possibile attività cancerogena.

Lo sviluppo delle metodologie relative alle prove di mutagenicità è in continua evoluzione. Per alcuni nuovi test non esistono ancora protocolli o criteri di valutazione standardizzati. Per valutare i dati di mutagenicità, è necessario prendere in considerazione la qualità dell'esecuzione delle prove e il grado di validità del metodo di prova utilizzato.

##### Categoria 1

Per collocare una sostanza nella categoria 1, è necessario disporre di prove positive derivanti da studi epidemiologici sulle mutazioni negli esseri umani; fino ad oggi non si conoscono esempi delle suddette sostanze. E' risaputo infatti che è estremamente difficile ottenere informazioni attendibili dagli studi sull'incidenza delle mutazioni nella popolazione umana o sul possibile aumento della loro frequenza.

##### Categoria 2

Per collocare una sostanza nella categoria 2, è necessario disporre di risultati positivi ottenuti in prove che dimostrino a) gli effetti mutageni, o b) altre interazioni cellulari relative alla mutagenicità nelle cellule germinali di mammiferi in vivo o c) gli effetti mutageni sulle cellule somatiche di mammiferi in vivo, unitamente a prove evidenti che la sostanza o un metabolita raggiungano le cellule germinali.

Per quanto concerne la collocazione di una sostanza nella categoria 2, attualmente si impiegano i metodi seguenti:

2 (a) Prove di mutagenicità sulle cellule germinali *in vivo*:

- test di mutazione per un locus specifico;
- prova di traslocazione ereditabile;
- test di mutazione letale dominante.

Le suddette prove dimostrano l'effettiva comparsa di mutazioni nella progenie o di alterazioni negli embrioni.

2 (b) Prove *in vivo* che dimostrano una rilevante interazione con le cellule germinali (di solito il DNA):

- test per le aberrazioni cromosomiche, rilevate tramite analisi citogeniche, inclusa l'aneuploidia, causate da una segregazione anomala dei cromosomi;
- test dello scambio tra cromatidi fratelli (SCE);
- test della sintesi del DNA non programmata (UDS);
- test del legame (covalente) del mutageno con il DNA della cellula germinale;
- test per la rilevazione di altri tipi di alterazioni del DNA.

I suddetti test forniscono prove di natura più o meno indiretta. I risultati positivi conseguiti con queste prove devono in genere essere confortati da risultati positivi ottenuti in test di mutagenicità su cellule somatiche *in vivo* eseguiti su mammiferi o sull'uomo [vedi categoria 3, soprattutto i metodi descritti al punto 3(a)].

2 (c) Prove *in vitro* che dimostrano gli effetti mutageni sulle cellule somatiche dei mammiferi [vedi punto 3(a)], unitamente a metodi tossico-cinetici o ad altre metodologie in grado di dimostrare che il composto o un metabolita raggiungono le cellule germinali.

Per quanto concerne i punti 2(b) e 2 ( c ), i risultati positivi derivanti da prove effettuate sull'ospite o la dimostrazione di effetti inequivocabili ottenuti nei test *in vitro* possono considerarsi come prove certe.

### Categoria 3

Per collocare una sostanza nella categoria 3, è necessario ottenere risultati positivi da test che dimostrino (a) gli effetti mutageni o (b) altre interazioni cellulari relative alla mutagenicità nelle cellule somatiche dei mammiferi *in vivo*. Soprattutto queste ultime sono normalmente confermate dai risultati positivi ottenuti in prove di mutagenicità *in vitro*.

Per quanto concerne gli effetti sulle cellule somatiche *in vivo*, attualmente si utilizzano i seguenti metodi:

3 (a) Prove di mutagenicità sulle cellule somatiche *in vivo*:

- prova del micronucleo del midollo osseo o analisi della metafase;
- analisi della metafase dei linfociti periferici;
- spot test sul colore della pelliccia dei topi.

3 (b) Prove di interazione del DNA delle cellule somatiche *in vivo*:

- test dello scambio tra cromatidi fratelli nelle cellule somatiche;
- test della sintesi del DNA non programmata nelle cellule somatiche;
- test per il legame (covalente) del mutageno con il DNA delle cellule somatiche;
- test delle alterazioni del DNA, ad esempio attraverso l'eluizione alcalina, nelle cellule somatiche.

Le sostanze che forniscono risultati positivi soltanto in una o più prove di mutagenicità *in vitro* in genere non dovrebbero essere classificate; è tuttavia opportuno approfondire le ricerche utilizzando prove *in vivo*. In casi eccezionali, ad esempio per sostanze che presentano risultati chiari in numerose prove *in vitro* ma per le quali non esistono i relativi dati delle prove *in vivo*, e che presentano affinità con mutageni o cancerogeni noti, si può prendere in considerazione la possibilità di classificarle nella categoria 3.

#### 4.2.3. Sostanze tossiche per la riproduzione

##### 4.2.3.1. Ai fini della classificazione e dell'etichettatura e sulla base delle attuali conoscenze queste sostanze sono suddivise in 3 categorie:

###### Categoria 1

###### *Sostanze che danneggiano la fertilità negli esseri umani*

Esistono prove sufficienti per stabilire un nesso causale tra l'esposizione umana alla sostanza e la riduzione di fertilità.

###### *Sostanze che provocano effetti tossici sullo sviluppo*

Esistono prove sufficienti per stabilire un nesso causale tra l'esposizione umana alla sostanza e successivi effetti tossici a livello di sviluppo della progenie.

###### Categoria 2

###### *Sostanze che possono eventualmente danneggiare la fertilità umana.*

Esistono prove evidenti per presumere che l'esposizione umana alla sostanza possa ridurre la fertilità sulla base di:

- Prove evidenti effettuati di fertilità ridotta in studi su animali in assenza di effetti tossici oppure prove di fertilità ridotta che si verifica a circa gli stessi livelli di dose di altri effetti tossici ma che non è una conseguenza secondaria non specifica di altri effetti tossici.
- Altre informazioni pertinenti.

###### *Sostanze che possono provocare effetti tossici sullo sviluppo negli esseri umani*

Esistono prove sufficienti per presumere che l'esposizione umana alla sostanza possa dar luogo a effetti tossici sullo sviluppo, sulla base in genere di:

- Risultati precisi in opportuni studi su animali dove gli effetti sono stati osservati in assenza di segni di pronunciata tossicità materna oppure all'incirca agli stessi livelli di dose di altri effetti tossici che non sono una conseguenza secondaria non specifica di altri effetti tossici.
- Altre informazioni pertinenti.

###### Categoria 3

###### *Sostanze sospette per la fertilità umana.*

In genere sulla base

- Risultati in appropriati studi su animali che forniscono sufficienti prove per avere un forte sospetto di una fertilità ridotta in assenza di effetti tossici oppure prove di fertilità ridotta che si verifica all'incirca agli stessi livelli di dose di altri effetti tossici ma che non è una conseguenza secondaria non specifica di altri effetti tossici e tuttavia le prove sono insufficienti per collocare la sostanza nella categoria 2.
- Altre informazioni pertinenti.

*Sostanze sospette per gli esseri umani a causa di possibili effetti tossici sullo sviluppo*  
In genere sulla base di:

- Risultati in appropriati studi effettuati su animali che forniscono sufficienti prove per avere il forte sospetto di tossicità evolutiva in assenza di segni di pronunciata tossicità materna oppure circa agli stessi livelli di dose di altri effetti tossici ma che non sono una conseguenza secondaria non specifica di altri effetti tossici e tuttavia le prove sono insufficienti per collocare la sostanza nella categoria 2.
- Altre informazioni pertinenti.

4.2.3.2. Si applicano i simboli e le frasi specifiche di rischio seguenti:

Categoria 1:

Alle sostanze che danneggiano la fertilità umana:

T; R60: Può diminuire la fertilità.

Per sostanze che provocano effetti tossici sullo sviluppo:

T; R61: Può danneggiare i bambini non ancora nati.

Categoria 2:

Alle sostanze da considerare come riduttive della fertilità umana:

T; R60: Può diminuire la fertilità.

Alle sostanze che si considera possono provocare effetti tossici sullo sviluppo negli esseri umani.

T; R61: Può danneggiare i bambini non ancora nati.

Categoria 3

Alle sostanze sospette per la fertilità umana:

Xn; R62: Possibile rischio di ridotta fertilità.

Alle sostanze sospette per gli esseri umani a causa di possibili effetti tossici sullo sviluppo:

Xn; R63: Possibile rischio di danni ai bambini non ancora nati.

4.2.3.3. Osservazioni sulla classificazione di sostanze tossiche per la riproduzione.

La tossicità riproduttiva comprende diminuzione delle funzioni o della capacità di riproduzione maschile e femminile e il manifestarsi di effetti nocivi non ereditari sulla progenie. Questi effetti sono classificati in due rubriche principali: 1) effetti sulla fertilità maschile e femminile, 2) effetti tossici sullo sviluppo.

1. *Effetti sulla fertilità maschile o femminile.* Questa rubrica comprende effetti negativi sulla libido, sul comportamento sessuale, su qualsiasi aspetto di produzione di spermatozoi o di uova o sull'attività ormonale o la risposta fisiologica che possono interferire sulla capacità di fecondazione, la fecondazione stessa o lo sviluppo dell'uovo fecondato fino al momento dell'annidamento.

2. *Effetti tossici sullo sviluppo.* Nel senso più ampio del termine include ogni interferenza con lo sviluppo normale, prima o dopo la nascita. Comprende effetti indotti o manifestati a livello prenatale nonché quelli che si manifestano dopo la nascita, tra cui effetti embriotossici/fetotossici quali peso corporeo ridotto, ritardo nella crescita e nello sviluppo, tossicità organica, morte, aborto, difetti strutturali (effetti teratogeni), difetti funzionali, difetti peri-post-natali e sviluppo ritardato dopo la nascita a livello fisico o mentale fino allo sviluppo puberale normale compreso.

La classificazione di sostanze chimiche come tossiche per la riproduzione deve essere usata per le sostanze chimiche con caratteristiche intrinseche o specifiche atte a produrre tali effetti tossici. Le sostanze chimiche non devono essere classificate come tossiche per la riproduzione se tali effetti si manifestano soltanto come una conseguenza secondaria non specifica di altri effetti secondari. Le sostanze chimiche che causano maggiori preoccupazioni sono quelle tossiche per la riproduzione a livelli di esposizione che non producono altri segni di tossicità.

La collocazione di un composto nella categoria 1 per effetti sulla fertilità e/o per effetti tossici sullo sviluppo avviene sulla base di dati epidemiologici. La classificazione nelle categorie 2 o 3 avviene principalmente sulla base di dati sugli animali. I dati di studi *in vitro* o di studi su uova di pollo sono considerati come <prova di sostegno> e solo in casi eccezionali portano alla classificazione in mancanza di dati *in vivo*.

In linea con la maggior parte degli altri tipi di effetto tossico, le sostanze che dimostrano tossicità riproduttiva dovranno avere una soglia limite al di sotto della quale non sono dimostrati effetti negativi. Anche se in studi su animali sono stati dimostrati effetti precisi, la rilevanza per gli esseri umani può essere dubbia a causa delle dosi somministrate, ad esempio se gli effetti sono stati dimostrati soltanto a dosi elevate oppure se esistono marcate differenze tossico cinetiche o ancora le modalità di somministrazione non sono opportune. Per queste o simili ragioni, può succedere che si effettui la classificazione nella categoria 3 o addirittura nessuna classificazione.

L'allegato V della direttiva specifica una prova limite nel caso delle sostanze a bassa tossicità. Se un livello di dose di almeno 1000 mg/kg orale non produce prove di effetti tossici per la riproduzione, si può considerare che non siano necessari studi ad altri livelli di dose. Se i dati sono ricavati da studi effettuati con dosi superiori alla dose limite di cui sopra, questi dati devono essere valutati insieme ad altri dati pertinenti. In circostanze normali si considera che gli effetti osservati soltanto a dosi superiori alla dose limite non portino automaticamente alla classificazione di <tossico per la riproduzione>.

#### EFFETTI SULLA FERTILITA'

Per la classificazione di una sostanza nella categoria 2 per la riduzione della fertilità, di norma, devono esistere prove evidenti su una specie animale con prove supplementari sul meccanismo dell'azione o sul sito dell'azione oppure sul rapporto chimico rispetto ad altri agenti noti per la loro azione negativa sulla fertilità o ancora altre informazioni ricavate da essere umani che possano portare a concludere che probabilmente si avrebbero tali effetti negli esseri umani. Se esistono studi soltanto su una specie senza altre prove di sostegno pertinenti, può essere opportuna la classificazione nella categoria 3.

Dato che la diminuzione di fertilità può verificarsi come fenomeno parallelo e non specifico ad una grave tossicità diffusa nei casi di grave inanizione, la classificazione nella categoria 2 deve aver luogo soltanto se esistono prove che vi è un certo grado di specificità della tossicità per il sistema riproduttivo. Se è dimostrato che la diminuzione di fertilità negli studi su animali era dovuta ad un'incapacità di accoppiamento, per la classificazione nella categoria 2 di norma si dovranno avere prove sul meccanismo dell'azione per interpretare se qualsiasi effetto negativo, ad esempio l'alterazione nell'andamento del rilascio ormonale, potrebbe verificarsi negli esseri umani.

#### EFFETTI TOSSICI SULLO SVILUPPO

Per la classificazione nella categoria 2 occorrono prove precise di effetti negativi in studi correttamente effettuati su una o più specie. Dato che gli effetti negativi nella gravidanza o dopo la nascita possono verificarsi come conseguenza secondaria di tossicità materna, ingestione ridotta di alimenti o acqua, stress della madre, mancanza di cure materne, specifiche carenze dietetiche, gestione animale carente, infezioni intercorrenti ecc., è importante che gli effetti osservati si verifichino in studi svolti correttamente e a livelli di dose non associati con pronunciata tossicità.

materna. Sono anche importanti le modalità di esposizione, in particolare l'iniezione di materiale irritante intraperitoneale che può provocare danni localizzati all'utero e al suo contenuto e i risultati di tali studi devono essere interpretati con cautela senza portare di norma di per sé ad una classificazione.

La classificazione nella categoria 3 si basa su criteri simili a quelli per la categoria 2 ma può essere applicata se la progettazione delle prove presenta delle carenze che rendono le conclusioni meno convincenti oppure se vi è la possibilità che gli effetti siano dovuti a influenze non specifiche tali da non poter escludere la tossicità diffusa.

In generale la classificazione nella categoria 3 o la non classificazione sarà effettuata caso per caso quando gli unici effetti registrati siano piccole modifiche nell'incidenza di difetti spontanei, piccoli cambiamenti nelle proporzioni di varianti comuni quali si osservano negli esami dello scheletro o piccole differenze nelle valutazioni dello sviluppo post-natale.

#### *Effetti durante la lattazione*

Le sostanze classificate come tossiche per la riproduzione e sospette per i loro effetti sulla lattazione dovranno essere etichettate anche con R64 (cfr. criteri del punto 3.2.8).

A scopi di classificazione, gli effetti tossici sulla prole derivanti *soltanto* dall'esposizione attraverso il latte materno, oppure gli effetti tossici derivanti dall'*esposizione diretta* di bambini non saranno considerati <tossici per la riproduzione> a meno che tali effetti provochino ritardi di sviluppo nella prole.

Le sostanze che non sono classificate come tossiche per il ciclo riproduttivo ma sono sospette per la tossicità trasferita al lattante durante il periodo di lattazione dovrebbero essere etichettate con R64 (cfr. criteri al punto 3.2.8). Questa frase R può anche essere opportuna per sostanze che incidono sulla quantità o qualità del latte.

R64 sarà di norma assegnata in base a:

- a) studi tossicocinetici che indicano la probabilità che la sostanza sia presente a livelli potenzialmente tossici nel latte materno e/o
- b) risultati di uno o due studi generazionali su animali che indicano la presenza di effetti negativi sulla prole a causa del passaggio nel latte e/o
- c) prove sugli esseri umani che indicano un rischio per i bambini durante il periodo di allattamento.

Le sostanze note per il loro accumulo nel corpo e che quindi possono essere rilasciate nel latte durante l'allattamento possono essere etichettate con R33 e R64.

#### 4.2.4. Procedura per la classificazione dei preparati riguardante gli effetti specifici sulla salute.

Qualora un preparato contenga una o più delle sostanze classificate in base ai criteri descritti in precedenza, deve essere classificato in conformità dei criteri di cui all'articolo 3 (5), lettere dal (j) a (q), del decreto ministeriale 28 gennaio 1992 (i limiti di concentrazione sono riportati nell'allegato I del decreto legislativo 3 febbraio 1997, n. 52 o nell'allegato I del decreto ministeriale 28 gennaio 1992 qualora la sostanza o le sostanze in esame non figurino nell'allegato I o vi figurino senza limiti di concentrazione).

## 5 CLASSIFICAZIONE IN BASE AGLI EFFETTI SULL'AMBIENTE

### 5.1 Introduzione

L'obiettivo principale della classificazione delle sostanze pericolose per l'ambiente è di sensibilizzare l'utilizzatore sui pericoli che tali sostanze presentano per gli ecosistemi. Sebbene i



presenti criteri si riferiscano sostanzialmente agli ecosistemi acquatici, è noto che talune sostanze possono danneggiare anche, o soltanto, altri ecosistemi i cui costituenti possono variare dalla microflora e microfauna del terreno fino ai primati.

I criteri descritti in appresso sono una conseguenza diretta dei metodi di prova stabiliti nell'allegato V per quanto ivi citati. I metodi di prova richiesti per il <fascicolo di base> di cui all'allegato VII sono limitati, e le informazioni così ottenute possono rilevarsi insufficienti per una classificazione adeguata, in quanto può essere necessario disporre di ulteriori dati ricavati dal livello 1 (allegato VIII) o da altri studi equivalenti. Inoltre, le sostanze classificate possono essere oggetto di revisione alla luce di nuovi dati.

Ai fini della classificazione e dell'etichettatura, e considerando le conoscenze attualmente disponibili, tali sostanze sono suddivise in due gruppi in base ai loro effetti, acuti e/o a lungo termine, sui sistemi acquatici o ai loro effetti acuti e/o a lungo termine sui sistemi non acquatici.

## 5.2. Criteri per la classificazione, l'indicazione di pericolo e la scelta delle frasi di rischio

### 5.2.1. Ambiente acquatico

#### 5.2.1.1. Le sostanze saranno classificate come pericolose per l'ambiente, contrassegnate con il simbolo <N> e l'opportuna indicazione di pericolo e saranno attribuite le frasi di rischio in conformità dei seguenti criteri:

R50: Altamente tossico per gli organismi acquatici

e

R53: Può provocare a lungo termine effetti negativi per l'ambiente acquatico

Tossicità acuta:

LC <sub>50</sub> a 96 ore (per il pesce)	≤ 1 mg/l
o EC <sub>50</sub> a 48 ore (per la Daphnia)	≤ 1 mg/l
o IC <sub>50</sub> a 72 ore (per le alghe)	≤ 1 mg/l

e la sostanza non è facilmente degradabile

o il log Pow (log del coefficiente di ripartizione ottanolo/acqua) sia ≤ 3.0 (a meno che il BCF determinato per via sperimentale non sia ≤ 100)

R50: Altamente tossico per gli organismi acquatici.

Tossicità acuta:

LC <sub>50</sub> a 96 ore (per il pesce)	≤ 1 mg/l
o EC <sub>50</sub> a 48 ore (per la Daphnia)	≤ 1 mg/l
o IC <sub>50</sub> a 72 ore (per le alghe)	≤ 1 mg/l

R51: Tossico per gli organismi acquatici

e

R 53: Può provocare a lungo termine effetti negativi per l'ambiente acquatico.

Tossicità acuta:

LC <sub>50</sub> a 96 ore (per il pesce)	1 mg/l < LD <sub>50</sub> ≤ 10 mg/l
o EC <sub>50</sub> a 48 ore (per la Daphnia)	1 mg/l < EC <sub>50</sub> ≤ 10 mg/l
o IC <sub>50</sub> a 72 ore (per le alghe)	1 mg/l < IC <sub>50</sub> < 10 mg/l

e la sostanza non è facilmente degradabile

o il log Pow (log del coefficiente di ripartizione ottanolo/acqua) sia ≥ 3.0 (a meno che il BCF determinato per via sperimentale non sia ≤ 100)

#### 5.2.1.2. Le sostanze saranno classificate come pericolose per l'ambiente in conformità dei criteri descritti in appresso. Le frasi indicanti i rischi sono attribuite anche sulla base dei seguenti criteri

R52: Nocivo per gli organismi acquatici

e

R 53: Può provocare a lungo termine effetti negativi per l'ambiente acquatico.

Tossicità acuta:	LC <sub>50</sub> a 96 ore (per il pesce)	10 mg/l < LD <sub>50</sub> ≤ 100 mg/l
o	EC <sub>50</sub> a 48 ore (per la Daphnia)	10 mg/l < EC <sub>50</sub> ≤ 100 mg/l
o	IC <sub>50</sub> a 72 ore (per le alghe)	10 mg/l < IC <sub>50</sub> ≤ 100 mg/l

e la sostanza non è facilmente degradabile.

Questo criterio viene applicato a meno che non esistano ulteriori prove scientifiche relative alla degradazione e/o alla tossicità che forniscano sufficienti garanzie che né la sostanza né i prodotti derivanti dalla sua degradazione costituiscano un pericolo potenziale a lungo termine e/o ritardato per l'ambiente acquatico. Tali ulteriori prove scientifiche dovrebbero normalmente basarsi sugli studi di cui al livello 1 (allegato VIII), o su studi di equivalente valore, e potrebbero comprendere:

- i) un potenziale accertato a degradare rapidamente nell'ambiente acquatico;
- ii) l'assenza di effetti tossici cronici ad una concentrazione di 1,0 mg/litro, ad esempio una concentrazione di effetti non osservati superiore ad 1,0 mg/litro determinata sulla base di uno studio prolungato di tossicità sul pesce o la Daphnia.

R52: Nocivo per gli organismi acquatici.

Sostanze che non rientrano nei criteri descritti in questo capitolo ma che, in base a prove disponibili sulla loro tossicità, possono tuttavia presentare un pericolo per la struttura e/o il funzionamento degli ecosistemi acquatici.

R53: Può provocare a lungo termine effetti negativi per l'ambiente acquatico.

Sostanze che non rientrano nei criteri descritti in questo capitolo, ma che, in base a prove disponibili concernenti la loro tossicità, persistenza, potenziale di accumulazione e destino e comportamento ambientale presunto o osservato, possono tuttavia presentare un pericolo immediato, a lungo termine e/o ritardato per la struttura e/o il funzionamento degli ecosistemi acquatici.

Per esempio, alle sostanze scarsamente solubili in acqua, vale a dire con una solubilità inferiore ad 1 mg/l, sarà applicato il suddetto criterio se:

- a) non sono facilmente degradabili e
- b) il log Pow ≥ 3,0 (a meno che il BCF determinato per via sperimentale non sia ≤ 100)

Si applica il suddetto criterio a meno che non esistano ulteriori prove scientifiche relative alla degradazione e/o tossicità sufficienti a garantire che la sostanza e i prodotti derivanti dalla sua degradazione non costituiranno un pericolo potenziale a lungo termine e/o ritardato per l'ambiente acquatico.

Tali prove scientifiche supplementari dovranno normalmente basarsi sugli studi di cui al livello 1 (allegato VIII) o su studi analoghi, e potrebbero comprendere:

- i) un potenziale accertato di degradazione rapida nell'ambiente acquatico;
- ii) l'assenza di effetti tossici cronici al limite di solubilità, vale a dire una concentrazione di effetti non osservati superiore al limite di solubilità determinato sulla base di uno studio di tossicità prolungato sul pesce o Daphnia.

#### 5.2.1.3. Osservazioni sulla determinazione del IC<sub>50</sub> per le alghe e la degradabilità.

- Se si può dimostrare, nel caso di sostanze fortemente colorate che la crescita di alghe è inibita soltanto a seguito di una riduzione dell'intensità della luce, non usare come base per la classificazione il valore 72h IC<sub>50</sub> per le alghe

- Le sostanze sono considerate facilmente degradabili se valgono i seguenti criteri:
  - (A) se negli studi di biodegradazione di 28 giorni si raggiungono i seguenti livelli di degradazione:
    - nelle prove basate sul carbonio organico disciolto: 70%
    - nelle prove basate sull'impovertimento dell'ossigeno o sulla formazione di anidride carbonica: 60 % dei valori massimi teorici.
  - Questi livelli di biodegradazione devono essere raggiunti entro 10 giorni dall'inizio del processo di degradazione, considerato come il momento in cui il 10% della sostanza è stato degradato;
  - 
  - (B) se nei casi in cui siano disponibili solo i dati relativi al COD e al BOD5, qualora il rapporto tra BOD5 e COD sia maggiore o uguale a 0,5.
  - 
  - (B) se esistono altre prove scientifiche fondate a dimostrazione che la sostanza può essere degradata (in maniera biotica e/o abiotica), nell'ambiente acquatico a un livello > 70% in un periodo di 28 giorni.

#### 5.2.2. Ambiente non acquatico

- 5.2.2.1. Le sostanze saranno classificate come pericolose per l'ambiente, contrassegnate con il simbolo <N> e l'opportuna indicazione di pericolo e saranno attribuite frasi di rischio in conformità dei criteri qui di seguito.

R54 Tossico per la flora

R55 Tossico per la fauna

R56 Tossico per gli organismi del terreno

R57 Tossico per le api

R58 Può provocare a lungo termine effetti negativi per l'ambiente

Sostanze che in base alle prove disponibili relative alla loro tossicità, persistenza, potenziale di accumulazione e destino e comportamento ambientale presunto o osservato, possono presentare un pericolo immediato, a lungo termine e/o ritardato per la struttura e/o il funzionamento degli ecosistemi naturali, esclusi quelli descritti al punto 5.2.1. I criteri dettagliati saranno elaborati in seguito

R59 Pericoloso per lo strato di ozono

Sostanze che in base a prove disponibili concernenti la loro tossicità, persistenza, potenziale di accumulazione e destino e comportamento ambientale presunto o osservato, possono presentare un pericolo immediato, a lungo termine e/o ritardato per la struttura e/o il funzionamento dello strato di ozono della stratosfera, comprese le sostanze elencate nell'allegato I, gruppi I, II, III, IV e V del regolamento del Consiglio (CEE) n. 594/91 relativo a sostanze che riducono lo strato di ozono (GU n. L 67 del 14.3.1991, pag. 1)

- 5.2.2.2. Le sostanze verranno classificate pericolose per l'ambiente conformemente ai criteri precisati qui di seguito. Le frasi di rischio saranno inoltre assegnate conformemente ai seguenti criteri

R59 Pericoloso per lo strato di ozono

Sostanze che non rientrano nei criteri elencati al punto 5.2.2.1 e che in base ai dati disponibili riguardanti le loro proprietà ed il loro comportamento ambientale, previsto o osservato, possono presentare un pericolo per la struttura e/o il funzionamento dello strato stratosferico di ozono. Sono comprese le sostanze che sono elencate nell'allegato I, gruppi VI del regolamento del Consiglio (CEE) n. 594/91 relativo a sostanze che riducono lo strato di ozono (GU n. L 67 del 14.3.1991, pag. 1).

## 6. SCELTA DELLE FRASI RELATIVE AI CONSIGLI DI PRUDENZA

### 6.1. **Introduzione**

Le frasi relative ai consigli di prudenza (frasi S) saranno assegnate alle sostanze ed ai preparati pericolosi in conformità dei seguenti criteri generali. Per alcuni preparati inoltre, sono obbligatori i consigli di prudenza descritti nell'allegato II del decreto ministeriale 28 gennaio 1992.

Ogniqualvolta il fabbricante è menzionato nel capitolo 6, si fa riferimento alla persona responsabile dell'immissione sul mercato della sostanza o del preparato.

### 6.2. **Frasi relative ai consigli di prudenza per le sostanze e i preparati**

#### S1 *Conservare sotto chiave*

- Campo d'applicazione:
  - Sostanze e preparati molto tossici, tossici e corrosivi.
- Criteri d'impiego:
  - Obbligatoria per le sostanze e i preparati sopra menzionati se in vendita al dettaglio.

#### S2 *Conservare fuori dalla portata dei bambini*

- Campo d'applicazione:
  - Tutte le sostanze e i preparati pericolosi.
- Criteri d'impiego:
  - Obbligatoria per tutte le sostanze e i preparati pericolosi in vendita al dettaglio, eccezion fatta per quelli soltanto classificati pericolosi per l'ambiente.

#### S3 *Conservare il luogo fresco*

- Campo d'applicazione:
  - Perossidi organici
  - Altre sostanze e preparati pericolosi con punto di ebollizione di  $\leq 40^{\circ}\text{C}$ .
- Criteri d'impiego:
  - Obbligatoria per i perossidi organici, a meno che si usi la frase S 47.
  - Raccomandata per le altre sostanze e preparati pericolosi che hanno un punto di ebollizione di  $\leq 40^{\circ}\text{C}$ .

#### S4 *Conservare lontano da locali di abitazione*

- Campo d'applicazione:

- Sostanze e preparati molto tossici e tossici.
  - Criteri d'impiego:
    - Di norma limitata alle sostanze ed ai preparati molto tossici e tossici, nei casi in cui è opportuno rafforzare la frase S13, ad esempio quando esiste un pericolo di inalazione e quindi occorre conservare la sostanza o il preparato lontano da locali di abitazione. Il consiglio non ha però lo scopo di impedire la corretta utilizzazione della sostanza o del preparato nei locali di abitazione.
- S5 *Conservare sotto...* (liquido appropriato da indicarsi da parte del fabbricante)
- Campo d'applicazione:
    - Sostanze e preparati solidi infiammabili spontaneamente.
  - Criteri d'impiego:
    - Di norma limitata a casi particolari, ad esempio sodio, potassio o fosforo bianco.
- S6 *Conservare sotto...* (gas inerte da indicarsi da parte del fabbricante)
- Campo d'applicazione:
    - Sostanze e preparati pericolosi che devono essere conservati in un'atmosfera inerte.
  - Criteri d'impiego:
    - Di norma limitata ad alcuni casi particolari, ad esempio alcuni composti organo-metallici.
- S7 *Conservare il recipiente ben chiuso*
- Campo d'applicazione
    - Perossidi organici.
    - Sostanze e preparati che possono sprigionare gas molto tossici, tossici, o estremamente infiammabili.
    - Sostanze e preparati che a contatto con l'umidità sprigionano gas estremamente infiammabili.
    - Solidi facilmente infiammabili.
  - Criteri d'impiego:
    - Obbligatoria per i perossidi organici.
    - Raccomandata per gli altri campi d'applicazione summenzionati.
- S8 *Conservare al riparo dall'umidità*
- Campo d'applicazione:

Sostanze e preparati che possono reagire violentemente con l'acqua

    - Sostanze e preparati che a contatto con l'acqua sprigionano gas estremamente infiammabili.
    - Sostanze e preparati che a contatto con l'acqua sprigionano gas molto tossici o tossici

- Criteri d'impiego:
  - Di norma limitata ai summenzionati campi d'applicazione, quando si vogliono sottolineare le avvertenze contenute nelle frasi R14, R15 in particolare e R29.

**S9 *Conservare il recipiente in luogo ben ventilato***

- Campo d'applicazione:
  - Sostanze e preparati volatili che possono sprigionare vapori molto tossici, tossici o nocivi.
  - Liquidi estremamente o facilmente infiammabili e gas estremamente infiammabili.
- Criteri d'impiego:
  - Raccomandata per le sostanze e i preparati volatili che possono sprigionare vapori molto tossici, tossici o nocivi.
  - Raccomandata per i liquidi estremamente o facilmente infiammabili o per i gas estremamente infiammabili.

**S12 *Non chiudere ermeticamente il recipiente***

- Campo d'applicazione:
  - Sostanze e preparati che possono sprigionare gas o vapori in grado di provocare la rottura dell'imballaggio.
- Criteri d'impiego:
  - Di norma limitata ai casi particolari summenzionati.

**S13 *Conservare lontano da alimenti o mangimi e da bevande***

- Campo d'applicazione:
  - Sostanze e preparati molto tossici, tossici e nocivi.
- Criteri d'impiego:
  - Raccomandata per le sostanze e i preparati venduti al dettaglio.

**S14 *Conservare lontano da...* (sostanze incompatibili da precisare da parte del produttore)**

- Campo d'applicazione:
  - Perossidi organici..
- Criteri d'impiego:
  - *Obbligatoria* e di norma limitata ai perossidi organici. Tuttavia può essere utile in casi eccezionali, quando l'incompatibilità può dar luogo ad un rischio particolare.

**S15 *Conservare lontano dal calore***

- Campo d'applicazione:

- Sostanze e preparati che possono decomporsi o che possono reagire spontaneamente sotto l'effetto del calore.
- Criteri d'impiego:
  - Di norma limitata a casi speciali, ad esempio monomeri, ma non utilizzata se sono state impiegate le frasi relative ai rischi R2, R3 e/o R5.

**S16 Conservare lontano da fiamme e scintille - non fumare**

- Campo d'applicazione:
  - Liquidi estremamente o facilmente infiammabili e gas estremamente infiammabili.
- Criteri d'impiego:
  - Raccomandata per le anzidette sostanze e preparati; non è tuttavia necessaria se sono già state utilizzate le frasi relative ai rischi R2, R3 e/o R5.

**S17 Tenere lontano da sostanze combustibili**

- Campo d'applicazione:
  - Sostanze e preparati che possono sviluppare un'eccessiva pressione nel contenitore.
- Criteri d'impiego:
  - Da utilizzare in casi particolari, ad esempio per sottolineare il contenuto delle frasi R8 e R9.

**S18 Manipolare ed aprire il recipiente con cautela**

- Campo d'applicazione:
  - Sostanze e preparati che possono sviluppare un'eccessiva pressione nel contenitore.
  - Sostanze e preparati che possono formare perossidi esplosivi.
- Criteri d'impiego:
  - Di norma limitata ai casi summenzionati, quando sussiste un pericolo di lesione agli occhi e/o quando le sostanze e i preparati sono venduti al dettaglio.

**S20 Non mangiare né bere durante l'impiego**

- Campo d'applicazione:
  - Sostanze e preparati molto tossici, tossici e corrosivi
- Criteri d'impiego:
  - Di norma limitata a casi particolari (arsenico e composti dell'arsenico, fluoroacetati), in particolare quando le anzidette sostanze e preparati sono venduti al dettaglio.

**S21 Non fumare durante l'impiego**

- Campo d'applicazione:
  - Sostanze e preparati che, in caso di combustione, sprigionano prodotti tossici.
- Criteri d'impiego:

- Di norma limitata a casi particolari (ad esempio composti alogenati).

**S22 Non respirare le polveri**

- Campo d'applicazione:
  - Tutte le sostanze e i preparati solidi pericolosi per la salute
- Criteri d'impiego:
  - **Obbligatoria** per le sostanze e i preparati sopramenzionati ai quali è assegnata la R42.
  - **Raccomandata** per le sostanze e preparati di cui sopra, forniti sotto forma di polveri respirabili e per i quali non si conoscono i rischi per la salute a seguito dell'inalazione.

**S23 Non respirare i gas/fumi/vapori/aerosoli [dicitura appropriata da precisare da parte del produttore]**

- Campo d'applicazione:
  - Tutte le sostanze e i preparati liquidi o gassosi pericolosi per la salute.
- Criteri d'impiego:
  - **Obbligatoria** per le sostanze e i preparati sopra menzionati, ai quali è assegnata la frase R42.
  - **Obbligatoria** per le sostanze e i preparati per uso a spruzzo. Aggiungere inoltre S38 o S51.
  - **Raccomandata** quando occorre richiamare l'attenzione dell'utilizzatore sui pericoli di inalazione non menzionati nelle frasi di rischio assegnate.

**S24 Evitare il contatto con la pelle**

- Campo d'applicazione:
  - Tutte le sostanze e i preparati pericolosi per la salute
- Criteri d'impiego:
  - **Obbligatoria** per le sostanze e i preparati cui è stata assegnata R43 tranne se è stata anche assegnata S36.
  - **Raccomandata** quando occorre richiamare l'attenzione dell'utilizzatore sui pericoli che comporta il contatto con la pelle, non menzionati nelle frasi di rischio assegnate. Tuttavia, può essere utilizzata per dare maggior risalto a tali frasi di rischio.

**S25 Evitare il contatto con gli occhi**

- Campo d'applicazione:
  - Sostanze e preparati corrosivi o irritanti
- Criteri d'impiego:
  - Di norma limitata a casi speciali, cioè quando si reputa essenziale porre in risalto il pericolo per gli occhi indicato dall'impiego delle frasi R34, R35, R36 o R41. Quindi va considerata importante se le sostanze e i preparati sono venduti al dettaglio e non è sempre disponibile una protezione per gli occhi o il volto.



**S26** *In caso di contatto con gli occhi, lavare immediatamente ed abbondantemente con acqua e consultare un medico*

- Campo d'applicazione:
  - Sostanze e preparati corrosivi o irritanti.
- Criteri d'impiego:
  - *Obbligatoria* per le sostanze e i preparati corrosivi e quelli ai quali viene assegnata la frase di rischio R41.
  - Raccomandata per le sostanze e i preparati irritanti ai quali è già stata assegnata la frase di rischio R36.

**S27** *Togliersi di dosso immediatamente gli indumenti contaminati*

- Campo d'applicazione:
  - Sostanze e preparati molto tossici, tossici o corrosivi.
- Criteri d'impiego:
  - Raccomandata per le sostanze e i preparati molto tossici e tossici che sono facilmente assorbiti dalla pelle e per le sostanze e i preparati corrosivi. Non usare questa frase se è stata assegnata S36.

**S28** *In caso di contatto con la pelle lavarsi immediatamente e abbondantemente con ... (prodotti idonei da precisare dal fabbricante)*

- Campo d'applicazione:
  - Sostanze e preparati molto tossici, tossici o corrosivi.
- Criteri d'impiego:
  - *Obbligatoria* per le sostanze e i preparati molto tossici.
  - Raccomandata per altre sostanze e preparati sopra menzionati, in particolare quando l'acqua non rappresenta il fluido di lavaggio più appropriato.

**S29** *Non gettare i residui nelle fognature*

- Campo d'applicazione:
  - Liquidi estremamente o facilmente infiammabili non miscibili con l'acqua.
- Criteri d'impiego:
  - Raccomandata per le sostanze e i preparati di cui sopra venduti al dettaglio.

**S30** *Non versare acqua sul prodotto*

- Campo d'applicazione:
  - Sostanze e preparati che reagiscono violentemente a contatto con l'acqua.
- Criteri d'impiego:
  - Di norma limitata a casi particolari (ad esempio acido solforico); può essere utilizzata all'occorrenza, per rendere più chiare le informazioni o per sottolineare la frase R14 o come alternativa alla R14.

**S33 Evitare l'accumulo di cariche elettrostatiche**

- Campo d'applicazione:
  - Sostanze e preparati estremamente o facilmente infiammabili.
- Criteri d'impiego:
  - Raccomandata per le sostanze e i preparati utilizzati in campo industriale che non assorbono umidità. Praticamente non viene mai utilizzata per le sostanze e i preparati venduti al dettaglio.

**S35 Non distaccare dal prodotto e dal recipiente se non con le dovute precauzioni**

- Campo d'applicazione:
  - ~~Sostanze e preparati esplosivi.~~
  - Sostanze e preparati molto tossici e tossici.
  - Sostanze pericolose per l'ambiente.
- Criteri d'impiego:
  - Obbligatoria per le sostanze e i preparati esplosivi diversi dai perossidi organici.
  - Raccomandata per sostanze e preparati molto tossici, in particolare se venduti al dettaglio.
  - Raccomandata per le sostanze pericolose per l'ambiente cui non si applica S56 se dette sostanze sono vendute al dettaglio.

**S36 Usare indumenti protettivi adatti**

- Campo d'applicazione:
  - Perossidi organici.
  - Sostanze e preparati molto tossici, tossici o nocivi.
  - Sostanze e preparati corrosivi.
- Criteri d'impiego:
  - Obbligatoria per le sostanze e i preparati molto tossici e corrosivi.
  - Obbligatoria per le sostanze e i preparati cui non sono state assegnate R21 o R24.
  - Obbligatoria per le sostanze cancerogene, mutagene e tossiche per la riproduzione di categoria 3 tranne se gli effetti sono prodotti soltanto mediante inalazione della sostanze o del preparato.
  - Obbligatoria per i perossidi organici.
  - Raccomandata per le sostanze tossiche e i preparati se il valore dermale LD<sub>50</sub> non è noto ma la sostanza o il preparato possono rivelarsi tossici a contatto con la pelle.
  - Raccomandata per sostanze e preparati usati nell'industria, atti a provocare danni per la salute in caso di esposizione prolungata.

**S37 Usare guanti adatti**

- Campo d'applicazione:
  - Sostanze e preparati molto tossici, tossici, nocivi o corrosivi.
  - Perossidi organici.
  - Sostanze e preparati irritanti per la pelle.
- Criteri d'impiego:
  - *Obbligatoria* per le sostanze e i preparati molto tossici, tossici e corrosivi.
  - *Obbligatoria* per le sostanze e i preparati cui non sono state assegnate R21, R24 o R43.
  - *Obbligatoria* per le sostanze cancerogene, mutagene e tossiche per la riproduzione di categoria 3 tranne se gli effetti sono prodotti unicamente mediante inalazione della sostanza o del preparato.
  - Raccomandata per sostanze e preparati tossici se il valore dermale LD<sub>50</sub> non è noto ma la sostanza o il preparato possono rivelarsi tossici a contatto con la pelle.
  - Raccomandata per i perossidi organici.
  - Raccomandata per sostanze e preparati irritanti per la pelle a causa delle loro proprietà sgrassanti.

**S38** *In caso di ventilazione insufficiente, usare un apparecchio respiratorio adatto.*

- Campo d'applicazione:
  - Sostanze e preparati molto tossici o tossici.
- Criteri d'impiego:
  - Di norma limitata a casi particolari, che richiedono l'impiego di sostanze e preparati molto tossici o tossici in campo industriale o agricolo.

**S39** *Proteggersi gli occhi/la faccia*

- Campo d'applicazione:
  - Perossidi organici.
  - Sostanze e preparati corrosivi, inclusi gli irritanti che comportano un grave pericolo di lesioni degli occhi.
  - Sostanze e preparati molto tossici e tossici
- Criteri d'impiego:
  - *Obbligatoria* per sostanze e preparati cui sono state assegnate R34, R35 o R41.
  - *Obbligatoria* per i perossidi organici.
  - Raccomandata quando occorre richiamare l'attenzione dell'utilizzatore per i rischi di contatto per gli occhi non menzionati nelle frasi di rischio assegnate.
  - Di norma limitata a casi eccezionali per sostanze e preparati molto tossici e tossici quando esiste pericolo di spruzzi che potrebbero essere facilmente assorbiti dalla pelle.

**S40** *Per pulire il pavimento e gli oggetti contaminati da questo prodotto usare...* (da precisare da parte del produttore)

- Campo d'applicazione:
  - Tutte le sostanze e i preparati pericolosi.
- Criteri d'impiego:
  - Di norma limitata a quelle sostanze e preparati pericolosi per i quali l'acqua non è considerata un mezzo adeguato di lavaggio (ad esempio quando occorre un assorbimento mediante sostanza polverulenta, dissoluzione mediante solvente, ecc.) e nei casi in cui è importante, per motivi sanitari e/o di sicurezza, riportare sull'etichetta un avvertimento.

**S41** *In caso di incendio e/o esplosione non respirare i fumi*

- Campo d'applicazione:
  - Sostanze e preparati pericolosi che durante la combustione sprigionano gas molto tossici o tossici.
- Criteri d'impiego:
  - Di norma limitata a casi particolari.

**S42** *Durante le fumigazioni/vaporizzazioni usare un apparecchio respiratorio adatto [termine(i) appropriato(i) da precisare da parte del produttore]*

- Campo d'applicazione:
  - Sostanze e preparati destinati alle utilizzazioni summenzionate ma che possono pregiudicare la sicurezza e la salute dell'utilizzatore quando non siano prese opportune precauzioni.
- Criteri d'impiego:
  - Di norma limitata a casi particolari.

**S43** *In caso d'incendio usare...(mezzi estinguenti idonei da indicarsi da parte del fabbricante). Se l'acqua aumenta il rischio precisare: <Non usare acqua>.*

- Campo d'applicazione:
  - Sostanze e preparati estremamente infiammabili, facilmente infiammabili o infiammabili.
- Criteri d'impiego:
  - Obbligatoria per le sostanze e i preparati che a contatto con l'acqua o l'aria umida sprigionano gas estremamente infiammabili.
  - Raccomandata per sostanze e preparati estremamente infiammabili, facilmente infiammabili e infiammabili, in particolare quando non sono miscibili con acqua.

**S45** *In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta)*

- Campo d'applicazione:
  - Sostanze e preparati molto tossici

- Sostanze e preparati tossici e corrosivi.
- Criteri d'impiego:
  - *Obbligatoria per sostanze e preparati citati qui sopra.*

**S46** *In caso di ingestione consultare immediatamente il medico e mostrargli il contenitore o l'etichetta.*

- Campo d'applicazione:
  - *Tutte le sostanze e i preparati pericolosi diversi da quelli molto tossici, tossici, corrosivi o pericolosi per l'ambiente.*
- Criteri d'impiego:
  - *Obbligatoria per tutte le sostanze e i preparati summenzionati venduti al dettaglio a meno che non vi sia motivo di ritenere pericolosa l'ingestione, in particolare da parte dei bambini.*

**S47** *Conservare a temperatura non superiore a ... °C (da precisare da parte del fabbricante)*

- Campo d'applicazione:
  - *Sostanze e preparati che diventano instabili ad una certa temperatura.*
- Criteri d'impiego:
  - *Di norma limitata a casi particolari (ad esempio alcuni perossidi organici).*

**S48** *Mantenere umido con ... (liquido appropriato da precisare da parte del fabbricante)*

- Campo d'applicazione:
  - *Sostanze e preparati che possono diventare molto sensibili alle scintille, a frizione o agli urti qualora si asciugano.*
- Criteri d'impiego:
  - *Di norma limitata a casi speciali, ad esempio nitrocellulosa.*

**S49** *Conservare soltanto nel recipiente originale*

- Campo d'applicazione:
  - *Sostanze e preparati sensibili alla decomposizione catalitica.*
- Criteri d'impiego:
  - *Di norma limitata alle sostanze e ai preparati sensibili alla decomposizione catalitica (ad esempio alcuni perossidi organici).*

**S50** *Non mescolare con ... (da specificare da parte del fabbricante)*

- Campo d'applicazione:
  - *Sostanze e preparati che possono reagire con i prodotti specificati e liberare gas molto tossici o tossici.*  
  
*Perossidi organici.*
- Criteri d'impiego:

- **Raccomandata** per le sostanze e i preparati anzidetti venduti al dettaglio, nei casi in cui questa frase è preferibile alla R31 o alla R32.
- **Obbligatoria** per alcuni perossidi che possono provocare una violenta reazione con acceleratori o promotori.

**S51 Usare soltanto in luogo ventilato**

- Campo d'applicazione:
  - Sostanze e preparati che potrebbero o che devono produrre vapori, polveri, spray, fumi, nebbia, ecc., e che comportano pericolo di inalazione o di incendio o di esplosione.
- Criteri d'impiego:
  - **Raccomandata** quando non risulti opportuno l'uso della S38; è quindi importante quando le sostanze e i preparati sono venduti al dettaglio.

**S52 Non utilizzare su grandi superfici in locali abitati.**

- Campo d'applicazione:
  - Sostanze volatili molto tossiche, tossiche e nocive, e preparati che le contengono.
- Criteri d'impiego:
  - **Raccomandata** quando la prolungata esposizione a queste sostanze può provocare un danno alla salute, a causa della loro volatilizzazione da ampie superfici trattate in ambienti domestici o comunque in ambienti chiusi in cui è possibile la presenza di persone.

**S53 Evitare l'esposizione - procurarsi speciali istruzioni prima dell'uso**

- Campo d'applicazione:
  - Sostanze e preparati cancerogeni, mutageni e/o tossici per la riproduzione.
- Criteri d'impiego:
  - **Obbligatoria** per le sostanze e i preparati summenzionati cui è assegnata almeno una delle frasi R45, R46, R49, R60 o R61.

**S56 Smaltire questo materiale e i relativi contenitori in un punto di raccolta rifiuti pericolosi o speciali**

- Campo d'applicazione:
  - Sostanze pericolose per l'ambiente.
- Criteri d'impiego:
  - **Raccomandata** per le sostanze cui è stato assegnato il simbolo <N> e in genere vedute al dettaglio.

**S57 Usare contenitori adeguati per evitare l'inquinamento ambientale**

- Campo d'applicazione:
  - Sostanze cui è stato assegnato il simbolo > N >.
- Criteri d'impiego:

- Limitata di norma alle sostanze in genere non vendute al dettaglio.

**S59 Richiedere informazioni al produttore o fornitore per il recupero/riciclaggio**

- Campo d'applicazione:
  - Sostanze pericolose per l'ambiente.
- Criteri d'impiego:
  - *Obbligatoria* per le sostanze pericolose per lo strato di ozono.
  - *Raccomandata* per altre sostanze cui è stato assegnato il simbolo <N> e per cui si raccomanda il recupero o il riciclo.

**S60 Questo materiale e il suo contenitore devono essere smaltiti come rifiuti pericolosi**

- Campo d'applicazione:
  - Sostanze pericolose per l'ambiente.
- Criteri d'impiego:
  - *Raccomandata* per le sostanze cui è stato assegnato il simbolo <N> in genere non venduta al dettaglio.

**S61 Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali/schede informative in materia di sicurezza.**

- Campo d'applicazione:
  - Sostanze pericolose per l'ambiente.
- Criteri d'impiego:
  - Usata di norma per le sostanze cui è stato assegnato il simbolo <N>.
  - *Raccomandata* per tutte le sostanze classificate pericolose per l'ambiente e non contemplate sopra.

**S62 In caso di ingestione, non provocare il vomito; consultare immediatamente un medico e mostrargli il contenitore o l'etichetta.**

- Campo d'applicazione:
  - Sostanze e preparati classificati come nocivi e caratterizzati dalla frase R65 conformemente ai criteri di cui al punto 3.2.3.
  - Non applicabile alle sostanze e ai preparati immessi in commercio in bombolette aerosol o in recipienti muniti di un dispositivo sigillato di nebulizzazione; cfr. sezioni 8 e 9.
- Criteri d'impiego:
  - *Obbligatoria* per le sostanze e i preparati di cui sopra, destinati alla libera vendita o che possono essere utilizzati dal pubblico.
  - *Raccomandato* per le sostanze e i preparati di cui sopra utilizzati nell'industria.

## 7. ETICHETTATURA

- 7.1. Dopo che una sostanza o un preparato sono stati classificati, l'etichetta adeguata viene determinata in conformità delle disposizioni dell'articolo 16 del decreto legislativo 3 febbraio 1997, n. 52 e dell'articolo 7 del decreto ministeriale 28 gennaio 1992 per le sostanze ed i preparati rispettivamente. Il presente capitolo illustra come si definisce l'etichetta ed in particolare serve da guida per la scelta delle frasi di rischio ed i consigli di prudenza più adeguati.

L'etichetta contiene le informazioni seguenti:

- a) denominazione/i delle sostanze che figureranno sull'etichetta;
- b) nome e indirizzo completi, compreso il numero di telefono, del fabbricante/importatore;
- c) simboli e indicazioni di pericolo;
- d) frasi indicanti rischi specifici (frasi R);
- e) frasi indicanti i consigli di prudenza (frasi S);
- f) per le sostanze, il numero CEE.

- 7.1.1. Per le sostanze che figurano nell'allegato I del decreto legislativo 3 febbraio 1997, n. 52, l'etichetta comprende anche le parole <etichetta CEE>.

- 7.1.2. Scelta finale delle frasi di rischio e di prudenza.

Anche se la scelta finale delle frasi di rischio e di prudenza più opportune sarà determinata soprattutto dalla necessità di fornire tutte le informazioni necessarie, si dovrà tener conto anche della chiarezza e dell'effetto dell'etichetta. Per mantenere la chiarezza, le informazioni necessarie devono essere espresse con un numero minimo di frasi.

Per le sostanze e i preparati irritanti, facilmente infiammabili, infiammabili e comburenti, non è necessaria l'indicazione delle frasi R e S se il contenuto dell'imballaggio non supera i 125 ml. Lo stesso vale per le sostanze nocive che, in imballaggi di pari contenuto, non sono poste in vendita al dettaglio.

- 7.1.3. Indicazioni quali <Non tossico>, <Non nocivo> o qualsiasi altra indicazione analoga non possono figurare sull'etichetta o sull'imballaggio delle sostanze o dei preparati disciplinati dal decreto legislativo 3 febbraio 1997, n. 52 e dal decreto ministeriale 28 gennaio 1992.

- 7.1.4. Per alcuni preparati, l'allegato II del decreto ministeriale 28 gennaio 1992 prevede disposizioni speciali di etichettatura.

## 7.2. Denominazione chimica da indicare sull'etichetta:

- 7.2.1. Per le sostanze elencate nell'allegato II del decreto legislativo 3 febbraio 1997, n. 52 l'etichetta deve indicare il nome delle sostanze secondo una delle designazioni di cui all'allegato I.

Per le sostanze non ancora elencate nell'allegato I la denominazione è stabilita secondo una nomenclatura chimica riconosciuta a livello internazionale, come definito al punto 1.4 precedente.

- 7.2.2. Per i preparati, la scelta delle denominazioni che devono figurare sull'etichetta segue le norme di cui all'articolo 7, paragrafo 1 lettera c) del decreto ministeriale 28 gennaio 1992.

Nota:



Nel caso di preparati concentrati destinati all'industria profumiera:

- la persona responsabile della loro immissione sul mercato può specificare semplicemente l'unica sostanza sensibilizzante che ritiene essere la causa principale del pericolo di sensibilizzazione;
- nel caso di una sostanza naturale, la denominazione chimica può essere: <olio essenziale di ...>, <estratto di ...>, piuttosto che la denominazione dei componenti di tale olio o estratto essenziale.

### 7.3. Scelta dei simboli di pericolo

I simboli di pericolo e la dicitura delle indicazioni di pericolo devono essere conformi a quanto specificato nell'allegato II. Il simbolo deve essere stampato in nero su fondo giallo arancione.

7.3.1. Per le sostanze che figurano nell'allegato I, i simboli e le indicazioni di pericolo sono quelli indicati nell'allegato.

7.3.2. Per le sostanze che non figurano ancora nell'allegato I e per i preparati pericolosi, i simboli e le indicazioni di pericolo sono assegnati conformemente alle norme stabilite nel presente allegato.

Quando ad una sostanza sono assegnati più simboli:

- l'obbligo di apporre il simbolo T rende facoltativi i simboli X e C;
- l'obbligo di apporre il simbolo C rende facoltativo il simbolo X;
- l'obbligo di apporre il simbolo E rende facoltativi i simboli F e O.

### 7.4. Scelta delle frasi di rischio

Il testo delle frasi R deve corrispondere a quello riportato nell'allegato III del decreto legislativo 3 febbraio 1997, n. 52.

Usare ove applicabile le frasi R combinate nell'allegato III

7.4.1. Per le sostanze che figurano nell'allegato I, le frasi R sono quelle indicate in allegato.

7.4.2. Per le sostanze che non figurano nell'allegato I, le frasi R sono scelte in base ai criteri e alle priorità seguenti:

a) in caso di pericoli di effetti sulla salute:

- i) le frasi R corrispondenti alla categoria di pericolo identificata da un simbolo devono figurare sull'etichetta;
- ii) le frasi R corrispondenti ad altre categorie di pericolo che non sono identificate da un simbolo conformemente all'articolo 20 del decreto legislativo 3 febbraio 1997, n. 52

b) in caso di pericolo derivante dalle proprietà fisico-chimiche.

- si applicano i criteri di cui al punto 7.4.2, lettera a), salvo il caso delle frasi di rischio <estremamente infiammabile> o <facilmente infiammabile> che non occorre riportare quando ripetono la dicitura delle indicazioni di pericolo usata con un simbolo;

c) in caso di pericolo per l'ambiente:

- le frasi R corrispondenti alla categoria <pericoloso per l'ambiente> devono figurare sull'etichetta.

7.4.3. Per i preparati, le frasi R saranno scelte secondo i criteri e le priorità qui di seguito:

a) in caso di pericolo per la salute:

- i) le frasi R corrispondenti alla categoria di pericolo identificata da un simbolo. In alcuni casi le frasi R devono essere adattate in conformità delle tabelle di cui all'allegato I del decreto ministeriale 28 gennaio 1992. In particolare, le frasi R relative al/ai componente/i che hanno determinato l'attribuzione del preparato alla categoria di pericolo devono figurare sull'etichetta;
- ii) le frasi R corrispondenti alle altre categorie di pericolo attribuite ai componenti ma che non sono contrassegnate da un simbolo conformemente all'articolo 7, lettera d) del decreto ministeriale 28 gennaio 1992.

b) in caso di pericolo derivante dalle proprietà fisico-chimiche:

- si applicano i criteri di cui al punto 7.4.3, lettera a), salvo in caso delle frasi <estremamente infiammabile> o <facilmente infiammabile> che non occorre indicare quando ripetono la dicitura dell'indicazione di pericolo utilizzata con il simbolo.

In linea generale, per i preparati saranno sufficienti al massimo 4 frasi R per descrivere i rischi. In particolare le combinazioni di frasi elencate nell'allegato III sono considerate come una sola frase. Le frasi standard devono tuttavia comprendere tutti i rischi principali connessi con il preparato.

Se tuttavia il fabbricante ritiene necessario precisare i rischi per l'ambiente si devono aggiungere ulteriori frasi R secondo il caso.

## 7.5. Consigli di prudenza

Il testo delle frasi S deve corrispondere a quello riportato nell'allegato IV del decreto legislativo

Usare ove applicabile le frasi S combinate nell'allegato IV.

7.5.1. Per le sostanze che figurano nell'allegato I, le frasi S sono quelle indicate nell'allegato. Se non sono indicate frasi S, il fabbricante o l'importatore possono includere qualsiasi frase o frasi S opportune.

7.5.2. Scelta dei consigli di prudenza

La scelta finale delle frasi relative ai consigli di prudenza deve tener conto delle frasi di rischio riportate sulle etichette e del previsto uso della sostanza o del preparato.

- in linea generale, saranno sufficienti al massimo 4 frasi S per formulare i consigli di prudenza più adeguati. In particolare, le combinazioni di frasi elencate nell'allegato IV sono considerate come una sola frase.
- in caso di pericolo per l'ambiente, usare come minimo una e come massimo quattro frasi S;
- alcune frasi R diventano superflue se si opera un'attenta selezione delle frasi S e viceversa;
- le frasi S che chiaramente corrispondono a frasi R figureranno sull'etichetta soltanto se si vuole sottolineare una determinata avvertenza.
- nella scelta dei consigli di prudenza occorre prestare particolare attenzione alle previste condizioni di utilizzazione di alcune sostanze e preparati, ad esempio gli effetti dell'applicazione a spruzzo o di altri aerosol. Le frasi vanno scelte tenendo presente l'utilizzazione prevista.

- i consigli di prudenza S1, S2 e S45 sono *obbligatori* per tutte le sostanze e i preparati molto tossici, tossici e corrosivi in vendita al dettaglio.
- i consigli di prudenza S2 e S46 sono *obbligatori* per tutte le altre sostanze pericolose (eccetto quelle soltanto classificate pericolose per l'ambiente) e per i preparati in vendita al dettaglio.

#### 7.6. Il numero CEE

Se una sostanza indicata sull'etichetta è elencata nell'<European Inventory of Existing Commercial Chemical Substances> (EINECS) o nell' <European List of Notified Substances> (ELINCS), il numero EINECS o ELINCS della sostanza deve figurare sull'etichetta. Questa richiesta non si applica ai preparati.

### 8. CASI PARTICOLARI: SOSTANZE

#### 8.1. Bombole mobili di gas

Per le bombole mobili di gas i requisiti di etichettatura sono ritenuti soddisfatti se essi sono conformi all'articolo 20 o all'articolo 21, paragrafo 6, lettera b) del decreto legislativo 3 febbraio 1997, n. 52. Tuttavia in deroga all'articolo 21, paragrafi 1 e 2, si potrà usare una delle seguenti alternative per le bombole di gas con una capacità inferiore o uguale a 150 l:

- il formato e le dimensioni dell'etichetta possono essere quelli indicati nella norma ISO/DP 7225;
- le informazioni di cui all'articolo 20, paragrafo 1, possono essere fornite su un dischetto o un'etichetta di informazione a carattere durevole fissata sulla bombola.

#### 8.2. Bombole di gas destinate al propano, butano o al gas di petrolio liquefatto (GPL)

Queste sostanze sono classificate nell'allegato I. Benchè la loro classificazione sia conforme all'articolo 2, non costituiscono un pericolo per la salute umana quando vengono immesse in commercio, come gas combustibili liberati unicamente in vista della loro combustione, in bombole ricaricabili o in cartucce non ricaricabili disciplinati dalla norma EN 417.

Queste bombole o cartucce devono essere contrassegnate da un simbolo adeguato, nonché dalle frasi R e S relative all'infiammabilità. Non è necessario riportare sull'etichetta le informazioni relative agli effetti sulla salute umana. Tuttavia, le informazioni di questo tipo che avrebbero dovuto essere riportate sull'etichetta saranno trasmesse all'utente professionale dalla persona responsabile della commercializzazione della sostanza, secondo la modalità previste all'articolo 25 del decreto legislativo 3 febbraio 1997, n. 52. Le informazioni che riceveranno consentiranno loro di adottare i provvedimenti necessari per la tutela della salute e della sicurezza.

#### 8.3. Metalli in forma massiva

Queste sostanze sono classificate nell'allegato I del decreto legislativo 3 febbraio 1997, n. 52 o vanno classificate in conformità dell'articolo 6 del decreto legislativo 3 febbraio 1997, n. 52. Tuttavia, talune di queste sostanze, anche se classificate in conformità dell'articolo 2 del decreto legislativo 3 febbraio 1997, n. 52.

non rappresentano un pericolo per la salute per inalazione, ingestione o a contatto con la pelle nella forma in cui vengono immesse in commercio. Tali sostanze non richiedono un'etichetta in conformità dell'articolo 20 del decreto legislativo 3 febbraio 1997, n. 52. Tuttavia, la persona responsabile dell'immissione in commercio del metallo trasmette agli utilizzatori professionali tutte le informazioni che avrebbero dovuto figurare sull'etichetta, tramite un sistema di informazione previsto dall'articolo 25 del decreto legislativo 3 febbraio 1997, n. 52.

#### 8.4 Sostanze caratterizzate dalla frase R65

Le sostanze classificate come nocive per la loro pericolosità in caso di aspirazione non devono essere classificate come nocive e caratterizzate dalla frase R65 sulla loro etichetta se sono immesse in commercio in bombolette aerosol o in recipienti muniti di un dispositivo sigillato di nebulizzazione.

### 9. CASI PARTICOLARI: PREPARATI

#### 9.1 Preparati gassosi (miscela di gas)

Per i preparati gassosi, è necessario prendere in considerazione quanto segue:

- valutazione delle proprietà fisico-chimiche;
- valutazioni dei rischi per la salute.

##### 9.1.1. Valutazione delle proprietà fisico-chimiche

##### 9.1.1.1. Infiammabilità

Le proprietà di infiammabilità di questi preparati sono determinate in conformità dell'articolo 3.2 del decreto ministeriale 28 gennaio 1992, secondo i metodi specificati nell'allegato V, parte A, del decreto legislativo 3 febbraio 1997, n. 52.

Tali preparati saranno classificati sulla base dei risultati delle prove eseguite e in relazione ai criteri di cui all'allegato V e ai criteri della guida di etichettatura.

In deroga a quanto sopra, tuttavia, nel caso in cui i preparati gassosi siano prodotti su commissione in quantità ridotte, l'infiammabilità delle suddette miscele gassose può essere calcolata con il seguente metodo:

l'espressione della miscela gassosa

$$A_1 F_1 + \dots + A_i F_i + \dots + A_n F_n + B_1 I_1 + \dots + B_i I_i + \dots + B_n I_n$$

dove: A, e B, frazioni molari

F, gas infiammabile

I, gas inerte

n, numero di gas infiammabili

p, numero di gas inerti

Può essere trasformata in modo che tutti gli I, (gas inerti) siano espressi da un equivalente di azoto utilizzando un coefficiente K, e che il contenuto equivalente di gas infiammabile A, sia espresso come segue:

$$A'_i = A_i \times \left( \frac{100}{(A_i + K_i B_i)} \right)$$

Usando il valore del contenuto massimo di gas infiammabile che, unito all'azoto, forma un composto non infiammabile nell'aria (Tci), si può ottenere la seguente espressione:

$$\sum_i A'_i / Tci \leq 1$$

La miscela di gas è infiammabile se il valore dell'espressione riportata in precedenza è superiore a 1. Il preparato è classificato come estremamente infiammabile ed è assegnata la frase R12.

**Coefficienti di equivalenza ( $K_i$ )**

I valori dei coefficienti di equivalenza  $K_i$  tra i gas inerti e l'azoto e i valori relativi al contenuto massimo di gas infiammabile ( $T_{ci}$ ) sono forniti nelle tabelle 1 e 2 della norma ISO 10156 edizione 15.12.90.

**Contenuto massimo di gas infiammabili ( $T_{ci}$ )**

Il valore relativo al contenuto massimo di gas infiammabili ( $T_{ci}$ ) è fornito nella tabella 2 della norma ISO 10156 edizione 15.12.90.

Quando il valore  $T_{ci}$  di un gas infiammabile non figura nella norma di cui sopra, si utilizzerà il corrispondente limite inferiore di esplosività (LEL). Se non esiste alcun valore LEL, il valore del  $T_{ci}$  sarà fissato all'1% del volume.

**Osservazioni**

- L'espressione di cui sopra può essere utilizzata per consentire un'etichettatura appropriata dei preparati gassosi, ma non va considerata come un metodo per sostituire la sperimentazione per determinare i parametri tecnici di sicurezza.
- La suddetta espressione inoltre non serve a determinare se una miscela contenente gas combustibile possa essere preparata in modo sicuro. Infatti, quando si valuta l'infiammabilità, i gas comburenti non sono presi in considerazione.
- L'espressione di cui sopra fornirà risultati attendibili soltanto se i gas infiammabili non hanno effetti gli uni sugli altri per quanto concerne l'infiammabilità; è pertanto opportuno considerare questo aspetto, ad esempio con gli idrocarburi alogenati.

**9.1.1.2. Proprietà comburenti**

Considerato che l'allegato V del decreto legislativo 3 febbraio 1997, n. 52 non fornisce un metodo per la determinazione delle proprietà comburenti delle miscele gassose, tali proprietà vanno valutate utilizzando il metodo indicato di seguito.

Il metodo si basa sul principio della comparazione del potenziale comburente dei gas in una miscela con il potenziale comburente dell'ossigeno nell'aria. Le concentrazioni dei gas nella miscela sono espressi in volume per cento.

La comburenza della miscela di gas è considerata uguale o superiore a quella dell'aria se si verifica la seguente condizione:

$$\sum_i x_i C_i \geq 21$$

dove:  $x_i$  è la concentrazione di gas  $i$  in volume %

$C_i$  è il coefficiente di equivalenza dell'ossigeno.

In questo caso, il preparato viene classificato come comburente e verrà attribuita la frase R8

**Coefficienti di equivalenza tra gas comburenti ed ossigeno.**

In appresso sono riportati i coefficienti utilizzati nel calcolo della capacità comburente di taluni gas in una miscela elencati al punto 5.2 nella norma ISO 10156 edizione 15.12.90 in relazione alla capacità comburente dell'ossigeno nell'aria.

O <sub>2</sub>	1
N <sub>2</sub> O	0,6

Quando non esiste un valore per il coefficiente  $C_i$  di un gas nella norma di cui sopra, si attribuisce valore 40 a tale coefficiente.

**9.1.2. Valutazione degli effetti sulla salute**

La pericolosità per la salute di un preparato viene valutata in conformità dell'articolo 3 (3) del decreto ministeriale 28 gennaio 1992.

Qualora i rischi per la salute vengano valutati per mezzo del metodo convenzionale descritto all'articolo 3, paragrafo 5 del decreto ministeriale 28 gennaio 1992 con riferimento ai singoli limiti di concentrazione, i suddetti limiti da utilizzare vengono espressi in percentuale del volume e figurano:

- nell'allegato I del decreto legislativo 3 febbraio 1997, n. 52 per il gas o i gas in questione;
- o nell'allegato I del decreto ministeriale 28 gennaio 1992, tavole da IA a VIA qualora il gas o i gas in questione non figurino nell'allegato I, o vi figurino senza l'indicazione dei limiti di concentrazione.

#### 9.1.3. Etichettatura

Per i contenitori mobili di gas, i requisiti di etichettatura sono rispettati quando sono conformi alle disposizioni dell'articolo 8, paragrafo 4, lettera b) del decreto ministeriale 28 gennaio 1992.

Tuttavia, in deroga agli articoli 8.1 e 8.2, per le bombole di gas con una capacità inferiore o uguale a 150 litri, la presentazione e le dimensioni dell'etichetta possono rispettare i requisiti della norma ISO 7225. In questo caso, l'etichetta può riportare la denominazione generica o quella industriale o commerciale del preparato, purché i componenti pericolosi del preparato siano indicati sul corpo della bombola in maniera chiara ed indelebile.

Le informazioni di cui all'articolo 7 possono essere fornite su un disco o un'etichetta durevoli integrati al recipiente.

#### 9.2. **Bombole di gas destinate a preparati contenenti del propano, del butano o del gas di petrolio liquefatto (GPL) odorizzati**

Il propano, il butano e il gas di petrolio liquefatto sono classificati nell'allegato I. Benché i preparati contenenti queste sostanze siano classificati conformemente all'articolo 3 del decreto ministeriale 28 gennaio 1992, essi non costituiscono un pericolo per la salute umana quando vengono immessi in commercio, come gas combustibili liberati unicamente in vista della loro combustione, in bombole ricaricabili o in cartucce non ricaricabili disciplinate dalla norma EN 417.

Queste bombole o cartucce devono essere contrassegnate da un simbolo adeguato, nonché dalle frasi R e S relative all'infiammabilità. Non è necessario riportare sull'etichetta le informazioni relative agli effetti sulla salute umana. Tuttavia, le informazioni di questo tipo che avrebbero dovuto essere riportate sull'etichetta saranno trasmesse all'utente professionale dalla persona responsabile della commercializzazione in base alle modalità previste all'articolo 10 del decreto ministeriale 28 gennaio 1992. Le informazioni che riceveranno consentiranno loro di adottare i provvedimenti necessari per la tutela della salute e della sicurezza.

#### 9.3. **Leghe, preparati contenenti polimeri e preparati contenenti elastomeri**

I suddetti preparati vanno classificati in conformità dell'articolo 3 ed etichettati in conformità dell'articolo 7 del decreto ministeriale 28 gennaio 1992. Tuttavia, taluni di questi preparati, anche se classificati secondo l'articolo 3 (3), non rappresentano un pericolo per la salute per inalazione, ingestione o a contatto con la pelle nella forma in cui vengono immessi in commercio: Tali preparati non richiedono un'etichetta in conformità dell'articolo 7; tuttavia tutte le informazioni che sarebbero dovute comparire sull'etichetta vanno trasmesse all'utilizzatore professionale tramite un sistema di informazioni secondo le modalità dell'articolo 10 del suddetto decreto.

#### 9.4. **Preparati caratterizzati dalla frase R65**

I preparati classificati come nocivi per la loro pericolosità in caso di aspirazione non devono essere classificati come nocivi e caratterizzati con la frase R65 sull'etichetta se sono immessi in commercio in bombolette aerosol o in recipienti muniti di un dispositivo sigillato di nebulizzazione.

**9.5. Perossidi organici**

I perossidi organici combinano le proprietà di una sostanza comburente e di una combustibile in un'unica molecola: se un perossido organico si decompone, la parte comburente della molecola reagisce isotermicamente con la parte combustibile (soggetta a comburenza). Per le proprietà comburenti, non si possono applicare ai perossidi organici i metodi attuali di cui all'allegato V.

Si deve usare il seguente metodo di calcolo basato sulla presenza di ossigeno attivo.

Il tenore di ossigeno disponibile (%) di un preparato di perossido organico è dato dalla formula:

$$16 \times (n_i \times c_i / m_i)$$

dove:

$n_i$  = numero di gruppi perossidici per molecola di perossido organico  $i$ ,

$c_i$  = concentrazione (massa %) del perossido organico  $i$ ,

$m_i$  = massa molecolare del perossido organico  $i$ .

**ALLEGATO VII***ALLEGATO VII parte A***INFORMAZIONI RICHIESTE PER IL FASCICOLO TECNICO  
(FASCICOLO DI BASE)**

Qualora non sia tecnicamente possibile o non risulti scientificamente necessario fornire una determinata informazione, occorre addurre un'adeguata motivazione, che dovrà essere accettata dall'autorità competente.

Va menzionato il nome dell'ente o degli enti responsabili delle prove.

**0 IDENTITÀ DEL FABBRICANTE ED IDENTITÀ DEL NOTIFICANTE; UBICAZIONE DEL  
LUOGO DI PRODUZIONE**

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante è stato designato unico rappresentante del fabbricante, identità e indirizzi degli importatori della sostanza nella Comunità.

**1 IDENTITÀ DELLA SOSTANZA****1.1 Denominazione****1.1.1 Denominazione secondo la nomenclatura dell'IUPAC****1.1.2 Altre denominazioni (denominazione comune, denominazione commerciale, abbreviazione)****1.1.3 Numero CAS e denominazione CAS (se disponibile)****1.2 Formula bruta e formula di struttura****1.3 Composizione della sostanza****1.3.1 Purezza in percentuale (%)****1.3.2 Natura delle impurità, compresi gli isomeri e i prodotti secondari****1.3.3 Percentuale delle principali impurità (significative)****1.3.4 Se la sostanza contiene uno stabilizzante o un inibente oppure altri additivi precisarne: la natura, l'ordine di grandezza.**

ppm,                      %

**1.3.5 Dati relativi allo spettro (UV, IR, NMR o spettro di massa)****1.3.6 HPLC, GC****1.4 Metodi di individuazione e di determinazione**

Descrizione completa dei metodi seguiti o indicazione dei relativi riferimenti bibliografici

Dovranno essere fornite informazioni, oltre che sui metodi di individuazione e di determinazione, sui metodi analitici noti al notificante che consentono di individuare una sostanza e i suoi prodotti di trasformazione dopo immissione nell'ambiente nonché di determinare l'esposizione umana diretta

**2 DATI RELATIVI ALLA SOSTANZA****2.0 Produzione**

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale connessa con il processo produttivo. Non sono richiesti dettagli precisi del processo produttivo, in particolare quelli di carattere delicato dal punto di vista commerciale

**2.0.1 Procedimenti tecnologici impiegati per la produzione****2.0.2 Valutazione dell'esposizione in sede di produzione**

— ambiente di lavoro

— ambiente



**2.1. Utilizzazioni previste**

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale alle sostanze, in connessione con le utilizzazioni proposte/previste.

**2.1.1. Tipi di utilizzazione: descrivere la funzione della sostanza e gli effetti desiderati****2.1.1.1. Procedimento o procedimenti tecnologici in sede di impiego della sostanza (qualora noti)****2.1.1.2. Valutazione o valutazioni dell'esposizione in sede di impiego (qualora note):**

— ambiente di lavoro

— ambiente

**2.1.1.3. Forma nella quale la sostanza è immessa sul mercato: sostanza, preparato, prodotto****2.1.1.4. Concentrazione della sostanza nei preparati e nei prodotti commercializzati (qualora nota)****2.1.2. Settori d'applicazione e ripartizione approssimativa:**

— industrie

— operatori dell'agricoltura e dell'artigianato

— libera vendita

**2.1.3. Se del caso, identità dei destinatari della sostanza, qualora sia nota****2.1.4. Quantità e composizione dei residui derivanti dalle utilizzazioni proposte (qualora nota)****2.2. Produzione e/o importazione prevista per ciascuna delle utilizzazioni o ciascuno dei settori di utilizzazione considerati****2.2.1. Produzione e/o importazione complessiva in tonnellate/anno:**

— durante il primo anno civile

— nei successivi anni civili

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante è stato designato unico rappresentante del fabbricante, queste informazioni debbono essere fornite per ciascuno degli importatori di cui al punto 0.

**2.2.2. Produzione e/o importazione ripartita secondo le indicazioni di cui ai punti 2.1.1 e 2.1.2, ed espressa in percentuale:**

— durante il primo anno civile

— nei successivi anni civili

**2.3. Metodi e precauzioni raccomandate concernenti:****2.3.1. — la manipolazione****2.3.2. — il deposito****2.3.3. — il trasporto****2.3.4. — l'incendio (natura dei gas di combustione o pirolisi, quando le utilizzazioni previste lo giustificano)****2.3.5. Altri pericoli, in particolare reazione chimica con l'acqua****2.3.6. Se del caso, informazioni sulle possibilità che la sostanza esploda se presentata in forma di polvere****2.4. Misure di emergenza in caso di dispersione accidentale****2.5. Misure di emergenza in caso di infortunio alle persone**

(esempio: avvelenamento)

**2.6. Imballaggio****3. PROPRIETÀ FISICO-CHIMICHE DELLA SOSTANZA****3.0. Stato della sostanza a 20 °C e a 101,3 kPa****3.1. Punto di fusione****3.2. Punto di ebollizione****3.3. Densità relativa**

- 3.4. Tensione di vapore
- 3.5. Tensione di superficie.
- 3.6. Idrosolubilità
- 3.8. Coefficiente di ripartizione n. ottanolo/acqua
- 3.9. Punto d'infiammabilità
- 3.10. Infiammabilità
- 3.11. Proprietà esplosive
- 3.12. Temperatura di autoaccensione
- 3.13. Proprietà comburenti
- 3.15. Granulometria

Per le sostanze che potrebbero essere commercializzate in una forma che presenta il rischio di una esposizione per inalazione, dovrebbe essere effettuata una prova per stabilire la diffusione delle particelle della sostanza nella forma commercializzata.

#### 4. STUDI TOSSICOLOGICI

##### 4.1. Tossicità acuta

Per le prove di cui ai punti da 4.1.1 a 4.1.3, le sostanze diverse dai gas devono essere somministrate come minimo attraverso due vie, di cui una deve essere la via orale. La scelta della seconda via dipenderà dalla natura della sostanza e dalla probabile via dell'esposizione umana. I gas e i liquidi volatili debbono essere somministrati per inalazione.

- 4.1.1. Via orale
- 4.1.2. Inalazione
- 4.1.3. Via cutanea
- 4.1.5. Irritazione della pelle
- 4.1.6. Irritazione degli occhi
- 4.1.7. Sensibilizzazione della pelle

##### 4.2. Somministrazione ripetuta

La via di somministrazione deve essere la più opportuna in funzione della probabile via dell'esposizione umana, della tossicità acuta e della natura della sostanza. In mancanza di controindicazioni si preferisce in genere la via orale.

##### 4.2.1. Somministrazione di tossicità ripetuta (28 giorni)

##### 4.3. Altri effetti

##### 4.3.1. Mutagenesi

La sostanza deve essere esaminata con due prove. Una prova deve essere batteriologica (prova di revisione della mutazione), con e senza attivazione metabolica. L'altra deve essere una prova non batteriologica intesa a evidenziare aberrazioni o danni cromosomici. In mancanza di controindicazioni questa prova deve in linea di massima essere effettuata *in vitro*, con e senza attivazione metabolica. In caso di risultati positivi in una delle due prove, sono necessarie prove complementari, da realizzare secondo le indicazioni di cui all'allegato V.

##### 4.3.2. Individuazione della tossicità connessa con il ciclo riproduttivo p. m.

##### 4.3.3. Valutazione del comportamento tossicocinetico di una sostanza in base ai dati contenuti nel fascicolo di base e altre informazioni pertinenti.

#### 5. STUDI ECOTOSSICOLOGICI

##### 5.1. Effetti sugli organismi

- 5.1.1. Tossicità acuta per i pesci
- 5.1.2. Tossicità acuta per la Daphnia

- 5.1.3. Prova di inibizione della crescita delle alghe
  - 5.1.6. Inibizione batterica  
Nei casi in cui l'effetto inibitorio di una sostanza sui batteri potesse influire sulla biodegradazione, si dovrebbe effettuare una prova di inibizione batterica prima di procedere alla biodegradazione
  - 5.2. Degradazione
    - biotica
    - abiotica:  
Se la sostanza non è facilmente biodegradabile occorre valutare l'opportunità di eseguire la seguente prova: idrolisi in funzione del pH
  - 5.3. Prova di screening di assorbimento/desorbimento
  - 6. POSSIBILITÀ DI RENDERE INNOCUA LA SOSTANZA
    - 6.1. A livello industria/artigianato
      - 6.1.1. Possibilità di riciclaggio
      - 6.1.2. Possibilità di neutralizzare gli effetti indesiderati
      - 6.1.3. Possibilità di distruzione:
        - discarica controllata
        - incenerimento
        - impianto di depurazione delle acque
        - altre
    - 6.2. A livello libera vendita
      - 6.2.1. Possibilità di riciclaggio
      - 6.2.2. Possibilità di neutralizzare gli effetti indesiderati
      - 6.2.3. Possibilità di distruzione:
        - discarica controllata
        - incenerimento
        - impianto di depurazione delle acque
        - altre
-

## ALLEGATO VII parte B

CARATTERISTICHE CHE FORMANO OGGETTO DEL FASCICOLO TECNICO  
(FASCICOLO DI BASE)

Qualora non sia tecnicamente possibile o non risulti scientificamente necessario fornire una determinata informazione, occorre addurre un'adeguata motivazione, che dovrà essere accettata dall'autorità competente.

Il nome dell'ente o degli enti responsabili delle prove deve essere indicato.

In aggiunta alle informazioni di seguito richieste, l'Autorità competente, qualora lo consideri necessario per una valutazione dei rischi, può richiedere che il notificante fornisca le seguenti informazioni supplementari:

- tensione di vapore
- esame di tossicità acuta per la Daphnia

## 0 IDENTITÀ DEL FABBRICANTE ED IDENTITÀ DEL NOTIFICANTE, UBICAZIONE DEL LUOGO DI PRODUZIONE

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante è stato designato unico rappresentante del fabbricante, identità e indirizzi degli importatori della sostanza nella Comunità.

## 1 IDENTITÀ DELLA SOSTANZA

## 1.1 Denominazione

## 1.1.1 Denominazione secondo la nomenclatura dell'IUPAC

## 1.1.2 Altre denominazioni (denominazione comune, denominazione commerciale, abbreviazione)

## 1.1.3 Numero CAS e denominazione CAS (se disponibile)

## 1.2 Formula bruta e formula di struttura

## 1.3 Composizione della sostanza

## 1.3.1 Purezza in percentuale (%)

## 1.3.2 Natura delle impurità, compresi gli isomeri e i prodotti secondari

## 1.3.3 Percentuale delle principali impurità (significative)

## 1.3.4 Se la sostanza contiene uno o più componenti o additivi oppure altri additivi pericolosi, la natura, l'ordine di grandezza:

g/kg                      %

## 1.3.5 Dati relativi allo spettro (UV, IR, NMR o spettro di massa)

## 1.3.6 HPLC/GC

## 1.4 Metodi di individuazione e di determinazione

Descrizione completa dei metodi, con l'indicazione dei relativi riferimenti bibliografici.

Oltre che sui metodi di individuazione e di determinazione, informazione sui metodi analitici noti al notificante che consentono di individuare una sostanza e i suoi prodotti di trasformazione dopo immissione nell'ambiente nonché di determinare l'esposizione umana diretta.

## 2 DATI RELATIVI ALLA SOSTANZA

## 2.0 Produzione

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale connessa con il processo produttivo. Non sono richiesti dettagli precisi del processo produttivo, in particolare quelli di carattere delicato dal punto di vista commerciale.

## 2.0.1 Procedimenti tecnologici impiegati per la produzione

## 2.0.2 Valutazione dell'esposizione in sede di produzione

- ambiente di lavoro
- ambiente

**2.1. Utilizzazioni previste**

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale alle sostanze, in connessione con le utilizzazioni proposte/previste.

**2.1.1. Tipi di utilizzazione: descrivere la funzione della sostanza e gli effetti desiderati****2.1.1.1. Procedimento o procedimenti tecnologici in sede di impiego della sostanza (qualora noti)****2.1.1.2. Valutazione o valutazioni dell'esposizione in sede di impiego (qualora note):**

- ambiente di lavoro
- ambiente

**2.1.1.3. Forma nella quale la sostanza è immessa sul mercato: sostanza, preparato, prodotto****2.1.1.4. Concentrazione della sostanza nei preparati e nei prodotti commercializzati (qualora nota)****2.1.2. Settori d'applicazione e ripartizione approssimativa:**

- industrie
- operatori dell'agricoltura e dell'artigianato
- libera vendita

**2.1.3. Se del caso, identità dei destinatari della sostanza, qualora sia nota****2.2. Produzione e/o importazione prevista per ciascuna delle utilizzazioni o ciascuno dei settori di utilizzazione considerati****2.2.1. Produzione e/o importazione complessiva in tonnellate/anno:**

- durante il primo anno civile
- nei successivi anni civili

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante è stato designato unico rappresentante del fabbricante, queste informazioni debbono essere fornite per ciascuno degli importatori di cui al punto 0.

**2.2.2. Produzione e/o importazione ripartita secondo le indicazioni di cui ai punti 2.1.1 e 2.1.2, ed espressa in percentuale:**

- durante il primo anno civile
- nei successivi anni civili

**2.3. Metodi e precauzioni raccomandate concernenti:****2.3.1. — la manipolazione****2.3.2. — il deposito****2.3.3. — il trasporto****2.3.4. — l'incendio (natura dei gas di combustione o pirolisi, quando le utilizzazioni previste lo giustificano)****2.3.5. Altri pericoli, in particolare reazione chimica con l'acqua****2.4. Misure di emergenza in caso di dispersione accidentale****2.5. Misure di emergenza in caso di infortunio alle persone (esempio: avvelenamento)****2.6. Imballaggio****3. PROPRIETÀ FISICO-CHIMICHE DELLA SOSTANZA****3.0. Stato della sostanza a 20 °C e a 101,3 kPa****3.1. Punto di fusione****3.2. Punto di ebollizione****3.6. Idrosolubilità**

3.8. Coefficiente di ripartizione n-ottanolo/acqua

3.9. Punto d'infiammabilità

3.10. Infiammabilità

#### 4. STUDI TOSSICOLOGICI

##### 4.1. Tossicità acuta

Per le prove da 4.1.1 a 4.1.2 è sufficiente una via di somministrazione. Sostanze diverse dai gas devono essere somministrate oralmente. I gas vanno somministrati per inalazione.

4.1.1. Via orale

4.1.2. Inalazione

4.1.5. Irritazione della pelle

4.1.6. Irritazione degli occhi

4.1.7. Sensibilizzazione della pelle

4.3. Altri effetti

4.3.1. Mutagenesi

Prove batteriologiche con e senza attivazione metabolica (prova di reversione della mutazione)

#### 5. STUDI ECOTOSSICOLOGICI

##### 5.2. Degradazione

— biotica

## ALLEGATO VII parte C

CARATTERISTICHE CHE FORMANO OGGETTO DEL FASCICOLO TECNICO  
(FASCICOLO DI BASE)

Qualora non sia tecnicamente possibile o non risulti scientificamente necessario fornire una determinata informazione, occorrerà addurre un'adeguata motivazione, che dovrà essere accettata dall'autorità competente.

Il nome dell'ente o degli enti responsabili delle prove deve essere indicato.

## 0. IDENTITÀ DEL FABBRICANTE ED IDENTITÀ DEL NOTIFICANTE SE NON SI TRATTA DELLA STESSA PERSONA; UBICAZIONE DEL LUOGO DI PRODUZIONE

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante è stato designato unico rappresentante del fabbricante, identità e indirizzi degli importatori della sostanza nella Comunità.

## 1. IDENTITÀ DELLA SOSTANZA

## 1.1. Denominazione

## 1.1.1. Denominazione secondo la nomenclatura dell'IUPAC

## 1.1.2. Altre denominazioni (denominazione comune, denominazione commerciale, abbreviazione)

## 1.1.3. Numero CAS e denominazione CAS (se disponibile)

## 1.2. Formula bruta e formula di struttura

## 1.3. Composizione della sostanza

## 1.3.1. Purezza in percentuale (%)

## 1.3.2. Natura delle impurità, compresi gli isomeri e i prodotti secondari

## 1.3.3. Percentuale delle principali impurità (significative)

## 1.3.4. Se la sostanza contiene uno stabilizzante o un inibente oppure altri additivi precisarne la natura, l'ordine di grandezza:

..... ppm; ..... %

## 1.3.5. Dati relativi allo spettro (UV, IR, NMR o spettro di massa)

## 1.3.6. HPLC, GC

## 1.4. Metodi di individuazione e di determinazione

Descrizione completa dei metodi seguiti o indicazione dei relativi riferimenti bibliografici.

Oltre che sui metodi di individuazione e di determinazione, informazioni sui metodi analitici noti al notificante che consentono di individuare una sostanza e i suoi prodotti di trasformazione dopo immissione nell'ambiente nonché di determinare l'esposizione umana diretta.

## 2. DATI RELATIVI ALLA SOSTANZA

## 2.0. Produzione

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale connessa con il processo produttivo. Non sono richiesti dettagli precisi del processo produttivo, in particolare quelli di carattere delicato dal punto di vista commerciale.

## 2.0.1. Procedimento o procedimenti tecnologici impiegati per la produzione

## 2.0.2. Valutazione dell'esposizione in sede di produzione:

— ambiente di lavoro

— ambiente

## 2.1. Utilizzazioni previste

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale alle sostanze, in connessione con le utilizzazioni proposte/previste.

- 2.1.1 Tipi di utilizzazione: descrivere la funzione della sostanza e gli effetti desiderati
- 2.1.1.1 Procedimento o procedimenti tecnologici in sede di impiego della sostanza (qualora noti)
- 2.1.1.2 Valutazione o valutazioni dell'esposizione in sede di impiego (qualora note):
- ambiente di lavoro
  - ambiente
- 2.1.1.3. Forma nella quale la sostanza è immessa sul mercato: sostanza, preparato, prodotto
- 2.1.1.4. Concentrazione della sostanza nei preparati e nei prodotti commercializzati (qualora nota)
- 2.1.2. Settori d'applicazione e ripartizione approssimativa:
- industrie
  - operatori dell'agricoltura e dell'artigianato
  - libera vendita
- 2.1.3. Se del caso, identità dei destinatari della sostanza, qualora sia nota
- 2.2. Produzione e/o importazione prevista per ciascuna delle utilizzazioni o ciascuno dei settori di utilizzazione considerati
- 2.2.1 Produzione e/o importazione complessiva in tonnellate/anno
- durante il primo anno civile
  - nei successivi anni civili
- Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante è stato designato unico rappresentante del fabbricante, queste informazioni debbono essere fornite per ciascuno degli importatori di cui al punto 0.
- 2.2.2 Produzione e/o importazione ripartita secondo le indicazioni di cui ai punti 2.1.1 e 2.1.2, ed espressa in percentuale:
- durante il primo anno civile
  - nei successivi anni civili
- 2.3 Metodi e precauzioni raccomandate concernenti:
- 2.3.1 — la manipolazione
- 2.3.2 — il deposito
- 2.3.3 — il trasporto
- 2.3.4 — l'incendio (natura dei gas di combustione o pirolisti, quando le utilizzazioni previste lo giustificano)
- 2.3.5 — i pericoli in particolare per azione chimica con l'acqua
- 2.4 Misure di emergenza in caso di dispersione accidentale
- 2.5 Misure di emergenza in caso di infortunio alle persone (esempio: avvelenamento)
- 2.6 Imballaggio
- 3 PROPRIETÀ FISICO-CHIMICHE DELLA SOSTANZA
- 3.0 Stato della sostanza a 20 °C e a 101,3 kPa
- 3.9 Punto d'inflammabilità
- 3.10 Inflammabilità
- 4 STUDI TOSSICOLOGICI
- 4.1 Tossicità acuta
- Una via di somministrazione è sufficiente. Le sostanze diverse dai gas devono essere somministrate per via orale. I gas vanno somministrati per inalazione.
- 4.1.1 Via orale
- 4.1.2 Inalazione



## ALLEGATO VII parte D

DISPOSIZIONI SPECIFICHE RELATIVE AI FASCICOLI TECNICI (FASCICOLO DI BASE)  
CONTENUTI NELLE NOTIFICHE DI CUI ALL'ARTICOLO 12

- A.** Ai sensi del presente allegato s'intende per
- "omopolimero", un polimero costituito da una sola specie di monomeri,
  - "copolimero", un polimero costituito da più di una specie di monomeri;
  - "polimero per cui è accettabile un insieme di prove ridotto" o "polimero IPR", un polimero che soddisfa i criteri indicati al punto C.2;
  - "famiglia di polimeri", un gruppo di polimeri (omopolimeri o copolimeri) con diversi pesi molecolari medi numerici o diverse composizioni derivanti da differenti rapporti tra le unità monomeriche. La differenza di peso molecolare medio numerico o di composizione non deve essere determinata da fluttuazioni involontarie connesse al processo bensì da alterazioni deliberate delle condizioni del processo senza che il processo in sé risulti modificato;
  - " $M_n$ ", il peso molecolare medio numerico,
  - " $M$ " il peso molecolare.
- B.** Approccio per famiglie
- Al fine di evitare prove superflue è possibile raggruppare i polimeri in famiglie il concetto è quello di sottoporre a prova i membri rappresentativi di una famiglia che presenti
- $M_n$  variabile per gli omopolimeri, oppure
  - una composizione variabile con  $M_n$  approssimativamente costante per i copolimeri, oppure
  - per  $M_n > 1000$ ,  $M_n$  variabile e una composizione approssimativamente costante per i copolimeri.
- Nei casi in cui si riscontrano effetti dissimili nei membri rappresentativi in conseguenza del campo di variazione del  $M_n$  o della composizione, sono necessarie ulteriori prove su altri membri rappresentativi.
- C.** Informazioni richieste per i fascicoli tecnici di cui all'articolo 12
- Qualora non sia tecnicamente possibile o non risulti scientificamente necessario fornire una determinata informazione, occorre addurre un'adeguata motivazione che dovrà essere sottoposta alle autorità competenti.
- Per la valutazione delle proprietà del polimero si può tener conto delle informazioni disponibili relative alle proprietà del(i) monomero(i).
- Fatto salvo l'articolo 3, paragrafo 1 del decreto legislativo 3 febbraio 1997, n°52, le prove devono essere effettuate conformemente alle metodologie riconosciute e raccomandate dai competenti organismi internazionali, qualora tali raccomandazioni esistano.**
- Deve essere indicato il nome dell'ente o degli enti responsabili delle prove.

**C.1. POLIMERI SOTTOPOSTI A UN INSIEME DI PROVE ORDINARIO**

- C.1.1. Polimeri presenti sul mercato commercializzati in quantità  $\geq 1$  t/anno e in quantità  $\geq 5$  t**
- La quantità delle informazioni e delle prove di cui all'articolo 7 indicate nell'allegato VII parte A si applicano alle seguenti informazioni specifiche sui polimeri:
1. IDENTITÀ DELLA SOSTANZA
    - 1.2.1. Peso molecolare medio numerico
    - 1.2.2. Distribuzione dei pesi molecolari (DPM)
  - 1.2.3. Identità e concentrazione dei monomeri di partenza e delle sostanze di partenza che saranno legati nel polimero
  - 1.2.4. Indicazione dei gruppi terminali identici e della natura dei gruppi funzionali reattivi
  - 1.2.5. Identità dei monomeri non reagiti
  - 1.2.6. Percentuale di monomeri non reagiti

**2 DATI RELATIVI ALLA SOSTANZA**

- 2.1.1.5. Una dichiarazione corredata delle informazioni pertinenti che indichi se il polimero è stato sviluppato in modo da essere degradabile nell'ambiente

**3 PROPRIETÀ FISICO-CHIMICHE DELLA SOSTANZA****3.6.1 Estraiibilità in acqua**

Fatto salvo l'articolo 16, paragrafo 1 del decreto legislativo 3 febbraio 1997, n°52, ulteriori prove possono essere richieste in taluni casi, ad esempio:

- fotostabilità se il polimero non è specificamente reso stabile alla luce;
- estraibilità a lungo termine (test di lisciviazione). A seconda dei risultati di questa prova, possono essere richieste caso per caso prove appropriate di lisciviazione.

**C.1.2. Polimeri immessi sul mercato comunitario in quantità < 1 t/anno o in quantità totali < 5 t, ma > 100 kg/anno, oppure in quantità totali > 500 kg**

In aggiunta alle informazioni e ai test di cui all'articolo 8, indicati nell'allegato VII parte B, si richiedono le seguenti informazioni specifiche sui polimeri:

**1. IDENTITÀ DELLA SOSTANZA**

- 1.2.1. Peso molecolare medio numerico
- 1.2.2. Distribuzione dei pesi molecolari (DPM)
- 1.2.3. Identità e concentrazione dei monomeri di partenza e delle sostanze di partenza che saranno legati nel polimero
- 1.2.4. Indicazione dei gruppi terminali, identità e frequenza dei gruppi funzionali reattivi
  - 1.3.2.1. Identità dei monomeri non reagiti
  - 1.3.3.1. Percentuale dei monomeri non reagiti

**2. DATI RELATIVI ALLA SOSTANZA**

- 2.1.1.5. Una dichiarazione corredata delle informazioni pertinenti che indichi se il polimero è stato sviluppato in modo da essere degradabile nell'ambiente.
- 3. PROPRIETÀ FISICO-CHIMICHE DELLA SOSTANZA
  - 3.6.1. Estraiibilità in acqua

**C.1.3. Polimeri immessi sul mercato comunitario in quantità < 100 kg/anno o in quantità totali < 500 kg**

In aggiunta alle informazioni e alle prove di cui all'articolo 8, indicate nell'allegato VII parte C, si richiedono le seguenti informazioni specifiche sui polimeri:

**1. IDENTITÀ DELLA SOSTANZA**

- 1.2.1. Peso molecolare medio numerico
- 1.2.2. Distribuzione dei pesi molecolari (DMP)
- 1.2.3. Identità e concentrazione dei monomeri di partenza e delle sostanze di partenza che saranno legate nel polimero
- 1.2.4. Indicazione dei gruppi terminali, identità e frequenza dei gruppi funzionali reattivi
  - 1.3.2.1. Identità dei monomeri non reagiti
  - 1.3.3.1. Percentuale di monomeri non reagiti

**2. DATI RELATIVI ALLA SOSTANZA**

- 2.1.1.5. Una dichiarazione corredata delle informazioni pertinenti che indichi se il polimero è stato sviluppato in modo da essere degradabile nell'ambiente.

**C.2. POLIMERI PER I QUALI È ACCETTABILE UN INSIEME DI PROVE RIDOTTO**

In determinate condizioni l'insieme di prove del fascicolo di base per i polimeri può essere ridotto

Le sostanze con un elevato peso molecolare medio numerico, un basso contenuto di specie a basso peso molecolare e con una scarsa solubilità/estraibilità sono considerate non biologicamente disponibili. Di conseguenza per individuare i polimeri per i quali un insieme ridotto di prove è accettabile, si deve ricorrere ai seguenti criteri:

Per i polimeri non facilmente degradabili immessi sul mercato comunitario in quantità  $\geq 1$  t/anno o in quantità totali  $\geq 5$  t, i criteri in base ai quali si deve stabilire per quali polimeri è accettabile un insieme di prove ridotto sono i seguenti:

- I. un elevato peso molecolare medio numerico ( $M_n$ )<sup>(1)</sup>,
- II. estraibilità in acqua (3.6.1)  
< 10 mg/l escluso ogni apporto derivante da additivi e impurità,
- III. pesi molecolari < 1 000 in percentuale inferiore all'1 %; questa percentuale si riferisce soltanto alle molecole (componenti) direttamente derivate da uno o più monomeri, questo(i) ultimo(i) compreso(i), ed escluse altre componenti quali additivi o impurità.

Qualora tutti i criteri siano rispettati, per il polimero in questione è accettabile il ricorso ad un insieme di prove ridotto.

Nel caso in cui polimeri non facilmente degradabili siano immessi sul mercato comunitario in quantità < 1 t/anno o in quantità totale < 5 t, è sufficiente che siano soddisfatti i criteri I e II perché il polimero sia inserito fra quelli per cui un insieme di prove ridotto è accettabile.

Qualora non sia possibile provare il rispetto dei criteri mediante le prove stabilite, il notificante deve dimostrare il rispetto di tali criteri con altri mezzi.

In talune circostanze si possono richiedere prove tossicologiche ed ecotossicologiche.

#### C.2.1. Polimeri immessi sul mercato comunitario in quantità $\geq 1$ t/anno o in quantità totale $\geq 5$ t

##### 0. IDENTITÀ DEL FABBRICANTE E IDENTITÀ DEL NOTIFICANTE · UBICAZIONE DEL LUOGO DI PRODUZIONE

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante sia stato designato unico rappresentante del fabbricante: identità e indirizzi degli importatori della sostanza nella Comunità.

##### 1. IDENTITÀ DELLA SOSTANZA

###### 1.1. Denominazione

###### 1.1.1. Denominazione secondo la nomenclatura IUPAC

###### 1.1.2. Altre denominazioni (denominazione comune, denominazione commerciale, abbreviazione)

###### 1.1.3. Numero CAS e denominazione CAS (se disponibile)

###### 1.2. Formula bruta e formula di struttura

###### 1.2.1. Peso molecolare medio numerico

###### 1.2.2. Distribuzione dei pesi molecolari (DPM)

###### 1.2.3. Identità e concentrazione dei monomeri di partenza e delle sostanze di partenza che saranno legate nel polimero

###### 1.2.4. Indicazione dei gruppi terminali, identità e frequenza dei gruppi funzionali reattivi

##### 1.3 Composizione della sostanza

###### 1.3.1. Grado di purezza (in percentuale)

###### 1.3.2. Natura delle impurità, compresi i prodotti secondari

###### 1.3.2.1. Identità dei monomeri non reagiti

###### 1.3.3. Percentuale delle principali impurità (significative)

###### 1.3.3.1. Percentuale di monomeri non reagiti

###### 1.3.4. Se la sostanza contiene uno stabilizzante o un inibente oppure altri additivi: precisarne natura, l'ordine di grandezza ppm, %

###### 1.3.5. Dati spettrali (UV, IR, NMR o spettro di massa)

###### 1.3.6.1 GPC

(1) l'autorità che riceve la notifica decide sotto la propria responsabilità se il polimero soddisfa tale criterio.

**1.4. Metodi di individuazione e di determinazione**

Descrizione completa dei metodi seguiti o indicazione dei relativi riferimenti bibliografici.

Oltre che sui metodi di individuazione e di determinazione, fornire informazioni sui metodi analitici noti al notificante che consentono di individuare una sostanza e i suoi prodotti di trasformazione dopo immissione nell'ambiente nonché di determinare l'esposizione umana diretta.

**2. DATI RELATIVI ALLA SOSTANZA****2.0. Produzione**

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale connessa con il processo produttivo. Non sono richiesti dettagli precisi del processo produttivo, in particolare quelli di carattere delicato dal punto di vista commerciale.

**2.0.1. Procedimenti tecnologici impiegati per la produzione****2.0.2. Valutazione dell'esposizione in sede di produzione:**

- ambiente di lavoro
- ambiente

**2.1. Utilizzazioni previste**

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale alle sostanze, in connessione con le utilizzazioni proposte/previste.

**2.1.1. Tipi di utilizzazione: descrivere la funzione della sostanza e gli effetti desiderati****2.1.1.1. Procedimento o procedimenti tecnologici in sede di impiego della sostanza (qualora noti)****2.1.1.2. Valutazione e valutazioni dell'esposizione in sede di impiego (qualora note):**

- ambiente di lavoro
- ambiente

**2.1.1.3. Forma nella quale la sostanza è immessa sul mercato: sostanza, preparato, prodotto****2.1.1.4. Concentrazione della sostanza nei preparati e nei prodotti commercializzati (qualora nota)****2.1.2. Settori d'applicazione e ripartizione approssimativa:**

- industria
- operatori dell'agricoltura e dell'artigianato
- libera vendita

**2.1.3. Se del caso, l'identità dei destinatari della sostanza, qualora sia nota****2.1.4. Quantità e composizione dei rifiuti derivanti dalle utilizzazioni proposte (qualora note)****2.2. Produzione e/o importazione prevista per ciascuna delle utilizzazioni e ciascuno dei settori di utilizzazione considerati****2.2.1. Produzione e/o importazione complessiva in tonnellate/anno:**

- durante il primo anno civile
- nei successivi anni civili

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante è stato designato unico rappresentante del fabbricante, queste informazioni debbono essere fornite per ciascuno degli importatori di cui al punto 0.

**2.2.2. Produzione e/o importazione ripartita secondo le indicazioni di cui ai punti 2.1.1 e 2.1.2 ed espressa in percentuale:**

- durante il primo anno civile
- nei successivi anni civili

**2.3. Metodi e precauzioni raccomandati concernenti:****2.3.1. La manipolazione****2.3.2. Il deposito****2.3.3. Il trasporto****2.3.4. L'incendio (natura dei gas di combustione o prodotti, quando le utilizzazioni previste lo giustificano)****2.3.5. Altri pericoli, in particolare reazione chimica con l'acqua****2.3.6. Se del caso, informazioni relative alla suscettibilità all'esplosione qualora la sostanza si presenti sotto forma di polvere**

- 2.4 Misure di emergenza in caso di dispersione accidentale
- 2.5 Misure di emergenza in caso di infortunio alle persone (esempio : avvelenamento)
- 2.6 Imballaggio
- 3 PROPRIETÀ FISICO CHIMICHE DELLA SOSTANZA
- 3.0 Stato della sostanza a 20° C e a 101,3 kPa
- 3.1 Intervallo di fusione (derivato ad esempio : dalla prova di stabilità termica)
- 3.3 Densità relativa
- 3.6.1 Estraibilità in acqua
- 3.10 Infiammabilità
- 3.11 Proprietà esplosive
- 3.12 Autoinfiammabilità
- 3.15 Dimensioni delle particelle  
Per le sostanze che possono essere commercializzate in una forma tale da creare il pericolo di esposizione per inalazione, occorrerebbe eseguire una prova per determinare la distribuzione delle particelle della sostanza nella forma in cui sarà commercializzata.
- 3.16 Stabilità termica
- 3.17 Estraibilità in :  
— acqua a pH 2 e 9 a 37° C  
— cicloesano
- 4 STUDI TOSSICOLOGICI  
Caso per caso, le autorità competenti possono richiedere, senza per ciò ritardare l'accettazione della notifica, alcune prove tossicologiche in presenza di gruppi reattivi o di caratteristiche strutturali/fisiche o della conoscenza delle proprietà di componenti a basso peso molecolare del polimero o di potenziali rischi di esposizione. In particolare possono essere richieste prove sulla tossicità per inalazione (ad esempio : 4.1.2, 4.2.1) qualora esista un rischio potenziale di esposizione
- 5 STUDI ECOTOSSICOLOGICI  
Caso per caso, le autorità competenti possono richiedere, senza per ciò ritardare l'accettazione della notifica, prove ecotossicologiche in presenza di gruppi reattivi, di caratteristiche strutturali/fisiche o della conoscenza di proprietà di componenti a basso peso molecolare del polimero o di rischi potenziali di esposizione.  
In taluni casi possono inoltre essere richieste le seguenti prove :  
— fotostabilità se il polimero non è specificamente reso stabile alla luce,  
— estraibilità a lungo termine (test di lisciviazione), a seconda dei risultati di questa prova, può essere richiesta, caso per caso, qualsiasi opportuna prova di lisciviazione
- 6 POSSIBILITÀ DI RENDERE INNOCUA LA SOSTANZA
- 6.1 A livello industria/artigianato
- 6.1.1 Possibilità di riciclaggio
- 6.1.2 Possibilità di neutralizzare gli effetti indesiderati
- 6.1.3 Possibilità di distruzione  
— discarica controllata  
— incenerimento  
— impianto di depurazione delle acque  
— altre
- 6.2 A livello libera vendita
- 6.2.1 Possibilità di riciclaggio
- 6.2.2 Possibilità di neutralizzare gli effetti indesiderati
- 6.2.3 Possibilità di distruzione  
— discarica controllata  
— incenerimento  
— impianto di depurazione delle acque  
— altre

## C.2.2 Polimeri presenti sul mercato comunitario in quantità &lt; 1 t/anno o in quantità totale &lt; 5 t

## 0 IDENTITÀ DEL FABBRICANTE ED IDENTITÀ DEL NOTIFICANTE, UBICAZIONE DEL LUOGO DI PRODUZIONE

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante sia stato designato unico rappresentante del fabbricante identità e indirizzi degli importatori della sostanza nella Comunità

## 1 IDENTITÀ DELLA SOSTANZA

## 1.1 Denominazione

## 1.1.1 Denominazione secondo la nomenclatura IUPAC

## 1.1.2 Altre denominazioni (denominazione comune, denominazione commerciale, abbreviazione)

## 1.1.3 Numero CAS e denominazione CAS (se disponibile)

## 1.2 Formula bruta e formula di struttura

## 1.2.1 Peso molecolare medio numerico

## 1.2.2 Distribuzione dei pesi molecolari (DPM),

## 1.2.3 Identità e concentrazione dei monomeri di partenza e delle sostanze di partenza che saranno legate nel polimero

## 1.2.4 Indicazione dei gruppi terminali, identità e frequenza dei gruppi funzionali reattivi

## 1.3 Composizione della sostanza

## 1.3.1 Purezza in percentuale (%)

## 1.3.2 Natura delle impurità, inclusi i prodotti secondari

## 1.3.2.1 Identità dei monomeri non reagiti

## 1.3.3 Percentuale delle principali impurità (significative)

## 1.3.3.1 Percentuale di monomeri non reagiti

## 1.3.4 Se la sostanza contiene uno stabilizzante o un inibente oppure altri additivi precisarne la natura, l'ordine di grandezza.

ppm, %

## 1.3.5 Dati relativi allo spettro (UV, IR, NMR o spettro di massa)

## 1.3.6.1 GPC

## 1.4 Metodi di individuazione e di determinazione

Descrizione completa dei metodi seguiti o indicazione dei relativi riferimenti bibliografici

Oltre che sui metodi di individuazione e di determinazione, fornire informazioni sui metodi analitici noti al notificante che consentono di individuare una sostanza e i suoi prodotti di trasformazione dopo immissione nell'ambiente nonché di determinare l'esposizione umana diretta

## 2 DATI RELATIVI ALLA SOSTANZA

## 2.0 Produzione

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana ed ambientale connessa con il processo produttivo. Non sono richiesti dettagli precisi del processo produttivo, in particolare quelli di carattere delicato dal punto di vista commerciale

## 2.0.1 Procedimenti tecnologici impiegati per la produzione

## 2.0.2 Valutazione dell'esposizione in sede di produzione

— ambiente di lavoro

— ambiente

## 2.1 Utilizzazioni previste

Le informazioni fornite in questa parte devono essere sufficienti per consentire una stima approssimativa ma realistica dell'esposizione umana e ambientale alle sostanze in connessione con le utilizzazioni proposte/previste

## 2.1.1 Tipi di utilizzazione descrivere la funzione della sostanza e gli effetti desiderati

## 2.1.1.1 Procedimento o procedimenti tecnologici in sede di impiego della sostanza (qualora noti)

- 2.1.1.2 Valutazione o valutazioni dell'esposizione in sede di impiego (qualora note)
  - ambiente di lavoro
  - ambiente
- 2.1.1.3 Forma nella quale la sostanza è immessa sul mercato sostanza, preparato, prodotto
- 2.1.1.4 Concentrazione della sostanza nei preparati e nei prodotti commercializzati (qualora nota)
- 2.1.2 Settori di applicazione e ripartizione approssimativa.
  - industrie
  - operatori dell'agricoltura e dell'artigianato
  - libera vendita
- 2.1.3 Se del caso, l'identità dei destinatari della sostanza, qualora sia nota
- 2.1.4 Qualità e composizione dei rifiuti derivanti dalle utilizzazioni proposte (qualora note)
- 2.2 Produzione e/o importazione previste per ciascuna delle utilizzazioni o ciascuno dei settori di utilizzazioni considerati
- 2.2.1 Produzione e/o importazione complessive in tonnellate/anno
  - durante il primo anno civile
  - nei successivi anni civili

Per le sostanze prodotte al di fuori della Comunità per le quali, ai fini della notifica, il notificante sia stato designato unico rappresentante del fabbricante, queste informazioni debbono essere fornite per ciascuno degli importatori di cui al punto 0
- 2.2.2 Produzione e/o importazione ripartita secondo le indicazioni di cui ai punti 2.1.1 e 2.1.2, ed espressa in percentuale
  - durante il primo anno civile
  - nei successivi anni civili
- 2.3 Metodi e precauzioni raccomandati concernenti:
  - 2.3.1 La manipolazione
  - 2.3.2 Il deposito
  - 2.3.3 Il trasporto
  - 2.3.4 L'incendio (natura dei gas di combustione o pirolisi, quando le utilizzazioni previsti lo giustificano)
  - 2.3.5 Altri pericoli, in particolare reazione chimica con l'acqua
  - 2.3.6 Se del caso, informazioni riguardanti la possibilità che la sostanza esploda qualora si presenti in forma di polvere
- 2.4 Misure di emergenza in caso di dispersione accidentale
- 2.5 Misure di emergenza in caso di infortunio alle persone (esempio: avvelenamento)
- 2.6 Imballaggio
- 3 PROPRIETÀ FISICO CHIMICHE DELLA SOSTANZA
  - 3.1 Stato della sostanza a 20° C e a 101,3 kPa
  - 3.1 Intervallo di fusione (ad esempio derivato dal test di stabilità termica)
  - 3.6.1 Estrattibilità in acqua
  - 3.10 Irritabilità

## ALLEGATO VIII

### INFORMAZIONI E PROVE COMPLEMENTARI RICHIESTE CONFORMEMENTE ALL'ARTICOLO 7, COMMA 2

Qualora non sia tecnicamente possibile o non risulti scientificamente necessario fornire una determinata informazione, occorrerà addurre una adeguata motivazione, che dovrà essere accettata dall'autorità competente.

Il nome dell'ente o degli enti responsabili delle prove deve essere indicato.

#### LIVELLO 1

##### Studi fisico-chimici

Ulteriori studi delle proprietà fisico-chimiche dipendenti dai risultati degli studi di cui all'allegato VII. Detti studi potrebbero includere per esempio l'elaborazione di metodi analitici che consentano di osservare e individuare una sostanza o i suoi prodotti di trasformazione nonché studi sui prodotti della decomposizione termica.

##### Studi tossicologici

Studio di fertilità (una specie, una generazione, maschi e femmine, via di somministrazione più adatta).

Se nella prima generazione si ottengono risultati dubbi, è necessario uno studio su una seconda generazione.

In funzione delle dosi somministrate potrebbero emergere indicazioni di teratogenicità. In tal caso è necessario effettuare uno studio formale di teratogenesi.

- Studio di teratogenesi (una specie, via di somministrazione più adatta)

Questo studio è necessario se la teratogenicità non è stata esaminata o valutata nello studio di fertilità.

- Lo studio di tossicità subcronica e/o cronica, compresi gli studi speciali (una specie, maschi e femmine, via di somministrazione più adatta) è necessario se dai risultati dello studio con somministrazione ripetuta di cui all'allegato VII o da altre informazioni pertinenti emerge la necessità di un esame più approfondito.

Tra gli effetti che rivelano la necessità di tale studio potrebbero ad esempio figurare:

- a) lesioni gravi o irreversibili;
- b) una dose "senza effetti" molto bassa o inesistente;
- c) un chiaro rapporto, per quanto riguarda la struttura chimica, tra la sostanza considerata ed altre sostanze che si sono dimostrate pericolose.

- Prove complementari di mutagenesi e/o prova o prove di screening della cancerogenesi, da effettuare secondo le modalità di cui all'allegato V.

Se entrambe le prove di base danno esito negativo dovranno essere effettuate altre prove conformemente alle proprietà specifiche e all'utilizzazione proposta della sostanza.

Se una prova o entrambe le prove di base danno risultati positivi, la prova complementare deve includere altri metodi di prova *in vivo* con gli stessi o con altri punti finali.

- Informazioni fondamentali di tossicocinetica

##### Studi di ecotossicità

- Studio prolungato di tossicità sulla *Daphnia magna* (21 giorni)
- Prova su una pianta superiore
- Prova su un lombrico
- Ulteriori studi di tossicità su un pesce
- Prova di accumulazione in una specie, una specie, preferibilmente un pesce
- Studio o studi complementari di degradazione, qualora gli studi di cui all'allegato VII non abbiano provato una degradazione sufficiente.
- Studi complementari sull'assorbimento/desorbimento in funzione dei risultati delle prove di cui all'allegato VII



**LIVELLO 2****Studi tossicologici**

A meno che esistano ragioni valide e giustificate per non ricorrervi, il programma delle prove deve riguardare i seguenti aspetti:

- studio di tossicità cronica
- studio di cancerogenesi
- studio di fertilità (per esempio: studio di riproduzione su tre generazioni); solo se si è constatato un effetto sulla fertilità a livello 1
- studio di embriotossicità sugli effetti peri e postnatali
- studio di teratogenesi (specie non impiegate nelle prove corrispondenti del livello 1)
- ulteriori studi tossicocinetici che includono la biotrasformazione e la farmacocinetica
- prove complementari per determinare la tossicità per determinati organi o la tossicità sistemica

**Studi di ecotossicità**

- Prove complementari di accumulazione, degradazione, mobilità e assorbimento/desorbimento
  - Studi complementari di tossicità sui pesci
  - Studi di tossicità sugli uccelli
  - Studi complementari di tossicità su altri organismi •
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## ALLEGATO IX

### Parte A

Disposizioni relative alle chiusure di sicurezza per la protezione dei bambini

#### 1. Imballaggi richiudibili

Le chiusure di sicurezza per bambini utilizzate per imballaggi richiudibili devono rispondere alla ISO 8317 (edizione 1° luglio 1989) che riguarda "Imballaggi di sicurezza per i bambini - Requisiti e metodi di prova degli imballaggi richiudibili" adottata dall'Organizzazione internazionale per la Standardizzazione (ISO).

#### 2. Imballaggi non richiudibili (p.m.)

#### 3. Osservazioni

1. La conformità con la norma suddetta può essere attestata unicamente dai laboratori che soddisfano le norme europee EN serie 45 000.

#### 2. Casi particolari

Se appare evidente che un imballaggio è sufficientemente sicuro per i bambini, in quanto essi non possono avere accesso al suo contenuto senza l'aiuto di un utensile, il saggio può non essere effettuato.

In tutti gli altri casi, e quando vi sono sufficienti ragioni per dubitare dell'efficacia di una chiusura di sicurezza per bambini adottata, l'autorità nazionale può chiedere al responsabile dell'immissione sul mercato di fornirle un attestato rilasciato da un laboratorio di saggio di cui al punto 1 precedente, nel quale si certifica:

- che il tipo di chiusura è tale da non richiedere saggi secondo la norma ISO sopraindicata; oppure
- che la chiusura in questione, sottoposta ai saggi previsti dalla norma ISO sopraindicata, è conforme alle prescrizioni imposte.

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**Parte B**

Dispositivi che permettono di rilevare i pericoli al tatto.

Le specifiche tecniche relative ai dispositivi che consentono di rilevare i pericoli al tatto devono essere conformi alla norma EN 272 (edizione 20 agosto 1989), relativa all'avvertimento tattile di un pericolo.

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DOMENICO CORTESANI, *direttore*

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